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ENTREPRENEURIAL INTENTION

Analysis of the influencing factors for choosing an
entrepreneurial career among students in Finland



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ENTREPRENEURIAL INTENTION

Analysis of the influencing factors for choosing an entrepreneurial career among students

Objectives

This research has objectives to examine dominant factors influencing on entrepreneurial intention among students. The intention includes decision to start a new business and entrepreneurial type students want to follow.

Summary

This study has examined the significant impact and correlations between internal and external factors that may influenced students' decision. Internal factors include: Self-Efficacy, Tolerance for Risk and Net desirability of Self Employment. External factors include: Education, Stimulation and Incubation. The survey consisted of 28 questions and data from 100 student respondents was collected in Finland. The data was analyzed using SPSS software. Descriptive statistics, Binary logistic regression and Multinomial Logistic Regression were conducted to evaluate impacts of factors.

Conclusion

The research finds out that internal factors have dominant impact on students' entrepreneurial intention while external factors do not have significant impact. The most significant factors are willingness to take risk, needs for personal freedom, diligence and self-confidence.

This finding provides other researchers a new perspectives for further research in entrepreneurship. It also provides suggestions for education and policy makers in order to encourage students choosing entrepreneurial careers.

KEYWORDS:

Entrepreneurship, Entrepreneurial intension, Entrepreneurial type, Startup decision, Startup choice

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LIST OF ABBREVIATIONS (OR) SYMBOLS

EI	Entrepreneurial intention
EC	Entrepreneurial career
ET	Entrepreneurial type

1 INTRODUCTION

1.1 Research motivation

Nowadays, it has become more difficult for students to find a suitable job that's fit their passion and knowledge in Finland. At the same time, economy is in recession so not many new jobs are created. Start-up has become a hot term, and it is considered as the solution for the economy.

According to Cantor (2011), most of jobs are created by small businesses. So new businesses and startup have attention from government in order to have suitable solutions to recover economy system. At the moment, students have more chance to succeed by running their own start-up, since start-ups are encouraged and supported well by government's policies. Therefore, more students decide to establish and run their own business instead of finding a job in an existing company.

In practice, before starting a business, people have to consider a lot of internal and external factors. Each factor has different level of impact on students' decision. Understanding why students want to run their own businesses will help us to have better education and policy to encourage entrepreneurial intention (EI) among students.

Thus, this research aims to analyze dominant factors that influence on students' EI running their own businesses. Hence, based on the study outcome, we will propose suggestions for other scholars as well as educators and policy makers.

1.2 Research problems

In order to understand the native nature of EI among students, many researches have been conducted in universities all over the world.

In the previous researches, Hatammimi & Wulandari (2014), Xu et al. (2011), Amir et al. (2013) have conclusion that need for achievements (prestige, finance...) is significant factor for EI. While Hatammimi & Wulandari studied on ICT based students, other scholars examined EI in general students and did not include students' study program as a factor. Interestingly, the final results are consistent.

Besides, Xue et al. (2011) stated that the need for independence or freedom is not considered as a significant factor. This conclusion conflicts with Hatammimi and Wulandari's finding since they concluded that respondents do not like to be controlled by other people.

Amir et al. (2013) pointed out that risk-taking propensity is a significant variable that should be considered to start a business

According to Hatammimi and Wulandari (2014), the most dominant factors to motivate students becoming entrepreneurs are: confidence to succeed, dislike company rules / to be independence and financial security.

Turker et al. (2008) found out that external factors such as education and structural support factors affect entrepreneurial intention among students.

Hence, EI factors are getting many considerations from scholars. We can divide those factors into 2 categories: internal and external factors.

In favor of understanding internal factors, different scholars proposed different variables. Hatammimi & Wulandari (2014) classified internal factors into 4

different categories: motivation, self- efficacy, tolerance for risk and net desirability of self employment. On the other hand, Xue et al. (2011) came up with slightly different variables: need for achievement, desire for independence, family business background and subjective norms. The number of variables vary from scholars to others. But most of them proposed need for achievement, self efficacy and risk taking propensity as main concerns (Hatammimi & Wulandari, 2014; Xue et al. , 2011; Amir et al. , 2013)

In their studies about external factors, Turker et al. (2008) examined external factors in 2 dimensions: educational and structural supports. To be more detail, Jansen et al. (2005) came up with 3 categories: education, stimulation and incubation.

During the process of choosing entrepreneurial career (EC), students may wonder about entrepreneurial type (ET) they want to follow. Szycher (2015) classified ET into 4 categories: lifestyle, innovator, empire builder and serial. Different ET has different characteristics and requires different resources and knowledge. Knowing about correlation between students' motivations and ET may help us to understand better nature of students' EI and have more suitable policies to support students and adjust entrepreneurship education. However, there is no research that conducts on finding impacts of internal and external factors on choosing ET which can be considered as one element of EI.

Statement of problems:

Many scholars are motivated by EI studying and a lot of researches have been done. But few of them examined EI in both internal and external factor dimensions. In the previous researches, scholars just focused on either internal or external factors independently. Hence, we cannot understand clearly the correlation and impact comparison between internal and external factors.

Because of the differences between research environments, the results may vary from scholar to others. Furthermore, there is no research conducted to examine students' EI in Finland.

Besides, there is no study examining correlation between those significant factors to ET that students want to follow.

1.3 Research questions

Thus, this study will evaluate above researchs to confirm the impacts of both internal and external factors on EI of students in Finland. Furthermore, we will examine how those factors affect students choosing ET.

The research is pretended to examine internal factors in 4 dimensions proposed by Hatammimi & Wulandari (2014): motivation, self- efficacy, tolerance for risk and net desirability of self employment.

External factors are studied in 3 dimensions stated by Jansen et al. (2005): education, stimulation and incubation.

In order to understand impact of those factors on choosing ET, we will examine 4 ETs proposed by Szycher (2015): lifestyle, innovator, empire builder and serial

Based on the research goals, we are supposed to answer following questions in our study:

Research question 1: - What are the characteristics of students who want to choose EC?

Research question 2: - What are the dominant factors that influence on their decision to be entrepreneur?

Research question 3: - How do those factors affect students on choosing ET?

Based on result of the study, the research will help education organizations, policy makers and other researchers having clear picture about entrepreneurial intention to help students improving their entrepreneurship motivation and starting their own businesses

1.4 Research scope and structure

There are numerous of factors that may have great impacts on EI among students. However, the expectation of the author is to support educators and policy makers. Hence, the author decides to focus on factors that educators and government can affect in the future. Those factors are already mentioned in chapter 1.3. It means author will not examine factors that cannot be affected such as: age, degree program, family background...

In the study, data is collected in Finland. Finland is a country which has active business environment for startups. The findings of the research can be useful to apply in practice in order to support student entrepreneurs but it might not applicable in other countries because of the differences between business environments.

The 2nd chapter will review main concepts about entrepreneurship and previous studies about internal and external factors that affect on EI and ET. After that, we will propose research methodology, hypothesis and data processing. Finally, we will discuss about the finding and give suggestions.

2 LITERATURE REVIEW

In order to have a clear picture about factors influencing on EI among students. We will start by reminding basic definitions to understand nature of startup and entrepreneurship, characteristics of an entrepreneur and entrepreneurial types (ET). This will be a base to specify and develop internal and external framework. After that, the research will review impacts of internal and external factors that may drive students to choose entrepreneurial career (EC).

2.1 Characteristics of a startup business

There are many controversies about definition of a startup. Most of definitions emphasize on two aspects: technology based and growth potential: "The term startup is also associated with a business that is typically technology oriented and has high growth potential." (US SBA, 2016)

At the moment, students choosing EC are not working only in technology field but they are also running different business models creating new jobs such as personal shop, restaurants, and logistics. The research is conducted in the background that our economy needs to decrease unemployment rate and create more value. It is hard to say whether a tech based company can bring more benefit for the society. We consider more about value that company can deliver. So the startup definition is not necessarily limited in technology oriented business.

