



# **Educating the Entrepreneurial and Growth-Oriented Mindset**

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## ABSTRACT

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The entrepreneurial and growth-oriented mindset has gained significant attention in the last two decades in most economically advanced countries. Entrepreneurial growth is vital for a nation due to its positive impact on socio-economic and political infrastructure.

The purpose of this thesis was to study the technologically innovative growth-oriented Finnish startup company and to study the entrepreneurial mindset and education. The key research questions were to understand the perspective of entrepreneurs as well as the skills and education entrepreneurs would need in the future. It also examined whether the different networking events, "Y-kampus," and growth maker activities were beneficial for the startups and students. This study also gathered information on family and cultural effects on entrepreneurship and future support needed for growth makers.

The thesis used the qualitative and quantitative research model, where the data was collected through semi-structured interviews as well as surveys. Different entrepreneurs attended SWC 2019, and students of the "Y-kampus," altogether ten individuals participated in the data collection process.

All the respondents agreed about the necessity of networking events in company formation. The findings show that vital skills for future entrepreneurs are communication and people skills, grit, risk-taking attitudes. In terms of entrepreneurial education (EE), respondents suggested a few points, which were a hands-on experience, customer-focused project works, and networking. Productive entrepreneurial traits and personalities consist of problem-solving, innovativeness, openminded, focused, influential, self-reflective. "Y-kampus" students survey showed that the current entrepreneurial and growth-oriented studies were helping them to start entrepreneurship while it could be even more compelling by introducing more real-life business cases and study trips.

To scale up to international markets, such practices (entrepreneurial skills, education, and networking) have absolute power, whereas the students of the "Y-kampus" argued about the effectiveness of growth makers course followed by the family and cultural effect on entrepreneurship.

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Keywords: startup, entrepreneurial education, mindset, Y-Kampus, scale up, technologically innovative, entrepreneurs, growth-oriented, SWC.

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**GLOSSARY or ABBREVIATIONS AND TERMS (choose one or other)**

TAMK	Tampere University of Applied Sciences
cr	Credit
ATB	Attitude toward Behaviour
PA	Personal Attitude
BI	Behavioural Intention
e.g.	Exempli gratia (for example)
EI	Entrepreneurial Intention
Etc.	Et cetera (and so forth)
i.e.	Id est (that is)
PBC	Perceived Behavioural Control
SN	Subjective Norm
TPB	Theory of Planned Behaviour
EE	Entrepreneurial Education
EC	European Commission
SWC2019	Startup World cup 2019

## 1 INTRODUCTION

The entrepreneurial and growth-oriented mindset has gained significant attention in the last two decades in most economically advanced countries (Matley & Carey 2006). Entrepreneurship courses has been doubled in the USA, and investing in entrepreneurship is still increasing at a reasonable rate (Katz, 2008 and Gwynne, 2008). Entrepreneurial growth is vital for a nation due to its positive impact on socio-economic and political infrastructure (Solomon & Matlay 2008). So national policymakers identify the entrepreneurial importance and promoting it for economic development by supporting tools such as entrepreneurial education, growth-oriented education (Fayolle, Gailly, & Lassas-Clerc, 2006). The European Commission (EC) highlighted to add entrepreneurship into university curricula and states such supports as "the primary purpose of entrepreneurship education [at higher education level] is to develop entrepreneurial capacities and mindsets" (European Commission, 2008: 11). The EC's final report for entrepreneurship education signifies the "vital role of education in promoting more entrepreneurial attitudes and behaviors are widely recognized" (European Commission, 2008: 10).

Above mentioned example defines the importance of entrepreneurial education and its positive impact. However, there is more than one way for entrepreneurship education, and they vary countries to countries (Arensburg, 2015). Entrepreneurship education can be either derived as "something that teaches students to become entrepreneurial and something that can help teachers learn what methods would be most efficient when teaching entrepreneurship" (Arensburg, 2015). According to Kyrö (1997), three main components of entrepreneurship education are i) self – oriented ii) internal and iii) external entrepreneurship. Self-oriented entrepreneurship is the core of both internal and external (Arensburg, 2015). Internal entrepreneurship describes entrepreneurial and enterprising behavior, whereas external entrepreneurship is all about operating a business (Ristimäki, 2003). Different studies shows that teachers may need to achieve more conceptual knowledge on entrepreneurial and enterprising as well as the knowledge about motive, features, practices of entrepreneurship education (Backstrom-Widjeskog, 2010; Leffler, 2009, Seikkula-Leino, 2010).

Growth-oriented mindsets has become significantly popular for many companies nowadays. Individuals and organizations are now clearly defining "growth" versus "fixed" mindset. Growth mindsets can be written as particulars who believe that their knowledge (talents) can be developed by hard work, strategies, other's inputs. These growth-minded people achieve more than their counterpart fixed minded (individuals who believe that their talents are fixed and cannot be enhanced more) peoples (Dweck, 2016).

TABLE 1: Difference between growth and fixed mindset (Dweck, 2008)

Fixed Mindset	Growth Mindset
Intelligence and talent are static and cannot be changed	Intelligence and talent can be developed
Desire to look smart	Desire to learn
Feedback can be a setback	Feedback is a chance to learn
Motivation comes from the approval	Motivation comes from mastery
Focus on what someone are good at	Focus on where individuals can develop
Others success can be a threat	Others success can be a threat

### 1.1 Growth makers and "Y-kampus."

For providing entrepreneurial education in the Tampere region, "Y-kampus" was established in fall 2018. This program helps individuals to study entrepreneurial education, attending different mentoring and events activities, and also provided dedicated spaces for entrepreneurs. The largest and most successful outgoing companies are paying their students for assignments, according to the growth makers. Therefore, students must be accountable. The training providers have a strong coaching skill in the team that helps the students team up and get involved in the program. Students gain a thorough hands-on understanding of growth entrepreneurship in the growth makers program: they go to businesses to monitor their operations, learn about the growing ecosystem, and receive challenging tasks from businesses such as mapping business growth, evaluating business models and risk analysis.

Studies also include short periods of foreign exchange. Students focus on an internationalization or growth issue in the target country. It is not enough to learn about a foreign culture, but the exchange study should become a real "learning experience" so that the student can also become an international business expert. Students can run their studies for two years and earn a total of 30-60 credits. Study success is not affected by participation in the growth makers program. Furthermore, most students are likely to get an idea from the business for their thesis (Korpela, 2018).

