GUESSS

Global University Entrepreneurial Spirit Students' Survey

Entrepreneurial Intention, Behaviour and Activities of Indonesian Universities Students

The Indonesia Report of the 2018 GUESSS Project

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Table of Contents

List of Tables

List of Figures

1. Introduction

GUESSS (Global University Entrepreneurial Spirit Students' Survey) focus on students' entrepreneurial intentions and activities, including the topic of family firm succession. Since it was established in 2003, GUESSS takes a global data collection effort every 2–3 years. In 2018, 54 countries are participated in GUESSS, leading to a dataset with more than 208,000 completed responses (Sieger et al., 2019). Starting to join GUESSS project in 2018, Indonesia is represented by School of Business and Economics, Prasetiya Mulya University. It is supported by Indonesian Association of Entrepreneurship Educators and other five Indonesian University partners. This collaboration produces 1,279 completed responses.

The main goal of GUESSS project is to generate unique and novel insights into student entrepreneurship, e.g., entrepreneurial intentions, nascent entrepreneurship, growth and performance of new ventures, and family firm succession. It also tries to investigate corresponding influencing factors on different levels, such as: motives, preferences, social identity (individual level), family structure, family relationships (family level), entrepreneurship education, entrepreneurial climate and learning (university level), culture and institutions (contextual level) (Sieger et al., 2019).

To achieve the main goal, GUESSS core team centrally manages online survey, which includes validated and up-to-date measurement instruments. This allows detailed cross-country comparisons and within-country analyses. While certain parts of the survey remain stable in order to allow comparisons across time, each survey has a different conceptual focus in addition. Survey invitations are then sent to the GUESSS country teams (one per country) who forward it to their own students and to their respective university partners (GUESSS, 2019).

Further, this report aims to examine various aspects related to the entrepreneurship of Indonesian students. We more specifically investigated students career choice intentions immediately after graduation and five years after completion of studies, students' involvement in entrepreneurial education, their views about the university entrepreneurial climate, attitude towards entrepreneurship, current entrepreneurial activities and related business performance.

This report covers five main areas related to sample profiles, career choice and entrepreneurial intentions of students, determinants of entrepreneurial intentions, nascent entrepreneurs and entrepreneurial activities.

The analysis, therefore, generates an impact on both research and practice informing practitioners, scholars and policy-makers about the trends in entrepreneurial intentions and activities of university students in Indonesia.

2. Sample Profiles

2.1 Data Collection

The University of Prasetiya Mulya School of Business and Economics is the Indonesia Country representative for GUESSS 2018 project. Distributed to the students of six universites, the response number and rate are presented in Table 2.1. Among some study programs these universities have, unfortunately, our respondents are mostly students of management, business or economics study program. These study programs pursue entrepreneurship as their foundation.

Table 2.1 Data Sources and Response Rate

No	Institution	Scope of Respondents	Population	Responses	Response rate
1	Prasetiya Mulya University	Undergraduate Business Students and Magister Management Students	2350	669	28.47%
2	STIE Surakarta	Undergraduate Business Students	600	179	29.83%
3	Bina Nusantara University	Undergraduate and Magister Management Students	1000	42	4.20%
4	Jenderal Achmad yani University	Undergraduate Business Students	600	244	40.67%
5	Paramadina University	Undergraduate Students	1200	101	8.42%
6	Ciputra University		1300	12	0.92%
7	Others			33	
		TOTAL	**6550**	**1279**	**19.53%**

There were around 6,550 students participated in this survey with various response rate among these university participants. Overall, we had 1,279 cases (19.53% response rate).

2.2 Personal Characteristics (Gender, Age)

Splitting the cases by gender, as shown in Table 2.1, we find a balance sample set (46.10% are male and 53.87% are female) and difference of their age (21.10 years old for male and 20.69 years old for female, *F-value*=3.016 and *p-value*=0.033). Further, their age is concentrated to below 20 years old (61.14%) and to 20-25 years old (27.68%), which is logical considering that most of them are undergraduate students, as shown in section 2.3.

Table 2.2 Personal Characteristics

	Quantity	%
Gender		
Male	590	46.13
Female	689	53.87
Age		
Up to 20 years	782	61.14
21-25 years	357	27.91
26-30 years	37	2.89
Above 30	31	2.43
Missing Data	72	5.63

2.3 University Studies (Study Fields, Level of Study)

The respondents are students of six Indonesian universities which located in Java Island, the most populous Indonesian island. Most of them are from institutions located in Jakarta, the Indonesian Capital city (63.49%). **Fehler! Verweisquelle konnte nicht gefunden werden.** shows that the majority of the respondents are undergraduates (93.12%) who are studying business, management or economics (88.35%). There gender proportion of this sample (business, management or economics undergraduate students) is 45.49% for male and 54.51% for female.

Table 2.3 University Studies

	Undergraduate	Master	PhD	Other	**Total**
Business / Management, Economics	1130	47	4	17	**1198**
Humanities, Social Science, Art	28	0	1	1	**30**
Engineering, Computer, IT, Maths, Medicine	3	1	1	1	**6**
Other	30	0	0	1	**31**
Total	**1191**	**48**	**6**	**20**	**1265**
Missing Data					**14**

2.4 Family Employment and Entrepreneurial Background

Looking at the respondents' family background, Table 2.4 shows that most respondents come from family with self-employment (58.95%) or entrepreneurial (59.81%) background. Especially the respondents who are studying business or management, they most likely come from family with self-employment (65.04%) or entrepreneurial (66.91%) background.

Table 2.4 Family Employment Background

	All Respondents		**Business and Mgmt Students**	
	Quantity	**%**	**Quantity**	**%**
None of father and mother as self-employed	525	41.05	337	34.96
Father as self-employed	347	27.13	294	30.50
Mother as self-employed	110	8.60	81	8.40
Both father and mother as self-employed	297	23.22	252	26.14
Total	**1279**	**100.00**	**964**	**100**

Table 2.5 Family Entrepreneurial Background

	All Respondents		**Business & Mgmt Students**	
	Quantity	**%**	**Quantity**	**%**
None of father and mother as self-employed	514	40.19	319	33.09
Father as self-employed	374	29.24	324	33.61

	All Respondents		Business & Mgmt Students	
	Quantity	%	Quantity	%
Mother as self-employed	114	8.91	82	8.51
Both father and mother as self-employed	277	21.66	239	24.79
Total	**1279**	**100.00**	**964**	**100**

3. Career Choice Intentions

3.1 Overview

Table 3.1 shows career choice intention of the respondents just after studies and five years later. It indicates the sifting career preferences from being employee to be business founder. For instance, respondents who intend to work for a small, medium and large business, drop from 7.04%, 15.48% and 29.40% (just after studies) to 0.70%, 2.19% and 9.15% (five years after studies) consecutively. On the other hand, students who want to create their own business increase drastically from 26.19% (just after studies) to 64.27% (five years after studies). A more detail information of the career choice transition is provided by Table 3.2.