On the other hand, Oxford Dictionaries proposed a simpler definition: "Startup is a newly established business." (Oxford Dictionaries, 2016)

In the definition by Blank, startup is not limited in a technology oriented company: "a startup is an organization formed to search for a repeatable and scalable business model." (Blank, 25)

Blank explained more about business model: "A business model describes how your company creates, delivers and captures value."

The author agrees with definition stated by Oxford dictionary and Blank. By combining 2 above definitions, we can propose main characteristics of startup are "newly established" and having "a repeatable and scalable business model." (Blank, 25)

Therefore, a student who wants to run their own business can be understood that he will establish a new business having repeatable and scalable business model.

At the moment, startup concept has strong correlation with entrepreneurship term. To intensive understanding about characteristics of a startup business, we should go deeper through literature of entrepreneurship.

2.2 Characteristics and nature of entrepreneurship

Onuoha (2007) has given a clear definition about entrepreneurship: “is the practice of starting new organizations or revitalizing mature organizations, particularly new businesses generally in response to identified opportunities.” This definition is closed to definition about startup we mentioned before. Both definitions pointed out that: new organization is established in practice of startup and entrepreneurship. However, Onuoha emphasized more about opportunity consideration. In fact, not many people can recognize and have suitable responses toward an opportunity. It can be understood that unconfirmed opportunity consists of certain risks and confirmed opportunity is not an opportunity anymore since it is taken by other people. So people are not always willing to take risk to react to a certain opportunity.

Hence, Frank H. Knight (1921) and Peter Drucker (1970) added another characteristic: ““entrepreneurship is about taking risk”. In author’s opinion, this is an important term in entrepreneurship studying. In practice, when starting a new business, nobody can make sure the business model is profitable or not. Besides, running a startup may cost a lot of time and money but the return might be zero. According to Patel (2015), 90% of startups fail. So risk should be considered as a factor that prevent people running their business. It also explains why risk is an important characteristic of entrepreneurship.

To have clearer picture about entrepreneurship, Baruah (2016) summarized main points of entrepreneurship:

- A theory of evolution of economic activities
- Essentially a creative activity or an innovative function.
- A risk taking factor which is responsible for an end result.
- Usually understood with reference to individual business.
- Generates self-employment and additional employment

This definition supports our study background and expected outcome of our EI research. Entrepreneurship is considered as a solution for the economy in order to create more jobs and it often refers to individual business. “Individual business”

characteristic might be an important factor when we examine about entrepreneurial type (ET). Students might want to follow business type that is more individual when choosing EC.

The definition pointed out another important characteristics of entrepreneurship: creativity and innovation. In fact, an entrepreneur is considered to be more innovative than other people (Koellinger, 2008). We can assume that innovative students have more intension to choose EC since they can deliver new solutions to solve a problem and they might be more confident about themselves.

In entrepreneurship studying, entrepreneur is an element that we cannot ignore. Understanding nature of an entrepreneur, we will know their motivation and why they want to choose EC. Based on that, we will have a framework to identify internal and external factors that encourage student to be an entrepreneur.

Entrepreneur, according to Bolton and Thompson (2000) is “a person who habitually creates and innovates to build something of recognized value around perceived opportunities”. Mentioned characteristics of entrepreneurs are consistent with nature of entrepreneurship: innovative, creative and be able to recognize opportunities. This definition emphasized more about “habitually” and “build something of recognized value”. It can be interpreted as self-efficacy factors: diligence, competence which may affect students’ EI.

Furthermore, Hisrich (1990) emphasized risk taking as an important characteristics of an entrepreneur: “Entrepreneur is someone who demonstrates initiative and creative thinking, is able to organize social and economic mechanisms to turn resources and situations to practical account, and accepts risk and failure”. This definition confirmed again particular characteristics of entrepreneurship. Risk taking factor is once again mentioned.

Baruah (2016) compiled definitions of an entrepreneur:

- He is a person who develops and owns his own enterprise
- He is a moderate risk taker and works under uncertainty for achieving the goal.

- He is innovative
- He peruses the deviant pursuits
- Reflects strong urge to be independent.
- Persistently tries to do something better.
- Dissatisfied with routine activities.
- Prepared to withstand the hard life.
- Determined but patient
- Exhibits sense of leadership
- Also exhibits sense of competitiveness
- Takes personal responsibility
- Oriented towards the future.
- Tends to persist in the face to adversity
- Convert a situation into opportunity.

Different scholars proposed different aspects of an entrepreneur. According to these literatures, we can confirm that students choosing EC are people who are willing to start and own his businesses. The definition of entrepreneur is not limited in technology based business but every business model that can create values. In researches about entrepreneurship, scholars focuses more about characteristics and personalities of entrepreneur such as: risk tolerance, diligence, competence and motivation.

Characteristics of entrepreneurs are examined in different aspects. Variables are different from person to person. Therefore, students may choose different EC type based on their nature.

In following chapter, we will review about the essentials of entrepreneurial career type.

2.3 Impact of entrepreneurship characteristics on entrepreneurial career type

Szycher (2015) classified EC into 4 types: life style, innovator, empire builder and serial entrepreneur. In practice, different students are encouraged by different factors and they also have different goals. Therefore, they choose different EC

types to fulfill their career goals. In this chapter, we will review each EC type to understand the correlation between EC types and characteristics of entrepreneurship.

Lifestyle business: Szycher (2015) specified lifestyle entrepreneur as someone who start-up firms to satisfy own personal motivation. This kind of entrepreneur wants to create successful company but becoming a big public company is not necessary. Kinkki & Isokangas (2006) clarified more about entrepreneurs' motivations: responsibility for their own income, benefits and risks. All of the definitions emphasize on "individual" characteristic of lifestyle business. Lifestyle business is not only technology based business but can be anything such as: fashion shop, music production, restaurant, marketer... This characteristic is consistent with definition of Baruah (2016) where the scholar emphasized about reference of entrepreneurship to individual business. From the author point of view, people who follow lifestyle business might be encouraged by freedom, self-directed career and more income. Lifestyle entrepreneurs do not really want to become big public company because they prefer personal freedom more.

Innovator: Szycher (2015) gave definition about innovator entrepreneur: "If you operate your business predominately by innovation, you are focused on using your company as a mean to improve the world. A business owned and operated by innovator is full of life, energy and optimism". Their main motivation is based on innovation and creativity. This characteristic is main component of entrepreneurship where Baruah (2016) mentioned it as an indicator of entrepreneurship. Their main goal is not limited in personal purpose but also consistent with a wish for a better world. They want to have contribution for humanity. Besides, we can assume innovator entrepreneurs tend to be people who have ability to recognize and convert opportunities. Examples of innovators are: Nikola Tesla, Elon Musk, and Palmer Luckey who created Oculus Rift.

Empire builder: According to Szycher (2015), these entrepreneurs would like to provide solutions for the world and build giant companies like Apple, Microsoft and Google. In author's opinion, people who want to build an empire might be encouraged by highlight role models like Steve Job or Bill Gates. Empire builders

have more than characteristics of a lifestyle or innovator entrepreneur such as essentials of leadership and sense of competitiveness. In fact, great empire builders are also great innovators such as Bill Gates, Larry Page or Michael Dell.

Serial entrepreneur: “This entrepreneur’s main motivation is to build a business with a clear exit strategy (to “harvest” the enterprise) (Szycher, 2015). Ability to recognize opportunities. One of significant characteristics of a serial entrepreneur is ability to recognize opportunities. Richard Branson and Edison are examples of great serial entrepreneurs.

In fact, an entrepreneur can be mixed between different ETs based on his motivation. For example Elon Musk can be lifestyle, innovator, empire builder and serial entrepreneur at the same time since he created a lots of giant companies such as PayPal, Tesla...Different motivations will cause different EI. In later chapters, we will analyze deeper about the factors that influences on students’ EI that will take part in explaining why students want to start their own business and why they decide to choose a certain ET.