## **1.2 Thesis objective**

The objective of this thesis is to identify the best way of developing an entrepreneurial mindset. At the same time, this research looks for the answers of future entrepreneurship skills, effectiveness of networking events in entrepreneurship, how different academic courses help incumbent to learn entrepreneurship was also the primary objective of this research. Moreover, the need for entrepreneurial education and growth-oriented mindset is thoroughly discussed in this thesis.

## **1.3 Purpose of the thesis**

The primary purpose of this scientific writing is to provide insight into entrepreneurial activity such as networking, EE, future entrepreneurial skills. The importance of entrepreneurial studies and activity is now boldly established for economic growth and prosperity of any nations. It is also crucial to create more entrepreneurs, venture creation, and high performing and growth-oriented entrepreneurs (Raposo & Do Paço, 2011). The global entrepreneurship indicated that entrepreneurs are essential for economic advancement; it drives innovation in the society, thus speed up the structural changes and hence increases productivity in the society (Enterprise, 2008).



## 1.4 Thesis research question

The strategic question that guides this research is how to develop entrepreneurial and growth-oriented mindsets. It is also studied how different startup events are helping the nations to build entrepreneurs, and at the same time, it studied the entrepreneurial future skill sets. Besides, this thesis was looking for answers on what are the different techniques of teaching entrepreneurship at the universities, how effective the current entrepreneurial studies at universities, how cultural and family background helps individuals to start a new venture, what are the entrepreneurial skills sets (personality and traits), and possible future support needed for growth makers. The core idea was to find out the mindsets of the entrepreneurs and structure them scientifically. The question was set in such a manner that they emphasized these key research questions.

## 1.5 Structure of the thesis

The research structure of this thesis is divided into four steps. The thesis starts with a brief introduction leading towards the main theories. In chapter two and three, there are solid theoretical background and methodologies are delineated, respectively. In chapter four, the main research results are depicted. Discussions and conclusions are written in chapter 5.

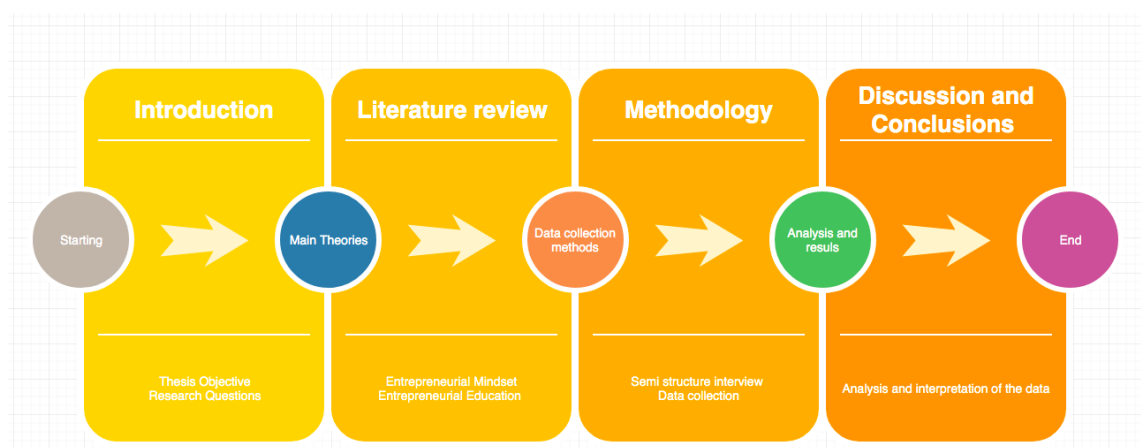


FIGURE 1: Structure of the thesis

The main idea of the thesis paper is to give a clear understanding of subject matter to the general audience, and the coherence of the thesis was well taken care

of throughout every chapter. In the first chapter, in the introduction, the thesis objective and main research question are described. All the critical research related theories shown in the second chapter, such as theories related to entrepreneurial mindset, education, networking, future entrepreneurial skills, entrepreneurial traits, and personalities, teaching entrepreneurship at the universities are depicted. In chapter 3, research methodology, and data collection processes are briefly described. The principal analysis based on the theoretical framework has been described in chapter 4. At the end of the thesis, in the appendices section, interview questions are attached as it has been conducted.

## **2 THEORETICAL FRAMEWORK**

In this chapter, different models and theories related to the entrepreneurial mindset, entrepreneurial education, entrepreneurial traits, personalities, and skills, networking in entrepreneurship will be discussed.

### **2.1 Introduction to entrepreneurship**

Development of any nation depends on entrepreneurship, and the government must provide special attention towards entrepreneurial education to enhance student's caliber for entrepreneurship (Acs, 2006) (Smit, 2004) (Karimi, Chizari, Biemans and Mulder 2010).

This chapter is divided into a few sections. The first section will emphasize literature related to entrepreneurial education, and the second part will discuss entrepreneurial mindsets. Relevant theories related to networking and entrepreneurial traits; personalities are delineated in the following sections. This chapter will provide a glimpse of entrepreneurial education and mindsets.

#### **2.1.1 What is entrepreneurship**

According to Coulter (2001), entrepreneurship can be defined as "entrepreneurship is the process whereby an individual or a group of individuals use organized efforts and means to pursue opportunities to create value and grow by fulfilling wants and needs through innovation and uniqueness, no matter what resources are currently controlled." According to Kuratko & Hodgetts (2007) suggestions, the meaning of enterprise is a collective effort that creates value, and value creation is known as entrepreneurship. In this argument, the enterprise and entrepreneurship are interconnected.

Another perspective is that enterprise and entrepreneurship are not connected. Based on Mason (2000), "enterprise involves measures to encourage individuals to become entrepreneurs and equip them with the necessary skills to make a

business successful" (pp.64-81). Also, Nixon (2004) mentioned that enterprise combined effort of opportunity recognition, new idea generation, and showing abilities and confidence to turn these ideas into tangible reality. In essence, according to Chitty (2009), enterprise precedes entrepreneurship.