Table 3.1 Career Choice Intention Right After Graduation and Five Years Later

N=1279	Just After Studies		5 Years After Studies	
	Quantity	%	Quantity	%
an employee in a small business (1-49 employees)	90	7.04	9	0.70
an employee in a medium-sized business (50-249 employees)	198	15.48	28	2.19
an employee in a large business (250 or more employees)	376	29.40	117	9.15
an employee in a non-profit organization	15	1.17	19	1.49
an employee in academia (academic career path)	25	1.95	21	1.64
an employee in public service	100	7.82	45	3.52
a founder (entrepreneur) working in my own business	335	26.19	822	64.27
a successor in my parents'/family's business	89	6.96	112	8.76
a successor in another business	21	1.64	74	5.79
Other / do not know yet	30	2.35	32	2.50

Table 3.2 displays the student intention transition, from employment to business founder intention and vice versa, right after to five years after study. It shows the career choice transition among corporation employment, non-corporation (non-profit, academia, public service), founder and successor. Among respondents who intend to work for corporation right after studies (*direct intentional business founders*), only less than 20% of them, stand on employment career, either incorporation (14.31%) or non-corporation (4.22%). Most of them want to be a business founder (70.63%), while the rest (9.94%) intend to be a family or other business successor five years after studies. Similarly, among respondents who intend to work for non-corporation right after studies, less than 20% of respondents remain to work for non-corporation five years after studies, while 68.57% of them want to develop their own business five years after studies. Also, among respondents who intend to be business successor in the first hand, almost 63% of them want to be business founder five years after studies.

Table 3.2 The Transition of Career Choice Intention

		Career path five years later					
		Employee of Corporation	Employee of Non-corporation	Business Founder	Business Successor	Other	
Career path right after studies	Employee of Corporation	95 14.31%	28 4.22%	469 70.63%	66 9.94%	6 0.90%	**664** **51.92%**
	Employee of Non-corporation	10 7.14%	27 19.29%	96 68.57%	6 4.29%	1 0.71%	**140** **10.95%**
	Business Founder	33 9.85%	22 6.57%	174 51.94%	90 26.87%	16 4.78%	**335** **26.19%**
	Business Successor	6 5.45%	6 5.45%	69 62.73%	23 20.91%	6 5.45%	**110** **8.60%**
	Other	10 33.33%	2 6.67%	14 46.67%	1 3.33%	3 10.00%	**30** **2.35%**
		154 **12.04%**	**85** **6.65%**	**822** **64.27%**	**186** **14.54%**	**32** **2.50%**	

Although business founder is a favourite career destination five years after studies, not all *direct intentional business founders* maintain their career preference. Around 16% and 27% of them likely switch their career to be employee and business successor successively. However, the business founder seems like the most stable career choice intention. More than half of *direct intentional business founders* prefer to maintain their intention.

Further, it is interesting to compare what entrepreneurial activities have already done by the students who are *direct intentional business founders* versus those who choose to be founder 5 years later. More than a quarter of *five years after study intentional founder* has not started with any entrepreneurial activity yet. The proportion is higher than the proportion of *direct intentional business founder* who has not started with any entrepreneurial activity yet. Interestingly, both direct and *five years after study intentional founder* have similar *nascent entrepreneur* proportion (around 40%). Finally, while around 43% of *direct intentional business founder* currently running business, only around 31% of *five years after study intentional business founder* currently running business.

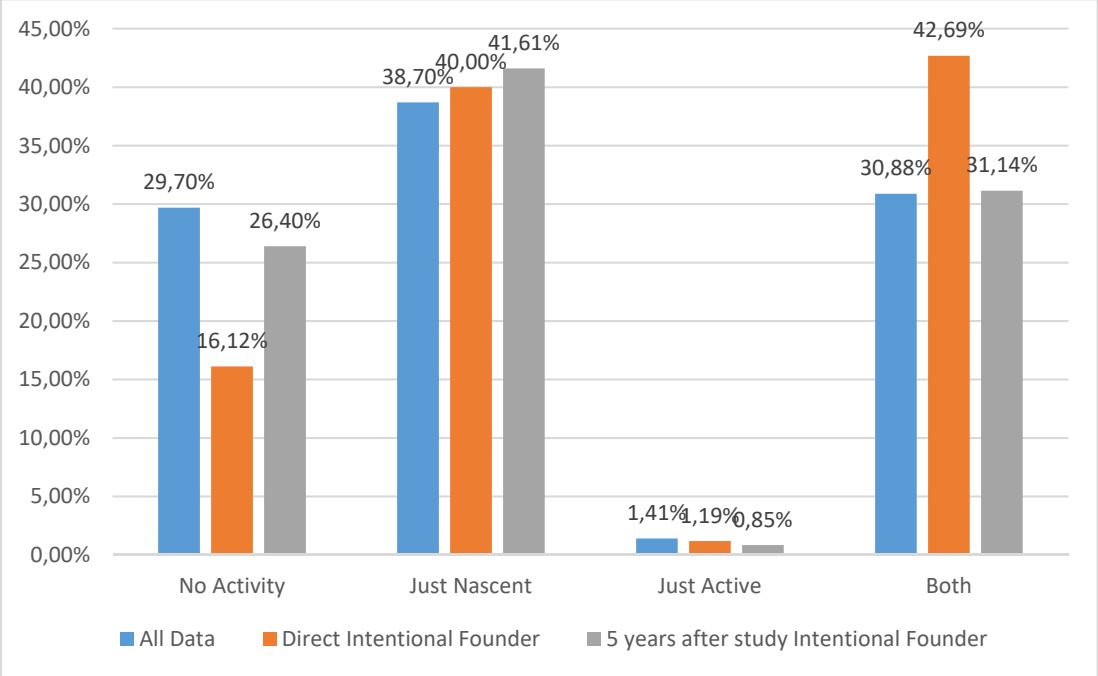

Figure 3.1 The Proportion of Nascent and Active Entrepreneurs

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Comparing the male and female students' responses (see Table 3.3), we find significant different preferences of their career choice intention in term of becoming employee in a large business, academia and public service, as well as becoming business founder and successor. Just after studies, female students more likely prefer to work for a large business, academia and public service (33.38%, 2.47% and 12.19% respectively) than male students (24.75%, 1.36% and 2.71% respectively). Conversely, male students more likely prefer to create own business (34.58%) than female students (19.01%). Further, while male students more likely intend to be a family business successor (8.31%) than female students (5.81%), on the other hand, the preference of female students to be a successor in another business (2.03%) is almost twice of male students' preference (1.19%).

After five years studies, these pattern however is similar only for their career choice intention in academia employment, public service employment and family business successor. The intention of female students to be business founder (67.49%) is even more than male students (60.51%). Conversely, the intention of male students to be a successor in another business (8.31%) is even more than female students (3.63%).

Table 3.3 Career Choice Intention by Gender

	Male (N=590)		**Female (N=689)**	
	Just After Studies	**5 Years After Studies**	**Just After Studies**	**5 Years After Studies**
an employee in a small business (1-49 employees)	7.97%	0.85%	6.24%	0.58%
an employee in a medium-sized business (50-249 employees)	15.25%	2.03%	15.67%	2.32%
an employee in a large business (250 or more employees)	24.75%	9.83%	33.38%	8.56%
an employee in a non-profit organization	1.36%	1.69%	1.02%	1.31%
an employee in academia (academic career path)	1.36%	1.19%	2.47%	2.03%
an employee in public service	2.71%	2.03%	12.19%	4.79%
a founder (entrepreneur) working in my own business	34.58%	60.51%	19.01%	67.49%
a successor in my parents'/family's business	8.31%	11.02%	5.81%	6.82%

	Male (N=590)		Female (N=689)	
	Just After Studies	5 Years After Studies	Just After Studies	5 Years After Studies
a successor in another business	1.19%	8.31%	2.03%	3.63%
Other / do not know yet	2.54%	2.54%	2.18%	2.47%

3.3 Level of Study Comparison

Comparing the career choice intentions based on the respondents' level of studies (undergraduate vs graduate and above), interestingly their preference to be a business founder is similar both just after and five years after study (see Table 3.4). Further, when both respondent's category have similar preference in being family business successor, they have different intention in being successor of another business. However, we need to cautiously aware that the cases proportion is not balance. The number of undergraduate cases is more than 16 times of graduate cases.