2.4 Impacts of internal factors motivating college students to choose entrepreneurial career

Many scholars have been interested in internal factors having influence on students’ EI.

Steinhoff and Burgess (Suryana, 2008:55) indicates 7 motivations to choose entrepreneurial career:

- Higher income
- More satisfying career
- Self-directed
- Prestige that comes in being a business owner
- To run with a new idea or concept
- To build long-term wealth
- To make a contribution for humanity or for a specific cause

Mapping these motivations with entrepreneurial types discussed in previous chapter, we can assume decision to choose a career type is dominated by different motivation. Such as lifestyle entrepreneur may expect higher income and to be self-directed while empire builder might need prestige and to have contribution for humanity. This framework does not mention about risk – an important characteristics of entrepreneurship. But in theory proposed by McClelland (1961), people who have high levels of needs for achievement such as income, freedom and prestige...are indicated as risk takers. As we discussed before, risk taking is an important characteristic of entrepreneurship. Therefore, there is significant impact between need for achievements and entrepreneurship intention. In their research, most of scholars such as Hatammimi & Wulandari (2014), Xu et al. (2011), Amir et al. (2013) have conclusion that need for achievements (prestige, finance...) is significant factor for EI.

Moreover, Hatammimi & Wulandari (2014) assorted those internal factors in 3 categories: Self-Efficacy, Tolerance for Risk and Net desirability of Self Employment.

Self-Efficacy: Steinhoff and Burgess (Suryana, 2008:27) clarified 4 manners and personalities of an successful entrepreneur:

- Have confidents to work hard independently and bold to face risks to gain outputs.
- Have organizational skills, can arranged goals, output oriented, and responsible towards the works.
- Creative and able to see opportunities in entrepreneurial.
- Enjoy challenges and find self-satisfaction in generating ideas.

Tolerance for Risk: According to Suryana (2008: 25), tolerance for risk can be determined by:

- Self-confidence.
- Willingness in using abilities and find opportunities and probability to get profit.
- Ability to assess risks situation realistically.

- Meredith stated that entrepreneurs are the one who likes more challenging efforts to gain success or failure rather than less challenging efforts (Suryana and Bayu, 2010:147).

Net desirability of Self Employment: Segal, G., Borgia, D., & Schoenfeld, J. (2005) indicated 5 factors considered as net desirability of self employment. Which are criterias to decide to be an entrepreneur or work for others:

- Income potential
- Financial freedom
- Need for achievements
- Get away from corporate bureaucracy

This framework covers all aspects of internal factors in EI. Self-efficacy emphasized in abilities of an entrepreneur to implement and convert an idea into a real business. Tolerance for risk is competence to face with and handle risks during the decision making process and implementation. Net desirability of Self Employment proposed main motivations that encourage entrepreneur to run their business.

Different people tend to be affected in different levels of those factors. In the studies conducted by different scholars all over the world, they found out different significant factors that motivate students. The findings are very interesting. Xue et al. (2011) stated that need for independence or freedom is not considered as a significant factor while Hatammimi and Wulandari (2014) concluded that respondents do not like to be controlled by other people.

Amir et al. (2013) pointed out that risk-taking propensity is a significant variable that should be considered to start a business. This finding is consistent with main entrepreneurship characteristic: taking risk.

In their research, Jurry Hatammimi and Dea Ayu Wulandari (2014) pointed out the most dominant variables to motivate students to be entrepreneurs are confidence to succeed, dislike the company rules and financial security.

The differences in above research findings can be explained by unequal external factors. Most of researches were conducted in examine internal factors so it caused the results varied. In the next chapter, we will have a closer look at external factors

2.5 Impacts of external factors motivating college students to choose entrepreneurial career

The external factors that encourage student entrepreneurship were examined by Jansen et al. (2005) In the research, they proposed Three Stage Student Entrepreneurship Encouragement Model (SEEM) which groups external factors in 3 categories: Education, Stimulation and Incubation.

Three Stage Student Entrepreneurship Encouragement Model is described in Figure 1:

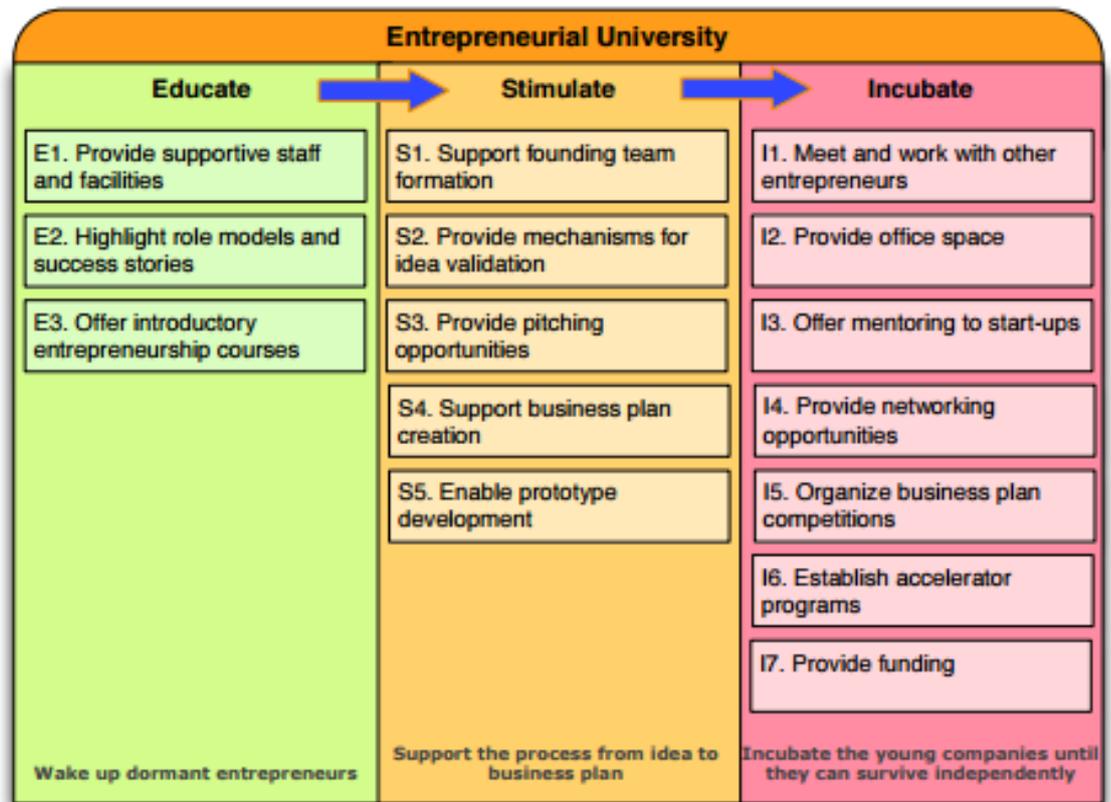


Figure 1: Three-stage Student Entrepreneurship Encouragement Model (SEEM) (Jansen et al., 2005, pp 172)

Education: According to Donckels (1991), the most important role of entrepreneurship education is to awake latent entrepreneur, changing attitude and creating awareness of entrepreneurial career among students. The important role of entrepreneurship education was awarded by many scholars. In their research, Remeikiene et al. (2013) pointed out an important findings that internal factors such as self-efficacy, risk taking, need for achievement can be developed by education. It is understandable since education can improve students' competence in management, risk control, and skills. Therefore, it gives them confidence to run their businesses and changing attitude toward risks.

Donckels (1991) also revealed effective ways to advance entrepreneurship educations:

- Having university staff and faculty that are supportive towards entrepreneurship and entrepreneurial students

- Highlight role models and success stories
- Provide introductory courses (at the bachelor/undergraduate level)

Education should not only provide students theories about background knowledge about economy or business management. In fact, it should take part in giving students inspiration and practical experience. Many universities often invite experienced experts and successful entrepreneurs to cooperate in entrepreneurship education. During the time working with experts, students can be motivated and learn much more than studying in theory books. In universities like Stanford, students have more chances to meet highly role models. Therefore, they are encouraged and inspired in higher frequency compared to other universities. It is a great motivation to push students to choose EC.