## **2.2 Entrepreneurship, psychology, social and cultural context**

According to Da, Demo, and Neiva (2017), entrepreneurship is an important topic that has gain momentum in recent times across the globe. Recognition and utilization of business opportunities within the individual are known as the basic definition of entrepreneurship. Entrepreneurship is necessary for the creation of jobs, industry, national economic, social advancements, and countries' innovativeness. Economics, sociology, and psychology are the crucial drivers for entrepreneurship research. Entrepreneurship research theory originated based on a psychological perspective back in 1934 by Schumpeter and McClelland, respectively. During 1980-2005 it has changed its psychological theory perspective to economic and strategy theory by Kirchoff. Now in recent times, psychological perspective again emerged, and it is now said, according to (Baum et al. 2014), "entrepreneurship is fundamentally personal."

Entrepreneurship has three phases, and they are (i) opportunity identification phase (ii) development and execution phase and (iii) new ventures grows and survive phase. Psychology plays a vital role in all these three phases. Initially, the individual entrepreneur is dominating, and eventually, it fades away as the enterprise grows. The following section emphasizes on the meta-analytic knowledge on psychology or quasi-psychology related to entrepreneurship (Da et al. 2017).

The meta-analytical findings are divided into three stages. They are (i) personality (ii) Human and social capital, and lastly (iii) strategy. These three stages again sub-divided. For example, in stage (i), personality can be explained by self-efficacy, achievement, and motivation, risk propensity, innovativeness, stress tolerance, autonomy, locus of control, neuroticism, openness to experience, and agreeableness. In stage (ii), human capital and social capital are the sub-division.

Furthermore, finally, in stage (iii) strategic planning, business planning, innovation is the basic constructs (Da et al. 2017).

Entrepreneurship can be considered a factor that affects the social and cultural ecosystem and can be influenced by it. Entrepreneurship leads to the development and growth of society, technology, and the economy. Individuals engaged in business activities are those who operate on them in various ways. As the role of entrepreneurship is increasingly recognized, its possible social impact is also evident (Cepel, 2019).

The social benefits that entrepreneurship brings to society have been taken into account by scholars. Zahra and Wright (2016) developed five pillars that could affect entrepreneurship's social role. The very first cornerstone was to tie entrepreneurship with other social activities that point to achieving a better living standard, advancing growth, and enriching one's life. Second, exploring ways of reducing stakeholders' dysfunctional impact of entrepreneurship. The third pillar relates to the need for a new definition of the context of entrepreneurship as a scientific domain. The fourth pillar is the need to know the company's social multiplier. Lastly, the fifth pillar refers to the tier of the organization concerned with managing the production of ecological, social, and financial resources (Cepel, 2019).

The social and cultural environment in which it operates can influence entrepreneurial activity. Schumpeter (1934) stated that the economic, sociological, and institutional dimensions of society are affected by profit and social climate. It comprises of a social sphere known as the social environment in which entities engage in and progress through entrepreneurial activity. As a consequence, it also includes social principles, among other aspects. In this view, it is crucial that the person involved in entrepreneurial activity is familiar with environmental circumstances and accepts them (Cepel, 2019).

Schumpeter (1934) argued that the distribution of income in a society reflects the social climate. Social stress would be present in an unequal society; associations would force the government to implement certain forms of tax distribution and would not have a positive impact on business people to increase their production.

The concept of social environment also includes cultural aspects. There is empirical evidence to demonstrate the effect of the cultural atmosphere on venture creation activity. Therefore, through entrepreneurship and creativity, the social and cultural climate will affect economic development. Culture and the social environment can motivate people to engage in business (Cepel, 2019).

### **2.3 Entrepreneurial mindset**

Few definitions about entrepreneurial mindsets are delineated below (Naumann, 2017; Yatu, Loon and Bell, 2016)

According to Reed and Stoltz (2011), everything you see and everything you do is influenced by mind-set. If we research more about mindset, we will learn that mindset can be compared with the internal lens. The internal lens helps people to see life and navigate through it. Few selected definitions related to the entrepreneurial mindset is given below:

McGrath and MacMillan (2000) contrasted mindsets is "passionately seeking new opportunities, pursuing opportunities with enormous discipline, pursuing only the very best opportunities, focusing on execution, and engaging everyone's energy in their domain."

Van and Dhliwayo (2007) defined mindset are "An entrepreneurial mindset indicates a way of thinking about business and its opportunities that capture the benefits of uncertainty" (pp. 123-124)

Haynie et al., (2010) described mindsets is "The foundation of EMS is cognitive adaptability. These scholars defined it simply as the ability to be dynamic, flexible, and self-regulating in one's cognitions given dynamic and uncertain task environments, with a focus on achieving desirable outcomes from entrepreneurial actions" (pp. 217-229).

Putta (2014) denoted mindset is "Entrepreneurial mindset can be defined as a specific state of mind which orientates human conduct towards entrepreneurial

activities and outcomes. Individuals with entrepreneurial mindsets are often drawn to opportunities, innovation, and new value creation. Other characteristics include the ability to take calculated risks and accept the realities of change and uncertainty" (pp. 70-75).

According to (Fayolle & Redford, 2014, pp 679-689) and Fayolle, (2007), a clarified mindset is "A specific state of mind which orientates human conduct towards entrepreneurial activities and outcomes, as a result of the ability to take calculated risk, willingness to adapt and navigate through and realities of change and uncertainties. Individuals with entrepreneurial mindsets are often drawn to opportunities, innovation, and new value creation."

Davis, Hall, & Mayer (2016, p. 21) illustrated EM is "constellation of motives, skills, and thought processes that distinguish entrepreneurs from no entrepreneurs."

McMullen & Kier (2016, p. 664) concluded about EM is "ability to identify and exploit opportunities without regard to the resources currently under their control," only working when entrepreneurs experience promotion focus."

The final line could be out of these definitions is, mindset is a state of mind which help peoples to identify opportunities, innovation, and creation of new value which solves human problems and often associated with uncertainty, risks. Whatever action entrepreneurs take in their entrepreneurial journey comes from mindsets. That mindsets drive them to chase their dream.

There are few theories are available related to entrepreneurial mindsets, and few are as follow (Fayolle et al. 2014; Lorz, 2011):

- i) Theory of planned behavior (TPB) (Ajzen, 1991)
- ii) Shapero & Sokol's entrepreneurial event model (Shapero & Sokol, 1982)
- iii) The Model of Implementing Entrepreneurial Ideas (Bird, 1988)
- iv) the Maximization of the Expected Utility Model (Douglas & Shepherd, 2000)

The most influential model among all these is TPB (Krueger et al. 2000; Liñán and Chen 2009; Moriano et al. 2012; van Gelderen et al. 2008). In this thesis, only first two theories will be briefly covered.