The undergraduate students' intention to be a successor of another business jumps from 1.25%, at just after studies, to 8.00%, five years after studies. On the other hand, the intention of graduate student's to be a successor of another business remains stable.

Further, both categories seem to left employment career after five years, but with a different pattern in term of academic and public service employment. When undergraduate student's remain stable in their less preference in academia (around 1.5% both just after and five years after studies), graduate student's preference drop significantly from 6.67% (just after studies) to 1.64% (five years after studies). The contrary happens for public service career intention. When the graduate students' intention remain stable at around 3.5%, the undergraduate students' intention drop from 8.15% to 2.67%.

Table 3.4 Career Choice Intentions by Level of Studies

	Undergraduate (N=1202)		Master, PhD and Other (N=75)	
	Just After Studies	5 Years After Studies	Just After Studies	5 Years After Studies
an employee in a small business (1-49 employees)	7.24%	0.67%	2.67%	0.70%

	Undergraduate (N=1202)		Master, PhD and Other (N=75)	
	Just After Studies	**5 Years After Studies**	**Just After Studies**	**5 Years After Studies**
an employee in a medium-sized business (50-249 employees)	15.64%	2.08%	13.33%	2.19%
an employee in a large business (250 or more employees)	29.03%	9.23%	34.67%	9.16%
an employee in a non-profit organization	1.25%	1.41%	0.00%	1.49%
an employee in academia (academic career path)	1.66%	1.50%	6.67%	1.64%
an employee in public service	8.15%	3.58%	2.67%	3.52%
a founder (entrepreneur) working in my own business	26.21%	64.64%	26.67%	64.29%
a successor in my parents'/family's business	7.07%	8.74%	5.33%	8.69%
a successor in another business	1.25%	5.57%	8.00%	5.79%
Other / do not know yet	2.50%	2.58%	0.00%	2.51%

3.4 Family Background Comparison

Most of the respondents have self-employment family background (N=754, 58.95%) or business-ownership background (N=765, 59.81%). As displayed in Table 3.5, respondents without self-employment family background have lower intention to be business owner just after studies (9.77%) than those with self-employment family background (16.42%). After five years studies, the business ownership intention of both kinds respondent increase (27.76% and 36.51% severally).

Table 3.5 Career Choice Intentions by Family Self-Employment Background

	No Family Self-employment Background (N=525)		**Having Family Self-employment Background (N=754)**	
	Just After Studies	**5 Years After Studies**	**Just After Studies**	**5 Years After Studies**
an employee in a small business (1-49 employees)	2.35%	0.16%	4.69%	0.55%
an employee in a medium-sized business (50-249 employees)	5.71%	1.17%	9.77%	1.02%
an employee in a large business (250 or more employees)	14.00%	4.07%	15.40%	5.08%
an employee in a non-profit organization	0.55%	0.70%	0.63%	0.78%
an employee in academia (academic career path)	1.17%	0.70%	0.78%	0.94%
an employee in public service	4.85%	2.35%	2.97%	1.17%
a founder (entrepreneur) working in my own business	**9.77%**	**27.76%**	**16.42%**	**36.51%**
a successor in my parents'/family's business	1.25%	1.25%	5.71%	7.51%
a successor in another business	0.63%	2.11%	1.02%	3.67%
Other / do not know yet	0.78%	0.78%	1.56%	1.72%

Further, as displayed in Table 3.6, respondents without business-ownership family background have lower intention to be business owner just after studies (20.82%) than those with self-employment family background (29.80%). Interestingly, after five years studies, the

increase of business ownership intention of respondents without business-ownership family background is higher (69.65% - 3.35 times) than their counterparts (62.09% - 2.08 times).

Table 3.6 Career Choice Intentions by Family "Business Ownership" Background

	No Family "Business Ownership" Background (N=514)		**Having Family "Business Ownership" Background (N=765)**	
	Just After Studies	**5 Years After Studies**	**Just After Studies**	**5 Years After Studies**
an employee in a small business (1-49 employees)	6.03%	0.39%	7.71%	0.72%
an employee in a medium-sized business (50-249 employees)	15.37%	2.33%	15.56%	2.17%
an employee in a large business (250 or more employees)	36.38%	10.70%	24.71%	6.14%
an employee in a non-profit organization	1.56%	1.75%	0.92%	1.44%
an employee in academia (academic career path)	2.92%	2.14%	1.31%	1.44%
an employee in public service	12.84%	5.45%	4.44%	2.17%
a founder (entrepreneur) working in my own business	**20.82%**	**69.65%**	**29.80%**	**62.09%**
a successor in my parents'/family's business	0.39%	1.95%	11.37%	14.80%
a successor in another business	1.56%	3.89%	1.70%	6.86%
Other / do not know yet	2.14%	1.75%	2.48%	2.17%

4. Determinants of Entrepreneurial Intentions

This study employed Liñán and Chen's (2009) instrument to measure the students' entrepreneurial intention. The instrument indicates the level of respondents' agreement, from 1 (strongly disagree) to 7 (strongly agree), to the six statements, such as "*I am ready to do anything to be an entrepreneur*", "*I will make every effort to start and run my own firm*". Table 4.1 shows the entrepreneurial intensity by gender.

Table 4.1 Entrepreneurial Intentions

	Overall		Male		Female	
	N	**Mean**	**N**	**Mean**	**N**	**Mean**
I am ready to do anything to be an entrepreneur.	370	5.21	129	5.06	241	5.29
My professional goal is to become an entrepreneur.	368	5.18	129	5.33	239	5.10
I will make every effort to start and run my own business.	369	5.21	129	5.26	240	5.18
I am determined to create a business in the future.	368	5.71	129	5.67	239	5.73
I have very seriously thought of starting a business	369	5.33	129	5.33	240	5.34
I am ready to do anything to be an entrepreneur.	368	5.66	129	5.73	239	5.62

Those six measured items produced Cronbach's Alpha index = 0.917 to demonstrate a reliable instrument of entrepreneurial intention. The entrepreneurial intention of male and female students was insignificant (5.398 for male and 5.379 for female, *F-value*=4.570 and *p-value*=0.877).

4.1 The University Context

Previous research showed a positive relationship between the university context, such as students' engagement in entrepreneurship education and entrepreneurial climate, with students' entrepreneurial intention (Saridakis et al., 2016). To observe their engagement in entrepreneurship education, students were asked their involving in entrepreneurship-related courses.