Stimulation: Donckels (1991) defined the main goal of stimulation is to transform a business idea to be a completed business plan. The stimulation can be done by following activities:

- The university should support founding team formation
- Provide mechanisms for idea validation
- Provide pitching opportunities
- Support business plan creation
- Enable prototype development

This stage has important impact on delivering an entrepreneurship dream to be real. Not every student has enough experience and resources to start a business. This is an obstacle that prevents them to be an entrepreneur. So if they are guided well by experienced experts, the chance they choose EC will be increased. In fact, university is the best environment where they can find suitable partners since they know other students' competence. Risk – free entrepreneurship activities like idea validation, pitching... can help students to be more familiar with real life business operations and give them more chances to learn. During the stimulation stage, students are more motivated on their entrepreneurship decision.

Incubation: The incubation focuses on supporting the launch of an actual company (Donckels, 1991). Donckels (1991) pointed out main supporting activities in incubators:

- Bringing young entrepreneurs together in a common working space
- Providing access to (free or subsidized) professional office space
- Mentoring and networking services
- Hosting business plan competitions
- Establish accelerator programs
- Provide funding

After students decide to start their businesses, definitely their survival chance is lower than other experienced entrepreneurs. Students often have problems about networking and financial resources. Therefore, incubators take important role to make a student startup to succeed. By providing co-working space or establishing accelerator programs, universities can give students more chance to enhance the networking. Funding support will help startups survive and show their potential in early stage. Indeed, startups like Facebook had a great incubation support from their universities.

In fact, an effective entrepreneurship university often has great education, stimulation and incubation at the same time. The coordination between those factors provide mechanism to encourage students's EI, reduce risk, and enhance success rate. Because it does not only support students running their business but also creates a culture within the university where each student is encouraged by each other and university's alumni. The number of startups in university can be a good metric to measure the success of university's policies toward entrepreneurship. Stanford University is a great example of successful university which has excellent entrepreneurship environment where successful startups like Instagram, Snapchat or Pulse were created.

This chapter has reviewed literatures about nature of entrepreneurship. Based on characteristics of entrepreneurship and entrepreneur, scholars developed understanding about entrepreneurial career types and factors that influence on

entrepreneurial intention. But few of the researches examined EI in both internal and external factor dimensions. In the previous researches, scholars just focused on either internal or external factors independently. Therefore, the current thesis will focus on analyzing impacts of both internal and external factors on EI.

3 RESEARCH METHODOLOGY AND HYPOTHESIS

3.1 Research method

This thesis will apply deductive approach in order to achieve its research goals. Deductive approach is defined by Wilson as “concerned with developing a hypothesis (or hypotheses) based on existing theory, and then designing a research strategy to test the hypothesis” (Wilson, 2010). Hence, our research will follow procedure below:

Based on theory about entrepreneurship and influencing factors, hypotheses will be developed. After that, relevant methods will be developed to test above hypotheses. After all, we will discuss about the findings. The research stages are described as in Figure 2 below:



Figure 2 Research stages

The research will aim to answer the following questions, which are mentioned in chapter 1.3

- 1) What are the characteristics of students who want to choose EC?
- 2) What are the dominant factors that influence on their decision to be entrepreneur?
- 3) How do those factors affect students on choosing ET?

3.2 Hypothesis

Based on theoretical framework, we divided EI into 2 components: decision to be an entrepreneur and entrepreneurial career type students want to follow. In order to decide their career paths, students may have 2 decisions: running their own businesses or working for other people.

Szycher (2015) specified 4 different ETs: lifestyle, innovator, empire builder and serial entrepreneur. Each ET has different characteristics. Students' EI is encouraged by different factors.

Factors having influences on EI include internal factors and external factors.

Correlation between those dimensions are described as in the figure below:

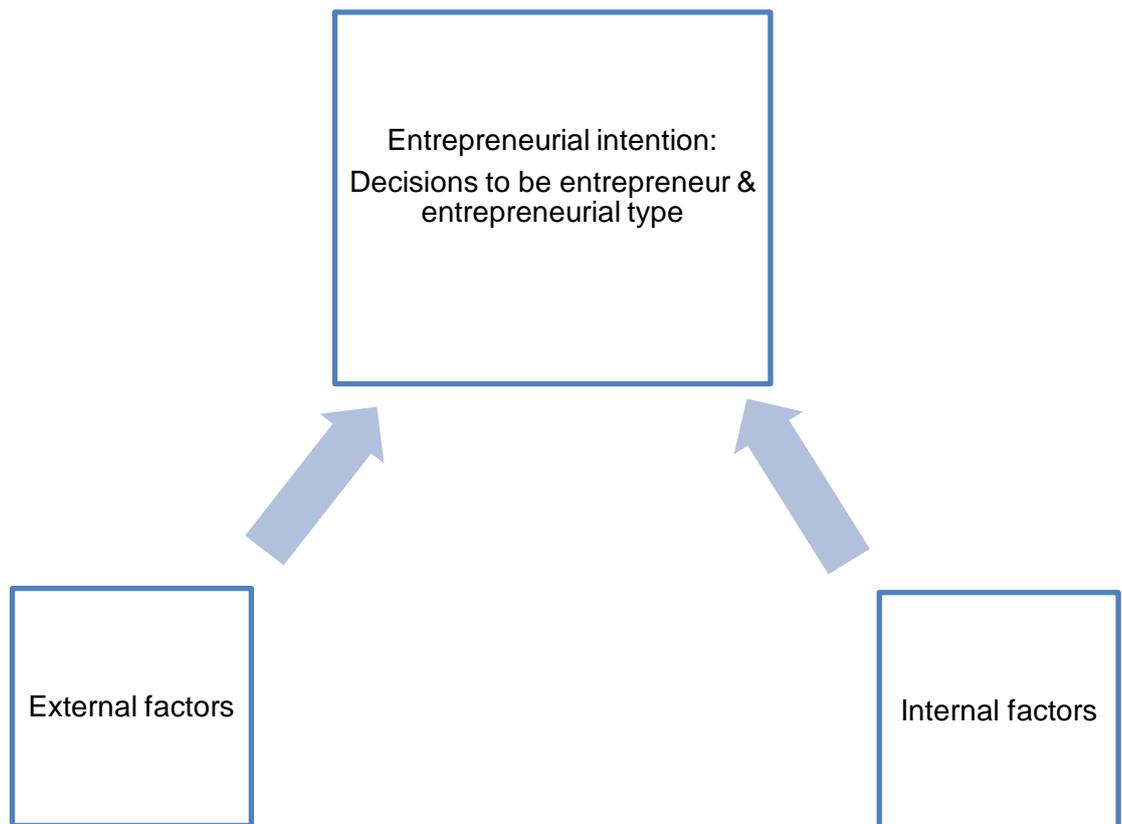


Figure 3 Correlation between entrepreneurial intention and factors

According to theory proposed by Hatammimi & Wulandari (2014), internal factors are categorized into 3 groups: Self-Efficacy, Tolerance for Risk and Net desirability of Self Employment. Each group has different element factors. The details of internal factors are described in table below:

Table 1. Internal factors having affects on EI.