#### 1) Theory of planned behavior (TPB)

The theory of planned behavior (TPB) comes from the theory of reasoned action (TRA). TRA comprises three essential pillars, and they are as follows i) the behavioral intention that relies on ii) subjective norms and iii) attitudes. TPB, on the other hand, is a concrete framework for understanding and predicting entrepreneurs and their mindsets by social and personal factors. Three components were described in TPB, and they are i) the personal attitude (PA), ii) subjective norm (SN), and lastly, iii) perceived behavioral control (PBC). The personal attitude (PA) toward behavior is defined as individual comprehensive entrepreneurial behavior (desirability), which determined by the complete set of behavioral beliefs (cognitive thinking about specific behavior) connected to the entrepreneurial behavior to various consequences (results or outcomes). The subjective norm (SN), on the other hand, defined as societal and cultural pressure to an individual to perform a particular behavior. Lastly, perceived behavioral control (PBC), discussed individual distinguish capacity to perform a particular behavior. The higher the positive attitude and subjective norm toward a behavior are, the stronger the behaviors mindsets. If the mindset is correct and high, then the individual performs the specified task efficiently. Perceived behavioral control (PBC) is connected with Bandura's self-efficacy concept. So TPB can be written as follows (Lorz, 2011).

$$\text{TPB or BI} = \text{PA} + \text{SN} + \text{PBC}$$

A graphical representation of TPB is given below:



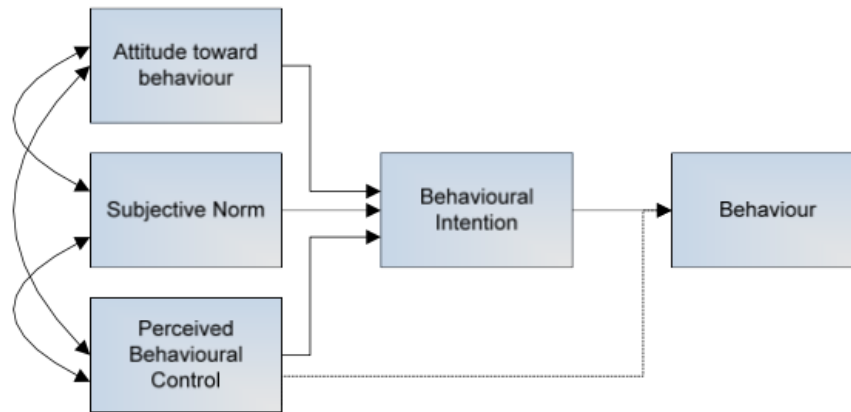


FIGURE 2: Theory of planned behavior (TPB) (Ajzen, 1991)

In figure 1, it is seen that the three components are inter-related with each other, and they merge to behavioral intention. This behavioral intention becomes the behavior at the end.

## II) Shapero & Sokol's entrepreneurial event model

Another exciting model for the entrepreneurial mindset is Shapero & Sokol's entrepreneurial event model. It describes that inertia controls human behavior. Thus, it means when something replaces inertia, it thus opens former undesired behavior. For example, unemployment can pull up the desirability to become self-employed (Lorz, 2011).

Graphical representation of Shapero & Sokol's entrepreneurial event model:

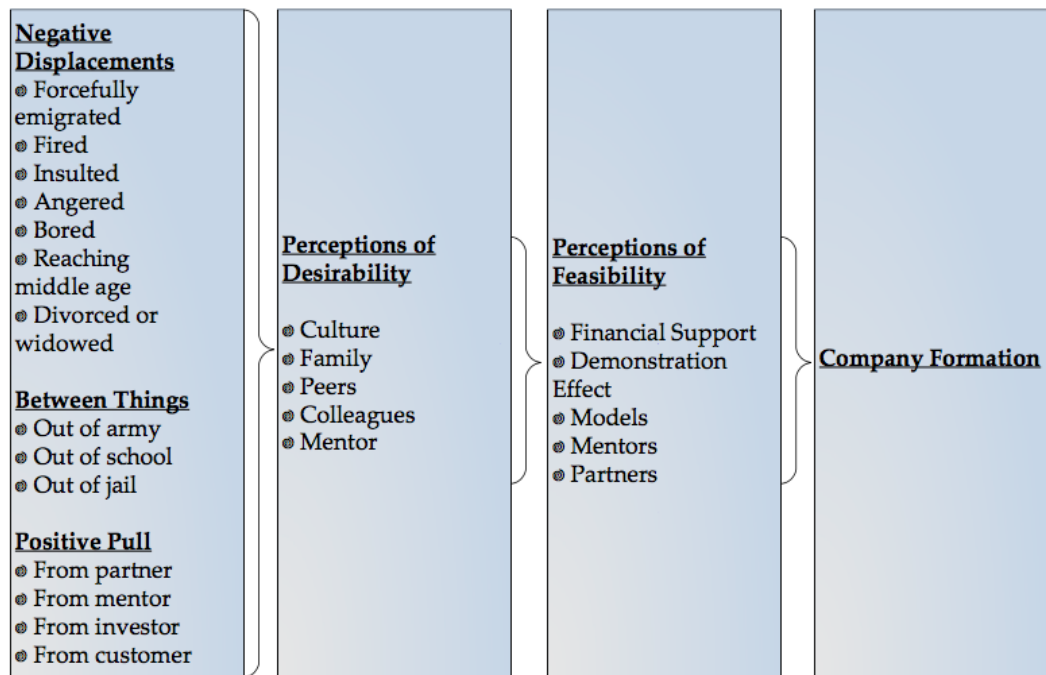


FIGURE 3: Shapero & Sokol's entrepreneurial event model (Shapero & Sokol, 1982)

## 2.4 Entrepreneurial education

Entrepreneurial education helps to create future entrepreneurs by giving them entrepreneurship education. The entrepreneurial education enhances students' mindsets, people and social skills, behaviors, and capabilities. Several kinds of research have been conducted on entrepreneurial education and necessary elements of entrepreneurial learning (Rae et al. 2010) and the consequence of entrepreneurial education on student's entrepreneurial intentions. According to (Pittaway & Cope, 2007) studies, shows that entrepreneurial studies have some positive impacts on students entrepreneurial intentions but many studies (Krueger & Brazeal, 1994; Souitaris, Zerbatiini & Al- Laham, 2007; Walter, Parboteeach, & Walter, 2011) found that the real impact on students due to entrepreneurial studies are unclear. Also, some studies found that the impacts on students were negative (Oosterbeek, van Praag & Ijsselstein, 2010).