Table 4.2 Attendance of Entrepreneurship Course

	Overall	Male	Female	Undergrad (N=1202)	Master, PhD, Other (N=75)
I have not attended a course on entrepreneurship so far	11.34%	12.37%	10.45%	10.48%	25.33%
I have attended at least one entrepreneurship course as elective.	13.53%	16.61%	10.89%	13.56%	13.33%
I have attended at least one entrepreneurship course as compulsory part of my studies.	31.12%	31.53%	30.77%	31.70%	20.00%
I am studying in a specific program on entrepreneurship.	34.87%	35.25%	34.54%	35.36%	28.00%
I chose to study at this university mainly because of its strong entrepreneurial reputation.	56.37%	61.02%	52.39%	56.41%	54.67%

As displayed in Table 4.2, the message that the university pursuing entrepreneurship as their teaching foundation seems being accepted by the students. More than half of the students, either female or male, either undergraduate or postgraduate students, choose to study in these universities because of their entrepreneurial reputation. Even, around one-third of them studying entrepreneurship program and another around one-third of them take compulsory entrepreneurship subjects.

Further, to understand the impact of learning about entrepreneurship to their overall learning progress, students were asked to indicate the extent to which they agree to these statements (see Table 4.3, 1=not at all, 7=very much). Those six measured-items produced Cronbach's Alpha index = 0.898 to demonstrate a reliable instrument of entrepreneurial learning.

Table 4.3 Assessment of Entrepreneurial Learning

The courses and offerings I attended...	Overall		Male		Female		Undergraduate		Master, PhD, Other	
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
increased my understanding of the attitudes, values and motivations of entrepreneurs.	1275	5.61	588	5.56	687	5.66	1198	5.59	75	6.01
increased my understanding of the actions someone has to take to start a business.	1260	5.70	583	5.73	677	5.68	1185	5.69	73	5.97
enhanced my practical management skills in order to start a business.	1256	5.66	581	5.68	675	5.64	1181	5.64	73	5.86
enhanced my ability to develop networks	1258	5.58	582	5.62	676	5.54	1184	5.57	72	5.67
enhanced my ability to identify an opportunity	1257	5.66	582	5.66	675	5.66	1182	5.64	73	5.95

The results presented in Table 4.3 indicate the positive impacts of learning about entrepreneurship to students overall learning during their university studies. The means of each measured-item is not statistically different between male and female students. However, the means difference are found between undergraduate and postgraduate students for item 1: *"increased my understanding of the attitudes, values and motivations of entrepreneurs"* (F-*value* = 8.125, *p-value* = 0.001), item 2: *"increased my understanding of the actions someone has to take to start a business"* (*F-value* = 4.440, *p-value* = 0.034) and item 5: *"enhanced my ability to develop networks".* The postgraduate students seem acquire more benefit from entrepreneurship courses.

The entrepreneurial climate at universities may affect students' entrepreneurial intentions. Students were asked to what extent they agree (1=not at all, 7=very much) to some statements (see Table 4.4) regarding their university and their learning experience. The results indicate that students appreciate the university environment in supporting their entrepreneurial learning (mean = 5.17, Cronbach's Alpha index = 0.862).

Table 4.4 University Entrepreneurial Environment

	Overall		Male		Female		Undergraduate		Master, PhD, Other	
	N	**Mean**	**N**	**Mean**	**N**	**Mean**	**N**	**Mean**	**N**	**Mean**
The atmosphere at my university inspires me to develop ideas for new businesses.	1274	5.32	589	5.49	687	5.18	1199	5.30	75	5.77
There is a favorable climate for becoming an entrepreneur at my university.	1256	5.49	583	5.58	675	5.41	1184	5.47	72	5.79
At my university, students are encouraged to engage in entrepreneurial activities.	1250	5.74	578	5.77	674	5.71	1178	5.74	72	5.79

The statistical difference of means of university entrepreneurial environment's average is shown by both gender and study level, but only for item 1: "*The atmosphere at my university inspires me to develop ideas for new businesses*" and item 2: "*There is a favorable climate for becoming an entrepreneur at my university*". Males perceive a stronger entrepreneurial climate than females (F-*value* = 0.770, *p-value* < 0.001 for item 1 and F-*value* = 5.993, *p-value* = 0.015 for item 2). Furthermore, we find that postgraduate students perceive a stronger entrepreneurial climate than undergraduate students (F-*value* = 1.197, *p-value* = 0.003 for item 1 and F-*value* = 3.972, *p-value* = 0.039 for item 2).

It is interesting to check how students' perceived entrepreneurial learning and university entrepreneurial environment may affect entrepreneurial intention. A regression analysis produced a positive relationship between entrepreneurial intention with entrepreneurial learning (β=0.516, p<.001) and with entrepreneurial environment (β=0.490, p<.001). Comparing these relationship of male and female data groups, we find that the results are not significantly different. According to undergraduate vs postgraduate data groups comparison, we find there is significant difference, but only for entrepreneurial environment – entrepreneurial intention relationship. The relationship is only significant for undergraduate data group (β=0.516, p<.001), not for postgraduate data group (β=0.045, p<.840).

4.2 The Role of Entrepreneurial Attitude, Self-Efficacy and Locus of Control

The relationship of entrepreneurial intention and entrepreneurial attitude, self-efficacy and locus of control is mainly explained by Theory of Planned Behaviour (TPB) (Ajzen, 1991; Ajzen, 2002). To measure students' entrepreneurial attitude, self-efficacy and locus of control, they were asked to what extent they agree (1=not at all, 7=very much) to some statements (see **Fehler! Verweisquelle konnte nicht gefunden werden.**, **Fehler! Verweisquelle konnte nicht gefunden werden.**, **Fehler! Verweisquelle konnte nicht gefunden werden.** severally). The results indicate high students' entrepreneurial attitude (mean = 5.55, Cronbach's Alpha index = 0.925), self-efficacy (mean = 4.93, Cronbach's Alpha index = 0.926) and locus of control (mean = 5.06, Cronbach's Alpha index = 0.745) with reliable corresponding instruments.

It is interesting to check how students' entrepreneurial attitude, self-efficacy and locus of control simultaneously may affect entrepreneurial intention. A regression analysis produced a positive relationship between entrepreneurial intention only with entrepreneurial attitude (β=0.689, $p<.001$) and self-efficacy (β=0.215, $p<.001$). The relationship with entrepreneurial locus of control is not significant. Comparing this relationship between male and female data groups, we find that the results are not significantly different. For male dataset, the regression coefficients are β=0.688 ($p<.001$) for entrepreneurial attitude and β=0.204 ($p<.001$) for entrepreneurial self-efficacy. For female dataset, the regression coefficients are β=0.688 ($p<.001$) for entrepreneurial attitude and β=0.219 ($p<.001$) for self-efficacy.

4.3 Family Context

As described in Section 4.1, the university context (entrepreneurial learning or entrepreneurial environment) is positively related to students' entrepreneurial intention. An interesting question may be how do entrepreneurial parents (either being self-employment or business owner) affect this relationship. Specifically, we empirically look for the potential moderating effect of parent's self-employment or business ownership.

With regard to the confidence region (95%), Figure 4.1 indicates the negligible effect of family self-employment status on the relationship between entrepreneurial learning and entrepreneurial status. Similarly, as depicted by Figure 4.3 and Figure 4.4, the family

entrepreneurial parents do not statistically affect the relationship of entrepreneurial intention with university context.