Internal factors		
Self-Efficacy	Tolerance for Risk	Net desirability of Self Employment
1) Diligent: You are hard working at work 2) Self-Confidence: you are confident that you have	1) Willing to take risk: you are willing to take risks and uncertainties when become an entrepreneur	1) Income potential: starting your own business may help you get more income than

<p>competence to obtain your career goals.</p> <p>3) Never give up: you always try your best and overcome difficulty to achieve your goals.</p> <p>4) You have good competence in your career field (IT, business)</p> <p>5) You are innovative, creative and have vision to see opportunity</p>	<p>2) Risk understanding (able to access risk realistically): you are able to analyze, assess risks that may occur and have corresponding solutions</p> <p>3) Love challenge to gain: as an entrepreneur you love to face with challenges to gain yourself and your entrepreneurial career</p>	<p>working for other people.</p> <p>2) Need for achievements: you would like to be respected and appreciated by other people when becoming a successful entrepreneur</p> <p>3) Freedom: you do not like company rules. As an entrepreneur, running your own business will give you more personal freedom</p>
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External factor framework is proposed by Jansen et al. (2005) which includes Education, Stimulation and Incubation. The framework was supported by Donken (1991) who specified more elements in each factor. External factors are described in Figure 1 in chapter 2.5

In this research, we will examine impacts of internal and external factors on EI. For each correlation between either internal or external factors on entrepreneurial decision and ET, we developed a relevant hypothesis. Therefore, following hypotheses are proposed:

- H1: There is significant relationship between students' internal factors and decisions to be entrepreneur. We assume that internal factors are dominant factors that encourages students to start their own business.

- H2: There is significant relationship between external factors and student's intention to start a new business
- H3: There is correlation between internal factors and entrepreneurial career types students want to follow
- H4: There is correlation between external factors and entrepreneurial career types students want to follow

3.3 Research method and data collection

This research aims to analyze factors influencing students' EI in Finland with the purpose to support other scholars, educators and policy makers. The study has background that there is a growing entrepreneurship trend among students in Finland. In that environment, young entrepreneurs have different studying backgrounds in different degree programs. The number of possible factors are very large and we do not have enough resource to examine every aspect in a single study. Therefore, this research will examine Finnish students' EI in common. It means we will not examine students' background such as studying programs, ages, working experiences or nationality. Those are factors that policy makers are harder to have impacts on. Our goal is to encourage entrepreneurship awareness in all students. So we focus more on factors that policy makers and educators can affect in the future.

This research will apply positivistic approach in data collection. Research Observatory defined positivistic approach: "In positivist / scientific research, the researcher is concerned with gaining knowledge in a world which is objective using scientific methods of enquiry. Methods associated with this paradigm include experiments and surveys where quantitative data is the norm" (Positivist / scientific research, 2016)

Hence, a questionnaire survey will be designed to collect students' EI decisions, examine their characteristics and gather their opinions about internal and external factors. After that the data will be interpreted to test the hypotheses. Based on the outcome, we will have discussion to understand the correlations between above factors and students' EI.

3.4 Questionnaire design

The survey has 4 parts, each of them measures different aspect of students' EI:

The first part includes 2 questions to identify 2 aspects of EI among students: decision to choose EC and ET students want to follow. The type of questions are multiple choices. In the first question students can choose between "Start your own business" and "Working for other people". In the second question, students can choose one of 4 ECs: Lifestyle, innovator, empire builder and serial entrepreneur. These ECs were mentioned in chapter 3.2.

The second part is used to collect data about internal factors. It has 11 questions divided into 3 groups: Self-Efficacy, Tolerance for risk and Net desirability of Self Employment. Each question presents one internal factor which is mentioned in Table 1 of Chapter 3.2. Internal factor questions are developed based on questions in reseach of Hatammimi & Wulandari (2014)

The third part is used to collect data about external factors. It has 12 questions divided into 3 groups: Education, Stimulation and Incubation. Each question presents one external factor which is mentioned in Figure 1 - Three-stage Student Entrepreneurship Encouragement Model (SEEM) (Jansen et al.,2005, pp 172) of Chapter 2.5. Jansen et al. (2005) proposed 7 factors in incubation stage but in the questionnaire, we combined relevant factors into one question. Therefore, number of questions in Incubation will be 4 instead of 7.

All of the questions in 2nd and 3rd part are interval rating scale where 1 is "extremely disagree" and 5 is "extremely agree", 3 is "neutral", 2 is "disagree" and 4 is "agree".

Author chooses scale from 1-5 to support the analyzing process using SPSS 24.0

The fourth part having 2 questions is used to get more student opinions about their entrepreneurship motivations and main obstacles. To be more objective, open-ended questions will be used. Students may give answers that are not included in study's proposed factors. But it may give better understanding about

entrepreneurial factors and help researcher to aware the limitation of the research.

3.5 Sampling and data collection

This research employs quantitative descriptive method using questionnaire survey. The survey is distributed using simple random sampling - probability sampling method.

Easton & McColl's gave definition of simple random sampling:

“Simple random sampling is the basic sampling technique where we select a group of subjects (a sample) for study from a larger group (a population). Each individual is chosen entirely by chance and each member of the population has an equal chance of being included in the sample. Every possible sample of a given size has the same chance of selection.” (Easton & McColl's, 1997). This method is suitable for our positivistic approach.

The survey is created by Google Form and printed paper survey. It was passed via Facebook groups and direct meeting. The collection process was from May 10th to May 16th, 2016.

The sample of this research is random college students in Finland. Around 70% of respondents are strangers in Turku. They are studying in University of Turku in different programs, Turku School of Economics and Turku Universities of Applied Sciences. 30% of respondents are random students in other universities in Finland.

100 answers were collected. Result was analyzed the result using SPSS 24.0

3.6 Reliability and validity

This research aims to analyze factors influencing on EI of students in Finland so the research will have high validity in Finland. Because of the differences in business environment in countries, the research may have lower validity when applying in other nations.

Since the research emphasized on examining factors derived from nature of entrepreneurship, it might be a good reference to other scholars, educator and policy makers in anywhere because entrepreneurs all over the world often share common characteristics.

About the validity and reliability of the data, the questionnaire has a clear design and it was tested carefully before distribution to prevent confusions from respondents. Most of the answers were conducted in printed paper version under observation of the author. Respondents were supported by author directly during the answering process.

In later chapter, author will also use Cronbach's alpha to test the reliability of the result.

4 DATA ANALYSIS

The data is analyzed using SPSS 24.0. In order to analyze the result, the first part of this chapter will test the reliability of collected data, the second part will present descriptive statistics about respondents then the third part will test hypotheses. Based on the result of this chapter, author will have discussion and comment about the finding in chapter 5.

4.1 Reliability of the data

Cronbach alpha is used to test the reliability of the rating scale questions. According to definition in Laerd Statistics, "Cronbach's alpha is the most common measure of internal consistency ("reliability"). It is most commonly used when you have multiple Likert questions in a survey/questionnaire that form a scale and you wish to determine if the scale is reliable." (Laerd Statistics, 2016)

According to L Juul et al. (2012), Cronbach's alpha values between 0.6 and 0.65 are acceptable

As the result shown in Table 2 in this study, the Cronbach alpha for internal factors is: 0.689 and for external factors is 0.861. It means, our sample has high level of internal of consistency and result is acceptable.

Table 2. Reliability Statistics.

Reliability Statistics		
	Cronbach's Alpha	N of Items
Internal factors	.644	11
External factors	.861	12

4.2 Descriptive statistics

According to the survey result in Table 3, 63% of respondents have intention to start their own businesses, while 37% of respondents choose to work for other people.

This result presents tendency of first dimension in students' EI: decision to be entrepreneur. In the later chapter, we will analyze factors that influenced on the decision.

Table 3. Entrepreneurial intention decision.

Do you want to start your own business instead of working for others?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Start your own business	63	63.0	63.0	63.0
	Working for other people	37	37.0	37.0	100.0
Total		100	100.0	100.0	

Result in Table 4 shows that 56% students have intention to follow lifestyle entrepreneurial career in which they create their own companies but becoming a

big public company is not necessary. 30% students want to be innovators operating their business predominately by innovation, using their company to improve the world.

Table 4. Entrepreneurial career type intention.