According to (Packham et al. 2010; Drost & McGuire 2011; Hytti et al. 2010; Fayolle & Gailly 2015), few essential aspects related to entrepreneurial education

on entrepreneurial intentions are individual, cultural aspects, teaching and learning methods. There are many techniques on the best way to deliver entrepreneurial education such as hands-on stuff or "learning by doing," means solving real-life problem solving, company visits, company studies, internships, live project works, dummy business running (Gibb, 2002; Hampden-Turner, 2002; Politis, 2005).

In other studies, shows that most of the entrepreneurial studies achieved outside formal studies and educational institution, as well as teachers or coach, are essential for adequate entrepreneurial studies (Rae & Carswell, 2001).

Different studies also showed that the role of teachers and teaching methods are also important. Studies also indicated that teachers could help students to enhance their entrepreneurial competences significantly. Teachers can bring their pedagogical and practical know-how, which enhance and invent learning environments and situation. Thus, will help students to gain and solidified their entrepreneurial intentions and orientation (e.g., Ruskovaara & Pihkala, 2013; Seikkula-Leino et al., 2010; Hämäläinen et al., 2016, Peltonen, 2015; Ruskovaara & Pihkala, 2013; Gibb, 2011; Hannon, 2006)

Oksanen (2012) indicated that a handful number of students could practice and learn initiation and managing a business when they have enough will, and it will be an essential experience for the students as well. However, institutions in Finland offer this type of experience through the academic curriculum. Tampere University of Applied Sciences has an entrepreneurial school named "Proakatemia," where coaches or teachers challenge students to learn and study entrepreneurship in a very engaging manner (Saraketo & Nevalainen, 2017). Due to this initiative, Proakatemi generates 40% entrepreneurs who are higher than the only 4% who become entrepreneurs from research universities. To become an entrepreneur, Finnish growth-oriented researcher (Brandt, Boedeker & Hautamäki, 2018) pointed out three categories that encourage the students. The first among the three categories is a blend of hard skill and practical knowledge, such as accounting, marketing, law, or strategic management. Resilience, time, and

stress management come as a package in the second category, and the last category comprises entrepreneurial education, such as company attachment and demo or simulation business exercises.

The below table collected from Gibb (2011, p.155) depicted the main theories associated with entrepreneurial education:

TABLE 2: The main theories associated with entrepreneurial education

Theory / Concept	Key Constructs	Relevance to Entrepreneurial Education
Self-efficacy theory	Emphasis on self-activity, observation/coding role model leading to the creation of attitudes	Emphasizes the importance of entrepreneurial role models and motivational analysis of training
Experiential learning	Learners should engage actively in learning processes to create awareness and value from the experience	Supports learning by doing things and doing things.
Psychodrama	Underlines the importance of playing roles in different contexts, promoting imagination, leading to increased empathy and comprehension	Provides the means to create empathy through 'feeling,' a key component of relationship management in business activity
Social learning and the Zone of Proximal development	The ability to learn as a function of social interaction depends on the current level of knowledge and understanding.	Emphasizes the importance of learning on a socially interactive 'need to know' and 'capacity to know' basis
Situated learning and 'community of practice.'	Learning is a 'situated' event that can be 'unintentionally' enhanced by the 'community of practice.'	Underpins the theory of experiential learning and implicit knowledge acquisition.
The concept of tacit knowledge	Learning employing contextual practice, formally un-coded, strengthened by personal confidence and based on intent to act	Emphasizes the importance of studying relationships in a wide range of ways – a key element in the growth of entrepreneurship

The concept of 'emotional intelligence.'	Focus on the importance of understanding feelings and the context of a relationship in the learning process	Facilitates the exploration of the impact of an entrepreneurial world on how entrepreneurs accumulate knowledge and use it
Heuristics and intuitive decision making	Involve mind maps based on experience accumulation as a basis for informal processes of decision-making	Provides the basis for exploring how entrepreneurs build decision-making processes by accumulating knowledge by solving problems
The concept of Metacognition	Emphasizes the importance of the learning process of self-awareness, self-reflection, and self-regulation	Emphasizes the importance of the ability to think flexibly

## 2.5 Entrepreneurial personality and traits

According to Singh & Rahman (2013), the characteristics that an entrepreneur possesses are innovation, creativity, persistence, self-confidence, positive attitude, problem-solving, independence, and risk-taking. Desai (2009) suggested few personality traits that influence entrepreneurs, and they are emotional stability and intelligence, personal relations or networking, consideration, and tactfulness. Spotting opportunities, persuasiveness, goal-oriented, courage, creativity, self-confidence, ambitious, empathy are the main determinants of a successful entrepreneur, according to Nandram & Samsom (2007). Abdullah et al. (2009) also suggested eight factors of successful entrepreneurs, and they are the goal or achievement-oriented, commitment, decision-making ability, taking and managing risks, persistence, hopefulness, meet and make friends, and future-driven Singh & Rahman (2013).

## **2.6 Networking in entrepreneurship**

The concept of networking is a reality in the current world. The importance of networking in the formation and growth of entrepreneurs has gained much momentum in the current context.

Elfring and Hulsink (2007) identified that network ties could achieve a few things, and they are opportunity identification, resources acquiring, and legitimacy. Networking also plays a vital role in these categories, such as independent startup, spin-offs, incubator – driven companies, which are further sub-divided by incremental and radical innovation. The network ties concept described that social events established strong and weak ties for the entrepreneurs and thus results in entrepreneurs to receive feedback and guidance. In addition to that, these interactions between strong and weak ties bring new context, new dimensions of thinking, and new business models. Entrepreneurial initiation and post entrepreneurial are also related to network ties and help entrepreneurs network evolution, renewal, and revolution.

Networking events create a chain or system of information, essential contacts, and support found out by Friar and Eddleston (2007). Networking is an essential skill that develops career and entrepreneurial skills. This research also illustrates that networking events develop strong relationships with customers, financial support, and the continuation of businesses. In addition to that, networking events allow entrepreneurs to judge their product prices, services, taxes, and marketing-related issue, which eventually help entrepreneurs to examine their competitiveness, performance and help them to establish connections for future collaboration with investors.