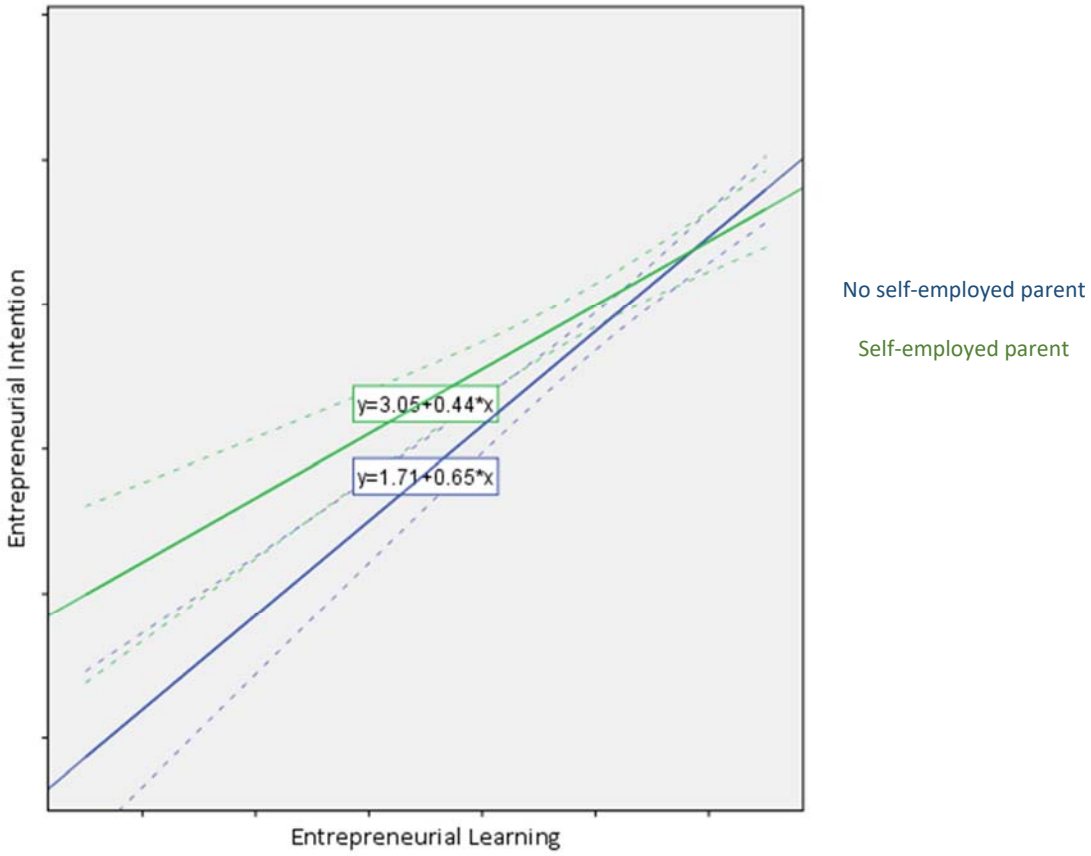

Figure 4.1 The Relationship of Entrepreneurial Intention and Entrepreneurial Learning, Moderated by Family Employment Background

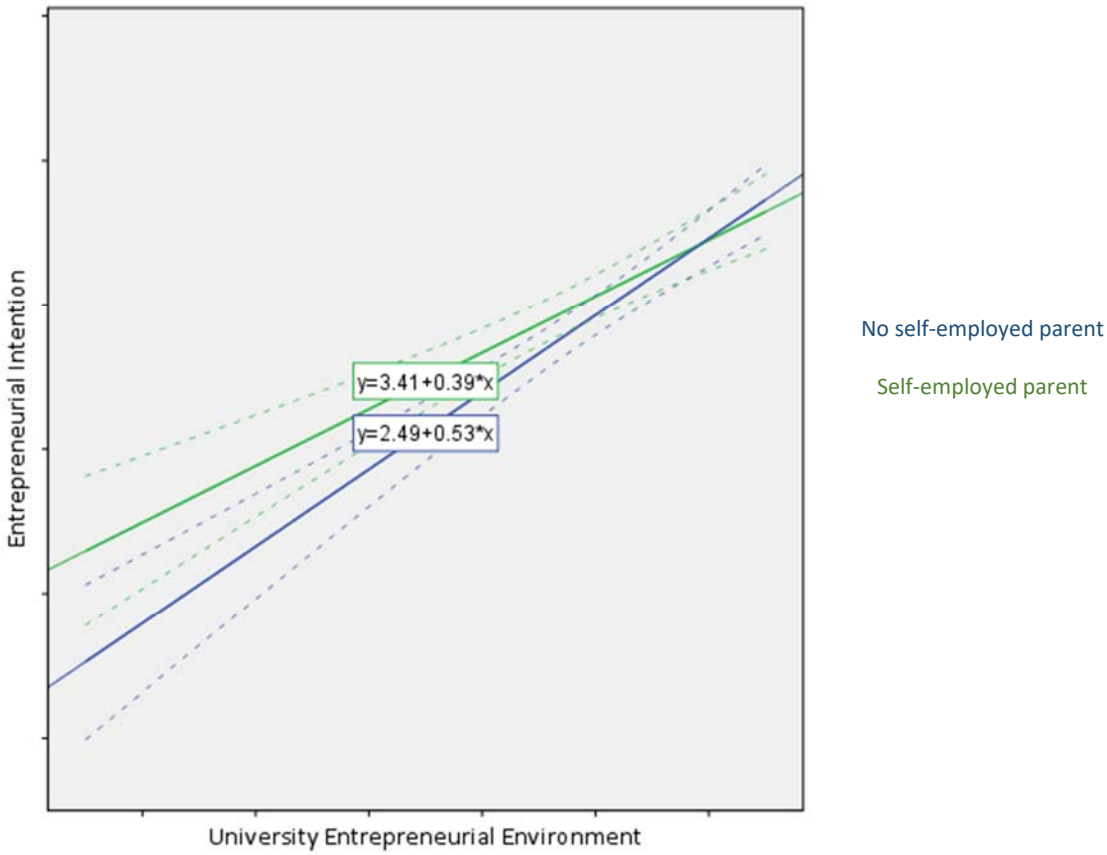

Figure 4.2 The Relationship of Entrepreneurial Intention and University Entrepreneurial Environment, Moderated by Family Employment Background