What kind of entrepreneurial career do you want to follow?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Build a business with a clear exit strategy. Then create other new business.	8	8.0	8.0	8.0
Create successful company but becoming a big public company is not necessary	56	56.0	56.0	64.0
Operate your business predominately by innovation, you are focused on using your company as a mean to improve the world.	30	30.0	30.0	94.0
You have dream to create giant companies like Microsoft, Apple or Google	6	6.0	6.0	100.0
Total	100	100.0	100.0	

This result indicates inclination of the second dimension in students' EI: ETs that students want to follow.

Students tend to have lifestyle business and innovator career. These kinds of ET will give them more freedom and they can be more self-directed implement any innovation they want. Innovator also wants to contribute to humanity. Therefore, this result might be the first sign to indicate students' motivation.

Table 5 shows main motivation of students that encourage them to start their business

Table 5. Main motivation for entrepreneurial career intention.

Main Motivation*Startup Decision Cross tabulation

		Startup Decision		Total	
		0	1		
Main Motivation ^a	Higher income and long term wealth	Count	11	22	33
		% within Startup Decision	34.4%	42.3%	
		% of Total	13.1%	26.2%	39.3%
	Self-directed and satisfying career	Count	23	36	59
		% within Startup Decision	71.9%	69.2%	
		% of Total	27.4%	42.9%	70.2%
	Prestige	Count	8	7	15
		% within Startup Decision	25.0%	13.5%	
		% of Total	9.5%	8.3%	17.9%
	Run new idea or concept	Count	5	13	18
		% within Startup Decision	15.6%	25.0%	
		% of Total	6.0%	15.5%	21.4%
	Contribution to humanity and specific cause	Count	5	8	13
		% within Startup Decision	15.6%	15.4%	
		% of Total	6.0%	9.5%	15.5%
	Total	Count	32	52	84
		% of Total	38.1%	61.9%	100.0%

Table 5 is created by using multiple response analysis, a respondent can answer more than one option so the total answers may exceed the total number of respondents.

It points out main motivation for students to start their business:

Startup decision: 0 means that students want to work for other people

Startup decision 1: means that students want to start their own business.

According to the result: 42.9 % responses indicate that they want to start business and their main motivation is to have freedom: self-directed and more satisfying career.

26.2% responses indicate that they want to start business and their main motivation is to higher income and long term wealth.

8.3 % responses shows that their motivation is to have better prestige.

This result supports finding in Table 4 where most of students want to be lifestyle or innovator entrepreneur. Based on data of Table 4 and 5, we can have overview picture about students' tendency. Students tend to be lifestyle and innovator entrepreneurs and their main motivation is to have more freedom and to be self-directed.

Table 6 shows main obstacles which prevent students starting their entrepreneurial career:

Table 6. Main obstacles for entrepreneurial career intention.

		Startup Decision		Total	
		0	1		
Main Obstacle ^a	Risk	Count	15	25	40

	% within Startup Decision	53.6%	51.0%	
	% of Total	19.5%	32.5%	51.9%
Finance	Count	6	17	23
	% within Startup Decision	21.4%	34.7%	
	% of Total	7.8%	22.1%	29.9%
No motivation	Count	11	8	19
	% within Startup Decision	39.3%	16.3%	
	% of Total	14.3%	10.4%	24.7%
No idea	Count	3	8	11
	% within Startup Decision	10.7%	16.3%	
	% of Total	3.9%	10.4%	14.3%
Legal and admin issue	Count	4	3	7
	% within Startup Decision	14.3%	6.1%	
	% of Total	5.2%	3.9%	9.1%
Knowledge	Count	3	3	6
	% within Startup Decision	10.7%	6.1%	
	% of Total	3.9%	3.9%	7.8%
Total	Count	28	49	77
	% of Total	36.4%	63.6%	100.0%

51.9% of responses show that Risk is the significant factor that inhibits students running their own business.

29.9% responses indicate that Finance is the main obstacles.

24.7% responses point out that obstacle is they do not have motivation: students are not interested in entrepreneurial career.

It is clear that the main obstacle preventing students is risk. This finding supports statement proposed by Knight (1921) and Drucker (1970) that ““entrepreneurship is about taking risk”. The difference between an entrepreneur and other people is the ability to take risk. This characteristics will be examined deeper in later chapter.

Table 7 and Table 8 calculate mean of internal and external factors

Table 7 Mean of internal factors

Descriptive Statistics		
	N	Mean
You are hard working at work	100	4.18
You are confident that you have competence to obtain your career goals	100	3.89
You always try your best and overcome difficulties to achieve your goals	100	4.14
You have good competence in your career field (IT, business)	100	3.53
You are innovative, creative and have vision to see opportunity	100	3.82
You are willing to take risks and uncertainties when become an entrepreneur	100	3.47
You are able to analyze, assess risks that may occurs and have corresponding solutions	100	3.74
You love to face with challenges to gain yourself and your entrepreneurial career	100	3.53
Starting your own business may help you get more income than working for other people	100	3.44
You would like to be respected and appreciated by other people when becoming a successful entrepreneur	100	3.72
You do not like company rules. As an entrepreneur, running your own business will give you more personal freedom	100	3.66
Valid N (list wise)	100	

Table 8 Mean of external factors

Descriptive Statistics		
	N	Mean
How supportive are accelerators, your university staff and facilities toward entrepreneurship and entrepreneurial students	100	3.04
You encouraged by highly role models and successful stories of well-known entrepreneurs like Steve Jobs, or Bill Gates?	100	2.88
Your university / accelerator provide supportive and useful entrepreneurship training courses	100	3.04
You get support founding team formation from university and entrepreneurship organizations	100	2.82
Your university / accelerator provide mechanisms to help you validate your business idea	100	2.86
You often have opportunities to pitch your idea in university / accelerator	100	2.93
You get support from university / accelerator to create your business plan / Business model canvas	100	2.83
You get help from university / accelerator to develop prototype for your business idea	100	2.54
You have chance to meet and work with other entrepreneurs in common working space	100	2.88
You get mentoring and networking program from your university / accelerator	100	2.96
You have attention in business idea competition in your university / accelerator	100	2.76
Your university / accelerator or other entrepreneurship organizations provide funding	100	2.49
Valid N (list wise)	100	

According to result, All means of internal factors are over Neutral level (3). It indicates that in students' perception, they have high level of Self-Efficacy, Tolerance for Risk and Net desirability of Self Employment.

Most of external factors have mean under Neutral level (3). It means students perceive that education, stimulation and incubation are not really supportive. It can be explained by low quality of those factors in their universities or students do not know about those services.

In chapter 4.3, we will have deeper analysis to test hypotheses proposed in chapter 3.2

4.3 Hypothesis testing

This chapter will mainly focus on testing hypotheses. Further discussion will be given in chapter 5.

Hypotheses 1 and 2 will be tested using Binary logistic regression analysis. Laerd statistics stated that “A binomial logistic regression (often referred to simply as logistic regression), predicts the probability that an observation falls into one of two categories of a dichotomous dependent variable based on one or more independent variables that can be either continuous or categorical.” (Laerd statistics, 2016)

In hypotheses 1 and 2, students’ decisions can fall into “Start their own businesses” or “Working for other people”. Hence, Binary logistic regression analysis is used to test.

According to Laerd statistics (2016), the statistical significance of the test is found in the "**Sig.**" column. p value which is < 0.05 is considered to have significant impact.

4.3.1 Testing H1 using Binary logistic regression analysis

In current research testing binary logistic regression testing, the decision to start a business instead of working for other people is used as dependent variable. Internal factors are used as independent variables

Table 9. Binary logistic regression testing to examine impact of internal factors on entrepreneurial intention.