## **2.7 Entrepreneurial skills**

There are a lot of studies in the past which focused on entrepreneurial skills. The top three entrepreneurial skills based on Croatian business students (Pfeifer, Šarlija, & Sušac, 2016) are entrepreneurial self-identity (results of a process by

which an individual mentally “connects” themselves to an area of conduct), aspiration and entrepreneurial self – efficacy (perceived competence) (Connor & Armitage, 1998).

According to Fisher (2012), entrepreneurs are “do-ers,” they are the people who get their hands dirty and take the initiative towards their milestones instead of sitting and doing detail planning or compile more primary information before the real action. Arpiainen (2019) pointed out the risk-taking, uncertainty handling, learning as a team, and emotional intelligence are the most dominant experiences for an entrepreneur. Frank (2007) showed differences between the entrepreneur's skills and the planner's skills. The vital skills essential for entrepreneurs are risk-taking, creativity, negotiation skills, and communication.

Lynch, Kamovich, Andersson, and Steiner (2017) studied 51 successful high-tech entrepreneurs from Silicon Valley and found out five key themes that are associated with entrepreneurs. The first theme among the list is taking actions or actions taken towards fulfilling desired goals. The second theme is that successful entrepreneurs are more concerned about the future than the past. Entrepreneurs often possess the idea of a collective perspective, which tells that they are not concerned about themselves, but they are concerned about the team or who are associated with them. Entrepreneurs are concerned and focus more on their client's needs and requirements, which means, in other words, that entrepreneurs are more inclined to customers' success rather than their success. The study also concluded with the theme that entrepreneurs are lifelong long learners. Lifelong learners are those people who are always curious and who consider experiences as an opportunity to learn and develop themselves.



### 3 METHODOLOGY

For any scientific writing, the methodology is fundamental, and due to this notion, in this chapter, the methodology related to this thesis will be described. This chapter will also focus on data collection and data analysis processes.

#### 3.1 Research strategy

In this thesis, a qualitative and quantitative research approach is used. At first, the key concepts and associated theories are focused, and later in other chapters, these theories are used for analysis (Grbich, 2013). In this study, the literature review implements the theoretical framework for the entrepreneurial and growth-oriented mindset results from the online survey and semi-structured interviews conducted at different places.

TABLE 3: Research design

Methodology	Quantitative and Qualitative research
Methods and techniques	Survey and interviews
Unit of analysis	Individuals
Sampling method	Purposeful theoretical sampling
Types of data	Primary: Interviews and survey
Ethical issues	No research on children under 18 Recording and use of personal data and recording statements after turning off the recorder

#### 3.2 Data collection method

In this research, a mixed data collection technique was used. Mixed data collection techniques employ both quantitative and qualitative approaches. According to Hyde (2000), the mechanism of deductive and inductive research corresponds to quantitative and qualitative methods, respectively. Due to their advantages, these processes were chosen for this thesis study as a mixed combination. The use of the mixed approach negates the problem of one process's superiority over

the other but instead provides a unique synthesis of the resources by integrating the power of both processes.

Crossan (2003) claims that both quantitative and qualitative approaches are often seen as opposing one another, but in fact, both are often used in research work together.

The quantitative method addresses the ability to measure data for statistical information to be produced and developed. The epistemological approach uses the positivism model. Ryan (2006) portrays that when they think about research, positivists always come up with terms such as data, figures, numbers, reading, analysis, objectivities, science, and logic. The qualitative method provides interpretivism's epistemological position. Interpretive epistemology suggests that information can only be generated and interpreted from the viewpoint of people living and working in a particular culture or organization (Hatch, 2018).

This understanding leads to the belief that a mixed combination can be employed for this data collection. The differences between quantitative and qualitative methods are representing below:

TABLE 4: Difference between qualitative and quantitative studies (Oak Ridge Institute for Science & Development)

Qualitative Study	Quantitative Study
The main tools are target groups, detailed interviews, and feedback.	The main tools are surveys.
The method used mainly to formulate theories	The central deductive method used to evaluate pre-specified ideas, constructs, and hypotheses that constitute a theory
More subjective: for those who encounter it explains a question or condition	More objective presents noticeable results of a system on a problem or condition (interpreted by researchers).
Text-based	Number - based
Less statistical tests and more detail studies on a few specific cases.	More statistical tests and Less in-depth but more data in a wide range of cases
It can be valid and reliable: it largely depends on the researcher's capacity and rigor. Less generalizable.	It can be valid and reliable: depends heavily on the instrument or measuring tool used. More generalizable.
Lighter time spent on the preparation end and more substantial during the process of evaluation	Time spending on the planning phase is lower, and the review process is lighter

### 3.2.1 Qualitative data collection method

The method of data collection used in this thesis research process was achieved by one-to-one personal interviews and an online survey. The data gathering method was chosen for the interview because it is a reliable way to gather valuable qualitative data from a limited number of people, and it enables the researcher to engage in the creation of information interactively, to track the degree of interaction, to interpret the questions and to define the answers (Metsämuuronen, 2000)

The attributes of an interview are comprising that it is planned, that it is directed and inspired by the interviewer, that it enables communication and that it must

always be classified (Metsämuuronen, 2000). Interview approaches can be defined by both the interview structure and the degree of communication between interviewer and respondent. The different types of interviews are open interviews, semi-structured interviews, structured interviews, and these depend on opinions. In this thesis, semi-structure or theme-based interviews were used, which is standard data collection method management and social sciences research (Heikkilä, 2018).

In this study, the interviews were conducted using the constructive, open-minded approach to address the research question and searching for details such as what happened, when, and how, but with some versatility and more conversational and informative atmosphere in a semi-structured manner (Eriksson et al. 2008). Most of the interview questions contain what, why, how question (Appendix I-III). "Why" questions are specific and essential to the discovery and definition of states, situations, and systems. "How" and "Why" questions concentrate on causes and consequences that are meant to clarify or describe something in qualitative terms (Eriksson et al. 2008). This set-up of questions is transparent, straightforward, and neutral, thereby helping to provide more detailed answers and avoid pre-assumptions. The interview started with the introduction of questions and subjects to be discussed. As a point of reference, the specific questions were used, but the format allowed to explore in more detail exciting, research specific areas. Specific questioning techniques were used in the interview; for example, necessary probe to repeat the question was employed in a few cases to remind the respondents of the topic of discussion.