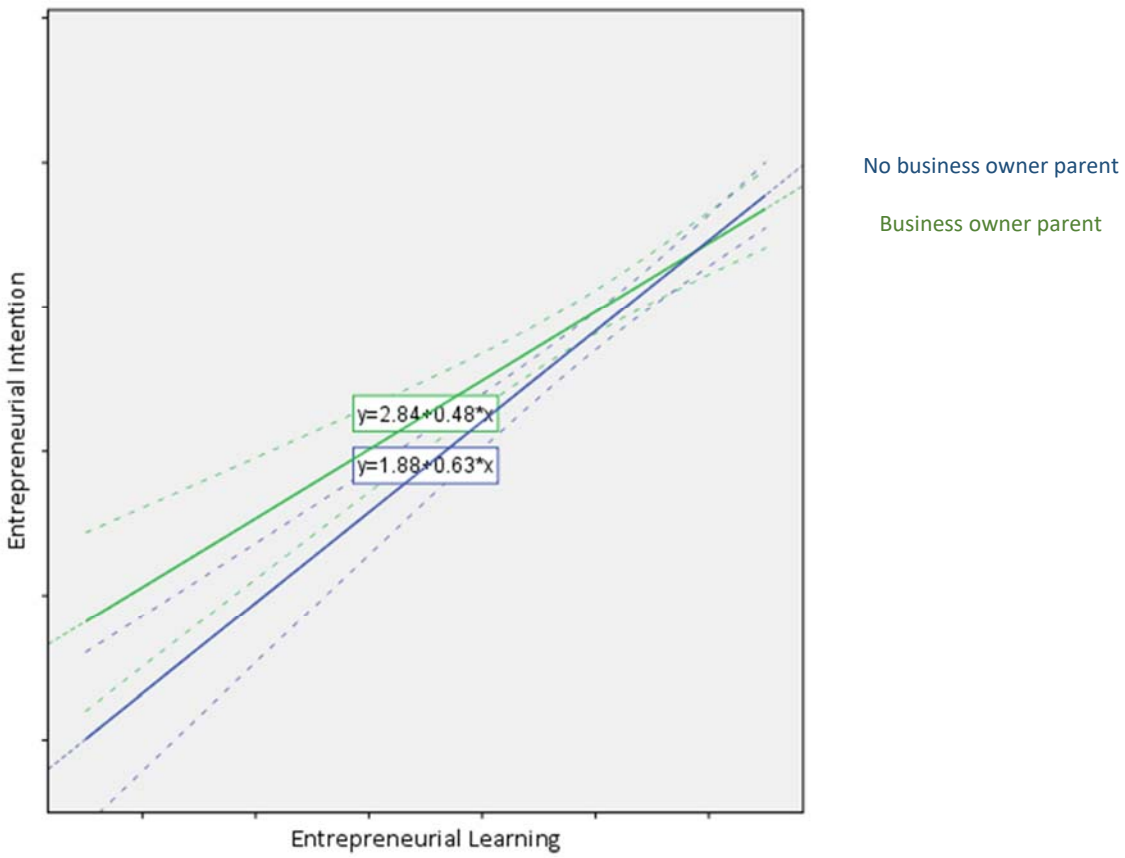

Figure 4.3 The Relationship of Entrepreneurial Intention and Entrepreneurial Learning, Moderated by Family Entrepreneurial Background

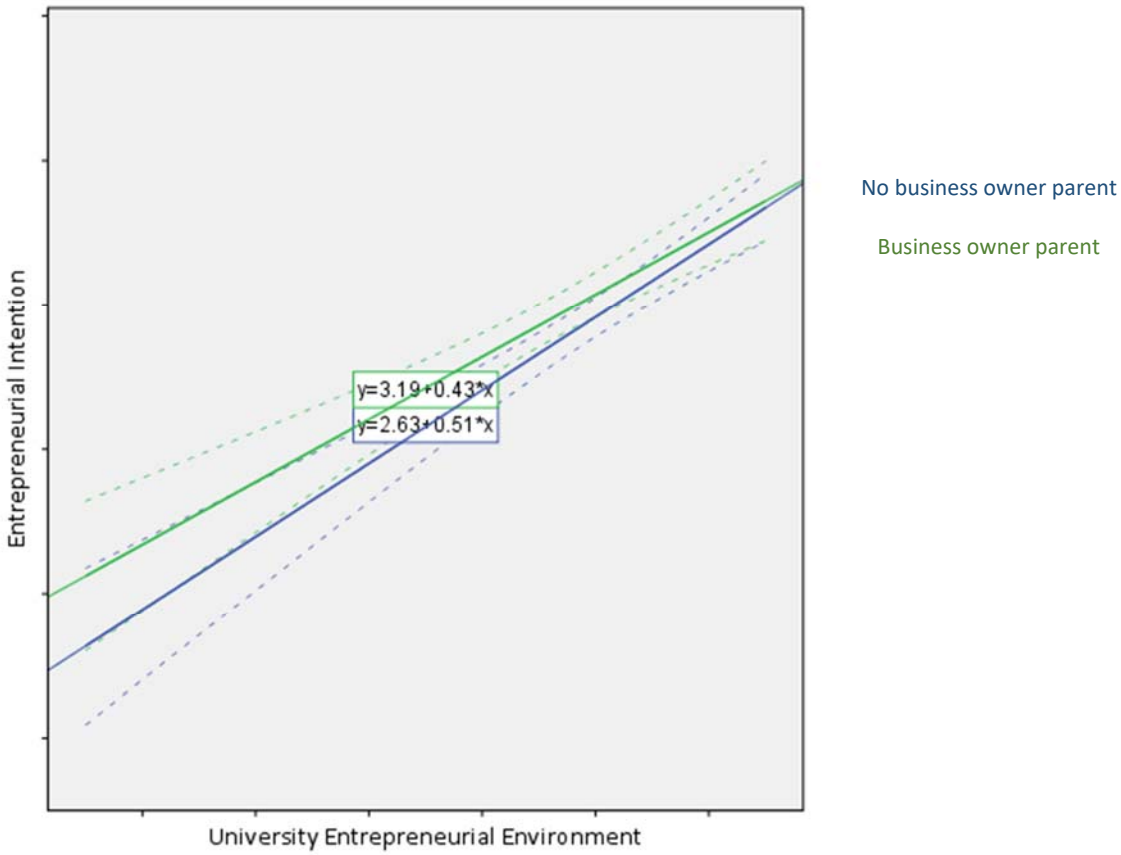

Figure 4.4 The Relationship of Entrepreneurial Intention and University Entrepreneurial Environment, Moderated by Family Entrepreneurial Background

4.4 The Social and Cultural Context

The social and cultural context, known as subjective norms, looks for the opinions of students close networks. The respondents were asked how their networks (e.g., parents, friends, fellow students) would react about their decision in pursuing an entrepreneurial career, using a scale from 1 (very negatively) to 7 (very positively). The items demonstrate good reliability with Cronbach's Alpha = 0.842. Comparing the male vs female and undergraduate vs postgraduate students' subjective norms, we find that the differences are not statistically significant.

Table 4.5 Perceived Social Value about Entrepreneurship

If you would pursue a career as an entrepreneur, how would people in your environment react?	Overall		Male		Female		Undergraduate		Master, PhD, Other	
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Your close family.	1275	6.00	586	5.99	689	6.02	1198	6.02	75	5.77
Your friends.	1256	5.97	582	6.02	674	5.92	1181	5.96	73	5.97
Your fellow students	1259	5.82	582	5.82	677	5.83	1183	5.81	74	5.96

Further, examining the relationship between entrepreneurial intention and subjective norm of entrepreneurship, we find a significant positive relationship (β=0.469, p<.001).

5. Nascent Entrepreneur

An important respondent group are students who are in the process of creating their own business, the so-called *nascent entrepreneurs*. In our sample, 38.70% of all students (N=1,279) are indicated as nascent entrepreneurs (N=495). Some of the nascent entrepreneurs (10.71%) have already created a business before and thus be regarded as *serial* or *portfolio entrepreneurs*. Further investigating the time needed to complete the process of business creation, unfortunately, only 24% (N=119) of the nascent entrepreneurs have provided information. Although around two-thirds of them (N=79, 67.38%) seem to be in the advanced process as they plan to found the business within one year (see Figure 5.1), surprisingly only 20% of them (N=24) willing to maintain their business after graduation.