		Variables in the Equation					
		B	S.E.	Wald	df	Sig.	Exp(B)
Step	You believe you can get success and meet your	-.412	.342	1.451	1	.228	.662
1 ^a	life's goal by choosing entrepreneurial career						
	You are hard working at work	.140	.445	.099	1	.754	1.150
	You are confident that you have competence to obtain your career goals	.712	.399	3.188	1	.074	2.038
	You always try your best and overcome difficulties to achieve your goals	-.873	.490	3.180	1	.075	.418

You have good competence in your career field (IT, business)	-.287	.355	.652	1	.419	.751
You are innovative, creative and have vision to see opportunity	-.170	.370	.211	1	.646	.844
You are willing to take risks and uncertainties when become an entrepreneur	-1.168	.382	9.361	1	.002	.311
You are able to analyze, assess risks that may occurs and have corresponding solutions	-.389	.385	1.024	1	.311	.677
You love to face with challenges to gain yourself and your entrepreneurial career	.188	.408	.212	1	.645	1.207
Starting your own business may help you get more income than working for other people	.058	.276	.044	1	.834	1.059
You would like to be respected and appreciated by other people when becoming a successful entrepreneur	-.276	.316	.764	1	.382	.759
You do not like company rules. As an entrepreneur, running your own business will give you more personal freedom	-.543	.259	4.396	1	.036	.581
Constant	10.130	3.414	8.802	1	.003	25079.489

The results in table 9 shows that the “Tolerance for risk” factor (You are willing to take risks and uncertainties when become an entrepreneur) has strongest impact on decision to become an entrepreneur. ($p = 0.002 < 0.05$)

“Net desirability of Self Employment” factor (Freedom) also has significant impact with $p = 0.036 < 0.05$

This result is corresponding with result in Table 5 in which the needs for self-directed and freedom is the main motivation. And in Table 6, the main obstacle to prevent student starting their own business is Risk.

Hence, H1 is supported.

4.3.2 Testing H2 using Binary logistic regression analysis

Binary logistic regression testing is used to examine impact of external factors on entrepreneurial intention. The decision to start a business instead of working for other people is used as dependent variable. External factors are used as independent variables

Table 10. Binary logistic regression testing to examine impact of external factors on entrepreneurial intention.

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	How supportive are accelerators, your university staff and facilities toward entrepreneurship and entrepreneurial students	-.169	.351	.231	1	.631	.845
	You are encouraged by highly role models and successful stories of well-known entrepreneurs like Steve Jobs, or Bill Gates?	-.054	.203	.071	1	.791	.947
	Your university / accelerator provide supportive and useful entrepreneurship training courses	.136	.351	.150	1	.698	1.146
	You get support founding team formation from university and entrepreneurship organizations	.304	.319	.906	1	.341	1.355
	Your university / accelerator provide mechanisms to help you validate your business idea	-.194	.428	.204	1	.651	.824
	You often have opportunities to pitch your idea in university / accelerator	.128	.316	.165	1	.685	1.137
	You get support from university / accelerator to create your business plan / Business model canvas	.227	.372	.374	1	.541	1.255
	You get help from university / accelerator to develop prototype for your business idea	.041	.357	.013	1	.909	1.042
	You have chance to meet and work with other entrepreneurs in common working space	-.287	.246	1.355	1	.244	.751
	You get mentoring and networking program from your university / accelerator	.318	.252	1.594	1	.207	1.375
	You have attention in business idea competition in your university / accelerator	-.261	.242	1.168	1	.280	.770
	Your university / accelerator or other entrepreneurship organizations provide funding	-.075	.277	.074	1	.786	.928

Constant	-	1.119	.726	1	.394	.386
	.953					

According to the result shown in Table 10, none of the external factors has significant impact ($p < 0.05$) on entrepreneurial intention so H2 is rejected

This result can be explained by using result in Table 8, which indicated that in students' perception, the external factors they are provided are not really supportive. Therefore, external factors do not have significant impacts on their decisions.

Hypotheses 3 and 4 will be tested using Multinomial Logistic Regression analysis. Laerd statistics stated that "Multinomial logistic regression (often just called 'multinomial regression') is used to predict a nominal dependent variable given one or more independent variables." (Laerd statistics, 2016)

In hypotheses 3 and 4, students' decisions can fall into 4 categories: Lifestyle, innovator, empire builder and serial entrepreneur. Hence, Multinomial Logistic Regression analysis is used to test.

According to Laerd statistics (2016), the statistical significance of the test is found in the "**Sig.**" column. p value which is < 0.05 is considered to have significant impact.

4.3.3 Testing H3 using Multinomial Logistic Regression analysis

In Multinomial Logistic Regression testing, the chosen entrepreneurial type is used as dependent variable. Tolerance for risk ("You are willing to take risks and uncertainties when become an entrepreneur") and need for freedom ("You do not

like company rules. As an entrepreneur, running your own business will give you more personal freedom”) are used as factors and other internal factors are used as covariates

Table 11. Multinomial Logistic Regression testing to examine impact of internal factors on choosing entrepreneurial type.

Likelihood Ratio Tests

Effect	Model Fitting Criteria -2 Log Likelihood of Reduced Model	Likelihood Ratio Tests		
		Chi-Square	df	Sig.
Intercept	146.620 ^a	.000	0	.
You believe you can get success and meet your life's goal by choosing entrepreneurial career	150.823	4.203	3	.240
You are hard working at work	155.229	8.609	3	.035
You are confident that you have competence to obtain your career goals	157.797	11.176	3	.011
You have good competence in your career field (IT, business)	151.801	5.180	3	.159
You are innovative, creative and have vision to see opportunity	150.316	3.696	3	.296
You are able to analyze, assess risks that may occurs and have corresponding solutions	151.770	5.150	3	.161
You love to face with challenges to gain yourself and your entrepreneurial career	150.378	3.758	3	.289
You would like to be respected and appreciated by other people when becoming a successful entrepreneur	149.740	3.119	3	.374
You always try your best and overcome difficulties to achieve your goals	150.556	3.936	3	.269
Starting your own business may help you get more income than working for other people	151.517	4.897	3	.180
You are willing to take risks and uncertainties when become an entrepreneur	160.278	13.658	12	.323
You do not like company rules. As an entrepreneur, running your own business will give you more personal freedom	167.821	21.201	12	.048

The results in table 11 shows that the “Self-Efficacy” factor (Self-Confidence - You are confident that you have competence to obtain your career goals.) has strongest impact on choosing entrepreneurial type. ($p = 0.011 < 0.05$)

Other “Self-Efficacy” factor (Diligent - You are hard working at work) has impact with $p = 0.035 < 0.05$

“Net desirability of Self Employment” factor (Freedom) also has significant impact with $p = 0.048 < 0.05$

Hence, H3 is supported.

4.3.4 Testing H4 using Multinomial Logistic Regression analysis

In this hypothesis testing, the chosen entrepreneurial type is used as dependent variable. External factors are used as factors

Table 12. Multinomial Logistic Regression testing to examine impact of external factors on choosing entrepreneurial type.

Effect	Likelihood Ratio Tests	
	Model Fitting Criteria -2 Log Likelihood of Reduced Model	Likelihood Ratio Tests Chi-Square df Sig.
Intercept	.000 ^a	.000 0 .
How supportive are accelerators, your university staff and facilities toward entrepreneurship and entrepreneurial students	.000 ^b	.000 12 1.000
You are encouraged by highly role models and successful stories of well-known entrepreneurs like Steve Jobs, or Bill Gates?	.087 ^c	.087 12 1.000
Your university / accelerator provide supportive and useful entrepreneurship training courses	3.179 ^c	3.179 12 .994
You get support founding team formation from university and entrepreneurship organizations	2.617 ^c	2.617 12 .998
Your university / accelerator provide mechanisms to help you validate your business idea	.000 ^b	.000 12 1.000

You often have opportunities to pitch your idea in university / accelerator	10.414 ^c	10.414	12	.580
You get support from university / accelerator to create your business plan / Business model canvas	.000 ^c	.000	12	1.000
You get help from university / accelerator to develop prototype for your business idea	9.162 ^c	9.162	12	.689
You have chance to meet and work with other entrepreneurs in common working space	10.053 ^c	10.053	12	.611
You get mentoring and networking program from your university / accelerator	14.598 ^c	14.598	12	.264
You have attention in business idea competition in your university / accelerator	.000 ^c	.000	12	1.000
Your university / accelerator or other entrepreneurship organizations provide funding	.000 ^b	.000	9	1.000

According to the result shown in Table 12, none of the external factors has significant impact ($p < 0.05$) on choosing entrepreneurial type so H4 is rejected

5 DISCUSSION

This study has attained its objectives of evaluating entrepreneurial intention among students: identifying personalities of students who want to choose entrepreneurial career, dominant factors influencing on their decision and factors that have significant impact on choosing entrepreneurial type.