The selection of the research respondents was made total randomly. In SWC 2019, a startup that participated in the events asked them whether they have will to participate and upon agreed interview was carried out. It can be seen that quite a mixed company or startup founder was interviewed. The company varies differently, as company selection was random. In the "Y-kampus" data collection process, an initial email was sent to the enrolled students on the subject matter, and based on the responses, the survey link and one-to-one interview were progressed.

Finally, from SWC 2019 events, a total of six interviews were collected, and all of them were face to face interviews with all the startup team members presented. It was seen a bit challenging during interaction with growth-makers students due to the busy schedule of the students. Four students were able to participate in the survey and further agreed on a one-hour long one-to-one interview. A unique voice recorder borrowed from TAMK was used for voice recording upon permission of the respondents. Before all the interviews, a brief introduction was given on research as well as the researcher's background. The interview sessions were inspiring, generally, and the environment was very open and sociable.

The following two sections contain more in-depth information on the data collection from SWC2019 and growth-makers students.

### **3.2.2 Quantitative data collection method**

Quantitative research means the empirical study of social phenomena by numerical, mathematical, or computational techniques. The quantitative researcher asks a fundamental, narrow question, and a sample of numerical data is obtained from respondents to answer the question. For analyzing their results, many researchers use statistical tools and packages. When working with a large sample size and require generalizing a large population, a quantitative analysis should be used. When identifying trends or patterns that are relevant in many different situations or particulars would like to make statistical correlations to compensate for some phenomenon's variation (Myers, 2019; Silvermann 2005).

By using quantitative methods, qualitative concepts can be given precise and testable form. Individuals can use qualitative research to record the specifics of how people interact in one situation and to define variation using quantitative methods. In other words, any better qualitative work can be described by a simple quantitative measure (Silvermann, 2005).

Also, the quantitative approach uses numerical methods that are fast and affordable. By using Google Form, the questionnaire was easy to share on the internet. Google Form is a digital survey tool that allows us to obtain and evaluate

the results of the questionnaire conveniently. From Google Form responses, it was then transferred to MS Excel and edited later on. When comprehending open-ended questions, a qualitative method was used.

### **3.2.3 The theoretical framework for questions**

Most of the research questions on quantitative fields are descriptive (i.e., they merely looking for quantifying responses to one or more variables), comparative (i.e., they are looking for the comparison between two or more types of outcome variables) Or associative (i.e., Patterns between variables (or between) two (or more)). Qualitative research questions, on the other hand, are more accessible, changing in nature, and non-directional. Useful qualitative questions are broad yet precise enough to focus on the issues that are most important to investigate individuals. Different studies argue that qualitative research questions can either reflect broad questions (e.g., How has the Growth Makers program impacted on your entrepreneurial mindset?) Or specific sub-questions that answer significant concerns and problems that are being discussed (e.g., What kind of support you would need more for entrepreneurial mindsets from the Growth Makers' program?). The main difference between quantitative and qualitative research questions is that quantitative research questions are usually formulated before the start of the experiment; on the other hand, qualitative questions are typically established at the start of the study or appear at some stage throughout the analysis. Four dimensions explain how researchers can compose research questions in the context of their qualitative and quantitative combined studies: 1) rhetorical style — question structure, 2) rhetorical style — a level of integration, 3) interrelationships with other questions, and 4) interrelationships of research questions. A research question based on the first dimension (i.e., rhetorical style — question format) can be stated in three different formats: 1) query (researchers write a question sentence complete with a question mark), 2) purpose (researchers write a claim sentence as an illustration of research goals), And 3) hypothesis (researchers write a report predicting the research outcome) (Venkatesh et al., 2016)

The interviews were conducted in this study using the positive, open-minded approach to answer the research question and to look for information such as what happened, when, and how, but with some flexibility and more semi-structured conversational and insightful environment (Eriksson et al. 2008).

Most of the questions from the interview include what, why, how (Appendix I-III). "Why" questions for the exploration and interpretation of states, conditions, and structures are descriptive and significant. "How" and "Why" questions focus on causes and consequences intended to explain or illustrate something (Eriksson et al. 2008) qualitatively.

### 3.2.4 Data collection from SWC 2019

This study focuses on six Finnish growth-oriented entrepreneurs' who took part in the Startup World Cup 2019 held at Tampere on 06th March 2019. Three questions were selected for the interviews. This study expressed the views of growth-oriented startups on networking events, potential entrepreneurship skills, and university-level entrepreneurial teaching methods. All the question was semi-structured, and that means that the same question was asked in the whole research. Moreover, in semi-structured interviews, there was no yes/no answer; instead, the idea was to get the overall perspective of the interviewees. All the interviews were conducted in English, and the interview was recorded with the consent of the interviewee. The entrepreneurs were mostly (85%) interviewed face-to-face, and a couple of them (15%) via phone. All the interviews took approximately 10 minutes each, and the method of the interview was half-structured. Table 1 shows the necessary information about the startup in terms of technology field they are working on, time since kick-off and founder age (Manner, 2017) (Brandt, Boedeker, and Hautamäki, 2018)

TABLE 5: Finnish grown-oriented company's details

Startup Name	Industry	Startup Age	Location	Details
Company A	E-Commerce	One year	Finland	<ul style="list-style-type: none"> <li>• Age: 30-35</li> <li>• Male</li> </ul>

				<ul style="list-style-type: none"> <li>• First-time entrepreneur</li> </ul>
Company B	Forest Technology	One year	Finland	<ul style="list-style-type: none"> <li>• Age: 30-35</li> <li>• Male and female</li> <li>• First-time entrepreneur</li> </ul>
Company C	E-health	One year	Finland	<ul style="list-style-type: none"> <li>• Age: 30-35</li> <li>• Male</li> <li>• First-time entrepreneur</li> </ul>
Company D	Cloud Service	One year	Finland & USA	<ul style="list-style-type: none"> <li>• Age: 30-35</li> <li>• Male</li> <li>• Serial entrepreneur</li> </ul>
Company E	E-health	2+ year	Finland	<ul style="list-style-type: none"> <li>• Age: 30-35</li> <li>• Male and female</li> <li>• First-time entrepreneur</li> </ul>
Company F	Cloud Technology	3+ years	Finland	<ul style="list-style-type: none"> <li>• Age: 30-35</li> <li>• Male and female</li> <li>• First-time entrepreneur</li> </ul>

### 3.2.5 Data collection from the "y-kampus."

Y-kampus funded in autumn 2012, and it is a dedicated unit for entrepreneurial education for T3 or all the universities in the Tampere region for the staff and students. Y-kampus offers entrepreneurship courses, mentoring, or coaching and organizes different entrepreneurial events. Y-kampus uses the Proacademy study models which comprise learning by doing, learning in a team as well as learning through reflections, feedback, and guidance from coaches (Gareis, 2017).