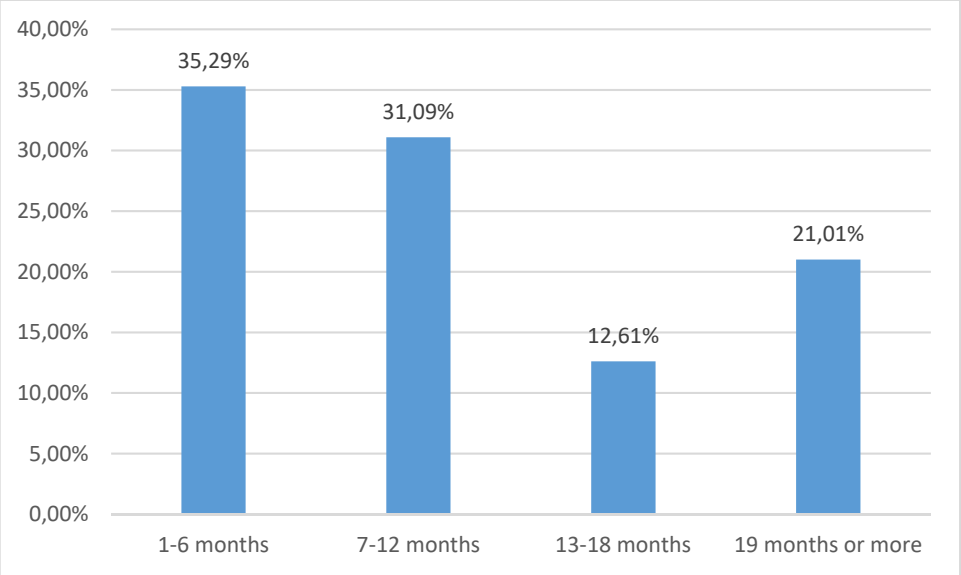

Figure 5.1 Time Horizon of Nascent Entrepreneurs

The importance of forming entrepreneurial team seems important, perhaps to gain networks and supports (Schjoedt et al., 2013) or due to the cultural context, regarding Indonesia as a high collectivist country (Hofstede, 1983; Gupta et al., 2002). Evidently, in the sample, less than 18% of the nascent entrepreneurs plan to create the business on their own.

Similarly (see Figure 5.2), less than 19% of the nascent entrepreneurs plan to own the whole share of the business (see Figure 5.3).

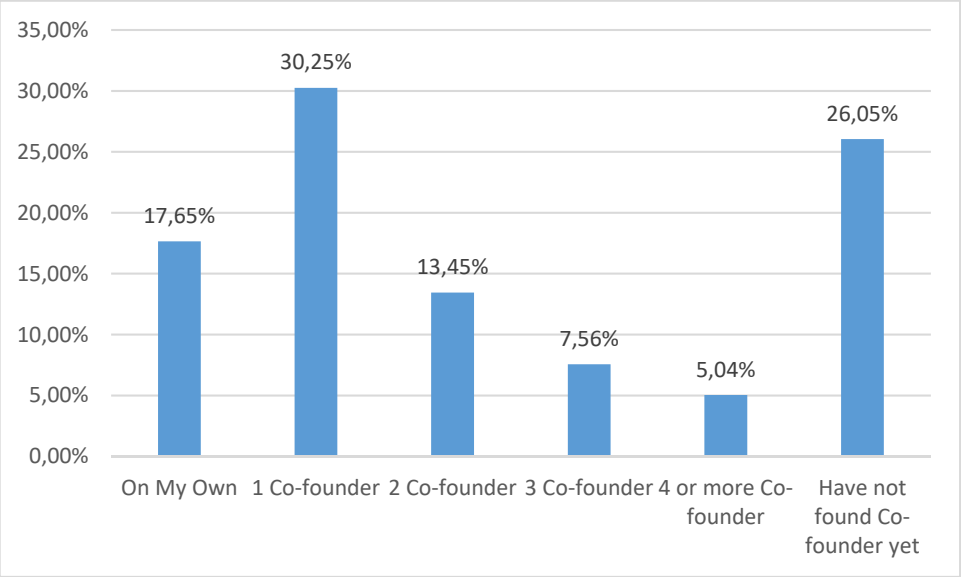

Figure 5.2 Number of Co-Founder of Nascent Entrepreneurs

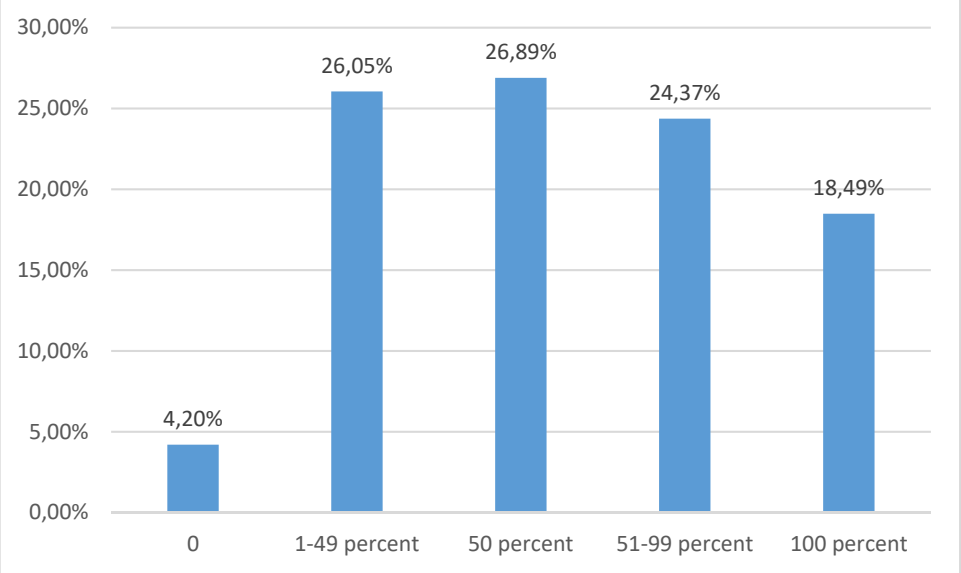

Figure 5.3 Approximate Ownership of the Share in the New Business

Going deeper to find the pattern of founding teams emerging process, we find that almost one-third of the nascent entrepreneurs intentionally search for the co-founder.

Overall, we cannot see a strong pattern, even almost 27% of them form their entrepreneurial team in other ways (see Figure 5.4).

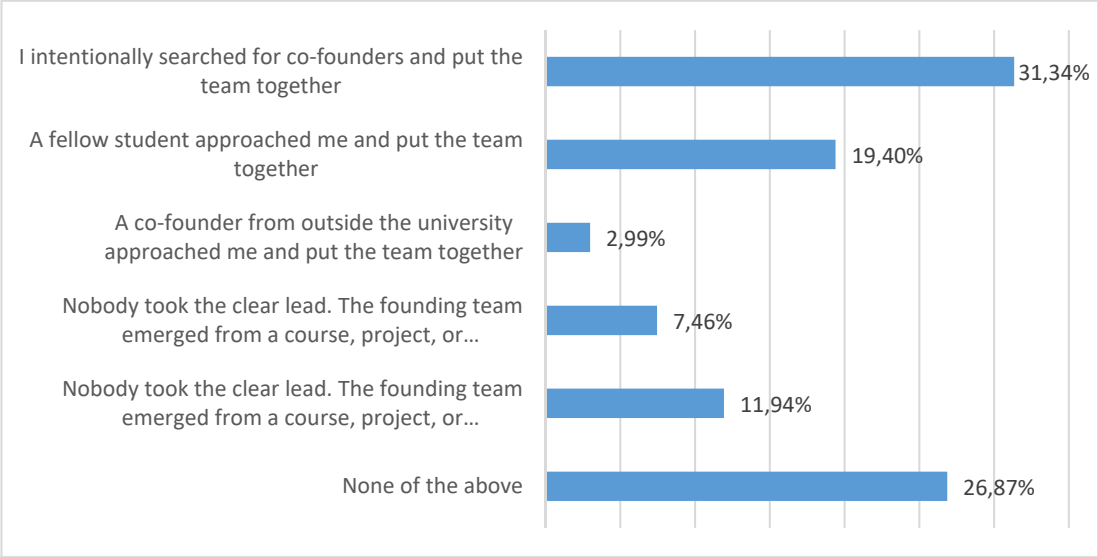

Figure 5.4 Formation of Entrepreneurial Team

6. Active Entrepreneurs

The whole process of business creation may be started from forming entrepreneurial intentions (by the intentional entrepreneurs), then create the actual business (by the nascent entrepreneurs); and finally completing, owning and running the business (by the active entrepreneurs) (Sieger et al., 2019). In our sample, 32.29% (N=413) of the respondents indicated themself as active entrepreneur.