According to the study, students who want to start their own business are tolerance for risk. They are willing to take risks and uncertainties when become an entrepreneur. They also have net desirability of self employment in which they believe they will get more personal freedom, to be more self-directed and long term wealth with better financial situation.

Dominant factors that encourage them to is willingness to take risk and motivation to have freedom.

Majority of them want to choose life-style and innovator entrepreneurial career and factors to encourage that decision are internal components: diligence, self-confidence and needs for freedom.

5.1 The impact of internal factors on decision to start business

The study has clarified that the tolerance for risk is dominant factor for student to start their own businesses. This finding is consistent with conclusion of Amir et al. (2013) in which they pointed out risk-taking propensity is a significant variable.

The result also indicated that Net desirability of self-employment (freedom) has significant impact on entrepreneurial intention. This shows consistency with conclusion of Hatammimi and Wulandari (2014)

“Desirability to be self-directed and personal freedom” is considered as a significant factor. But this contrasts with finding of Xue et al. (2011) that the need for independence or freedom is not considered as a significant factor.

In this research, financial desire seems to be a significant motivation. But it is not considered as significant impact on decision to start the business. This can be explained by students think becoming entrepreneur may help them having better financial situation, but they notice that the risk is high and they are not willing to take.

External factors do not have significant impact on the decisions. This finding is not consistent with Turker et al. (2008). This finding can be explained by the difference in students' perception toward external factors. The result indicated that in students' opinion in Finland, they are not received supportive external factors (education, stimulation and incubation).

5.2 The impact of internal factors on choosing entrepreneurial type

56% of student choose to have life style business and 30% wants to be innovator. The significant factors that influences on this decision are: Self-Confidence, diligence and need for freedom.

This can be explained by their main motivation is to have freedom (42.9 %). That is why they want to have life-style and innovator business in which they are more self-directed, have more personal freedom, time and do whatever they want.

Becoming public company or serial entrepreneur may take more time and freedom from them so not many students want to choose these options.

External factors do not have significant impact on choosing entrepreneurial type. As explanation in previous chapter, students in the study perceived that those external factors are not supportive for them.

5.3 Limitations

There are 3 limitations in this research:

- Limitation of literature review: there are many external factors that may affect the entrepreneurial intention such as business environment, family background. But those factors are not included in the study.
- Limited of respondents: the number of respondents is limited (100 respondents). There are few respondents who are not so sure about entrepreneurial definitions and context.
Despite of the fact that they said they will choose to be entrepreneur. They might choose to work for other people in the future.
- Survey design: Too many scale questions in the survey, especially in the external factor. So the perception of respondents may be different from the reality.

5.4 Future study suggestions

Further research should gather more details about respondent background such as: family background, passion.

The survey should be distributed to students in other universities.

The impact of external factors such as education and incubator should be studied again.

6 CONCLUSION AND RECOMMENDATION

This study shows that the main motivation for student to choose entrepreneurial career is to have more personal freedom and to be self-directed. They are confident and diligent leading by freedom motivation so they want to choose life style career to achieve their goal. The main trait of those students are willingness to take risk.

This is clear that internal factors have dominant impact than external factors. External factors may support students in their career but do not have significant impact on decisions to start their own businesses. Finding of the study is different than conclusions of other scholars because of the differences of business environment between countries. Besides, the characteristics of sample sizes are also different.

The author suggests that educators and policy maker should review their implementation of education, stimulation and incubation. It is clear that those implementation are not really supportive in students' opinion or maybe students are not introduced well about the programs.

Finally, researcher suggests education organization and policy maker to have attention on above factors and obstacles preventing students from entrepreneurial career. Students can be educated to have more risk taking propensity. Government also may have support to reduce risks of becoming entrepreneur.

Good education in entrepreneurship, networking, financial support may also help students to be confident to choose entrepreneurial career.

The result of this research also may benefit established companies. The research indicated that students want to have more personal freedom and to be self-directed. It suggested company or public organizations having policy to reduce bureaucracy.

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Questionnaire

Variables	Questions	Question Type
	Do you want to start your own business instead of working for others?	Yes / No
	<p>What kind of entrepreneurial career do you want to follow:</p> <ol style="list-style-type: none"> 1) Life style: create successful company but becoming a big public company is not necessary 2) Innovator: you operate your business predominately by innovation, you are focused on using your company as a mean to improve the world. 3) Empire builder: you have dream to create giant companies like Microsoft, Apple or Google 4) Serial: build a business with a clear exit strategy. Then create other new business. 	Multiple choice
Internal / Self-Efficacy/	<p>What are your significant traits and personalities:</p> <ol style="list-style-type: none"> 1) Diligent: You are hard working at work 2) Self-Confidence: you are confident that you have competence to obtain your career goals. 3) Never give up: you always try your best and overcome difficulty to achieve your goals. 4) You have good competence in your career field (IT, business) 5) You are innovative, creative and have vision to see opportunity 	Range 1-5
Internal / Tolerance for risk/	<p>What are your attitude toward risks</p> <ol style="list-style-type: none"> 1) Willing to take risk: you are willing to take risks and uncertainties when become an entrepreneur 	Range 1-5

Appendix

	<p>2) Risk understanding (able to access risk realistically): you are able to analyze, assess risks that may occurs and have corresponding solutions</p> <p>3) Love challenge to gain: as an entrepreneurs you love to face with challenges to gain yourself and your entrepreneurial career</p>	
Internal / Net desirability of Self Employment	<p>What are your significant motivations to start new business:</p> <p>1) Income potential: starting your own business may help you get more income than working for other people.</p> <p>2) Need for achievements: you would like to be respected and appreciated by other people when becoming a successful entrepreneur</p> <p>3) Freedom: you do not like company rules. As an entrepreneur, running your own business will give you more personal freedom</p>	Range 1-5
External / Education	How supportive are accelerator (boost turku), your university staff and facilities toward entrepreneurship and entrepreneurial students?	Range 1-5
External / Education	How are you encouraged by highly role models and successful stories of well-known entrepreneurs like Steve Jobs, or Bill Gates?	Range 1-5
External / Education	Does your university / accelerator (boost turku) provide supportive and useful entrepreneurship training courses?	Range 1-5
External / Stimulation	Do you get support founding team formation from university and entrepreneurship organizations?	Range 1- 5
External / Stimulation	Does your university / accelerator (boost turku) provide mechanisms to help you validate your business idea	Range 1- 5
External / Stimulation	Do you often have opportunities to pitch your idea in university / accelerator (boost turku)	Range 1- 5
External / Stimulation	Do you get support from university / accelerator (boost turku) to create your business plan / Business model canvas	Range 1- 5

Appendix

External Stimulation	/ Do you get help from university / accelerator (boost turku) to develop prototype for your business idea	Range 1- 5
External Incubation	/ Do you have chance to meet and work with other entrepreneurs in common working space?	Range 1- 5
External Incubation	/ Do you get mentoring and networking program from your university / accelerator?	Range 1- 5
External Incubation	/ Do you have attention in business plan competition in your university / accelerator?	Range 1- 5
External Incubation	/ Do your university / accelerator or other entrepreneurship organization provide funding?	Range 1- 5
	According to above question, what is your main motivation to become an entrepreneur?	Open question
	In case you do not want to start your own business, what is the main reason? And what are the obstacle stopping you to be an entrepreneur	Open question