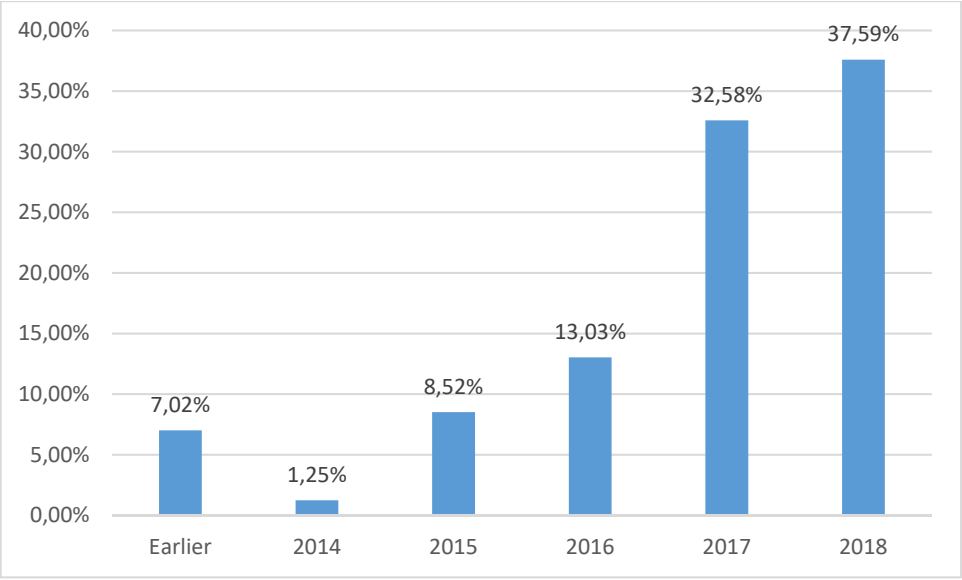

Figure 6.1 Founding Year of Active Entrepreneurs' Firms

Their business is very young; more than 70% of them have just been established for two years or less. Only 7% of them have been established for more than 5 years (see Figure 6.1). Not surprisingly, they hire a small number of employees, mostly less than 5 employees. Even, more than a quarter of them have no employee (see Figure 6.2). Surprising, 48.03% of the active entrepreneurs have not decided yet whether to continue the business as their main occupation or not. Even 27.83% of them will not continue the business after studies, and only 24.14% of them indicated to maintain their business as their main occupation.

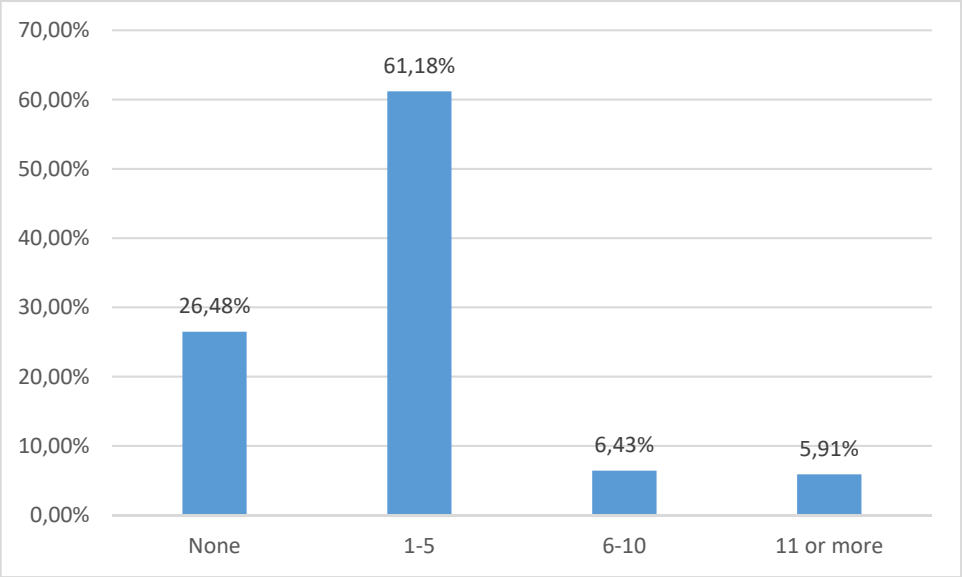

Figure 6.2 Number of Employee of Active Entrepreneurs' Firms

Further, the data in Figure 6.3 emphasize the relevance of co-founders in student entrepreneurship (Schjoedt et al., 2013), especially for Indonesian context as a country with high collectivist culture (Hofstede, 1983; Gupta et al., 2002). In our sample, less than 20% of student active entrepreneurs intended to run their business alone.

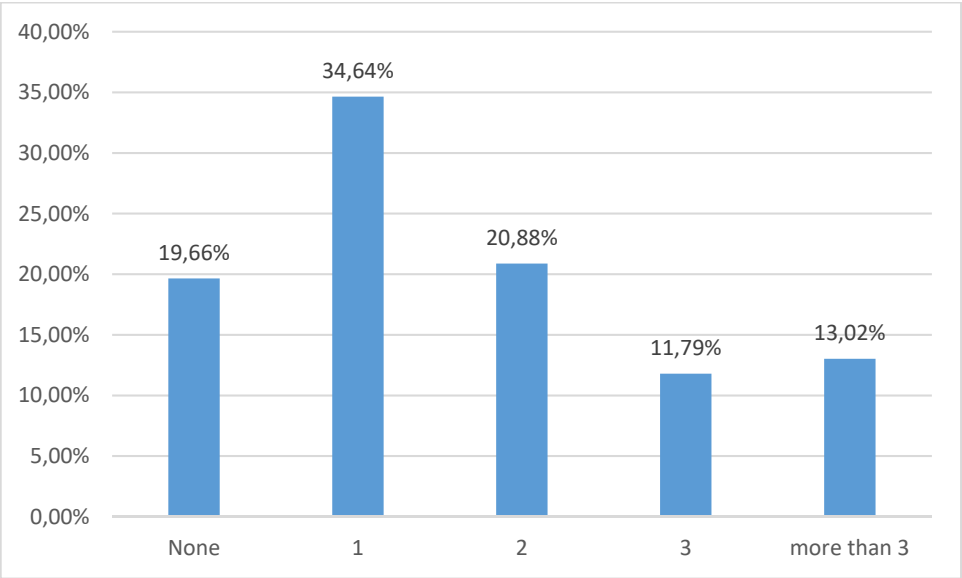

Figure 6.3 Number of Co-founder of Active Entrepreneurs' Firms

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