A survey was carried out at the TAMK Y -Kampus students. The survey question was divided into four subparts, and they are basic questions, entrepreneurial traits, entrepreneurial personality, and growth makers activity.

TABLE 6: "Y-kampus" student details

Respondents Number	Educational Institute	Total Entrepreneurial study	Living in	Details
A	Y-kampus	Two year	Finland	<ul style="list-style-type: none"> <li>• Age: 27</li> <li>• Female</li> </ul>



B	Y-kampus	Two year	Finland	<ul style="list-style-type: none"> <li>• Age: 23</li> <li>• Female</li> </ul>
C	Y-kampus	Two year	Finland	<ul style="list-style-type: none"> <li>• Age: 27</li> <li>• Male</li> </ul>
D	Y-kampus	Two year	Finland	<ul style="list-style-type: none"> <li>• Age: 24</li> <li>• Female</li> </ul>

The selection of the question was studied from Singh & Rahman (2013); Desai (2009); Nandram & Samsom (2007); Abdullah et al. (2009); MacRae, (2019); CP, (2018) and the shortlisted questions were: innovation, creativity, persistence, self-confidence, positive attitude, problem solving, independence and risk-taking, emotional stability and intelligence, personal relations or networking, consideration and tactfulness, Spotting opportunities, persuasiveness, goal-oriented, courage, creativity, self-confidence, ambitious, empathy, goal or achievement-oriented, commitment, decision making ability, taking and managing risks, persistence, hopefulness, meet and make friends and future driven.

Question-related to growth makers are chosen from growth makers study program (Y-kampus Tampere)

TABLE 7: Growth-makers activity

Growth-makers activity (Based on course)	Learning Leaderships
	Learning sales and marketing
	Learning growth strategy and business models
	Growth Ecosystem
	Professional growth experience
Independent Question	How growth makers activity helping an individual to build entrepreneurial mindsets

### 3.3 Data analysis method

The qualitative content analysis can be defined as:

- “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh & Shannon, 2005, p.1278)
- “an approach of empirical, methodological controlled analysis of texts within their context of communication, following content analytic rules and step by step models, without rash quantification” (Mayring, 2000, p.2), and
- “any qualitative data reduction and sense-making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings” (Patton, 2002, p.453).

The data analysis, as Lancaster explains, is the method of turning data into information that can be used to clarify and make decisions (Lancaster 2005). In general, there are several issues with case-study design in terms of interpretation: risk of getting caught in minute details, lack of impartiality, the information provided can be challenging and time-consuming to examine (Brewerton & Millward, 2001). The content analysis was used as an approach to evaluate the qualitative data to prevent and address the issues as mentioned earlier. Deciding what is to be evaluated or noted is a crucial aspect of content analysis (Lancaster 2005). In this thesis, the interviews were transcribed and then read through several times concerning the entrepreneurs' views on networking events, future skills, and entrepreneurial teaching methods at the university level. All the interviews then coded and categorized. Connecting and interrelation, the interview data comes just after. Lastly, these views were further categorized by their content and analyzed accordingly to find the explanatory meaning Schulz (2012). The below figure 5 shows the data analysis method used in this thesis, Rosala & Rosala (n.d.).

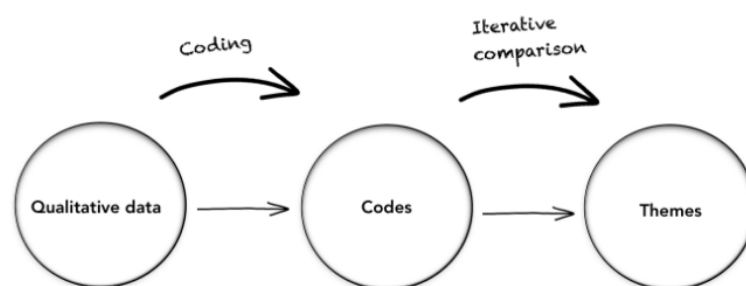


Figure 4: Data analysis process Rosala & Rosala (n.d.)

### 3.4 Quality of the data

According to Lancaster (2005), the quality of the data contains three dimensions, and they are validity, reliability, and generalizability to achieve results that are reproducible and scientific. The quality of the data presented in this thesis is assessed in these three dimensions and described below.

Validity refers to the degree to which the process of data collection or analysis represents or calculates what it should represent or measure (Lancaster, 2005). Validity can be assessed by significance, thoroughness, consideration of alternative points of view, substantial evidence, sensitivity, and value (Brewerton & Millward, 2001).

The subject matter of this research is the entrepreneurial mindset and education, so this research can be considered complete as all the respondents answered all the questions given the somewhat senior and strategic nature of the information requested. Also, the completeness of the data allowed the researcher to address the original questions of the study. Due to the introduction of open questions, the collection of data is considered impartial. The proper processing and review of the interviews were ensured by audio recording, which allowed the researcher to revisit the interviews and avoid biased notes or assumptions.

When demanded from an ethical and realistic point of view by Brewerton and Lynne, it was agreed that the interviews be conducted privately and confidentially (Brewerton & Millward, 2001). The recording was also done with each respondent's permission. However, it is difficult to assess whether the answers without recording would have been more open.

Generalizability is a further aspect of data validity and refers to the degree to which data outcomes can be applied to other circumstances (Lancaster, 2005). The sample size was seven firms and four growth-minded students, and it was limited to Finland geographically, although respondents are initially from other countries across the globe but living in Finland, for a substantial amount of time.

In the sense of entrepreneurial mindsets and education from Finnish growth-oriented startups and students, the research results can be considered generalizable. Nonetheless, it is unclear whether the results could be applied to a different setting, including, for example, an entrepreneurial mindset and education in a different geographical area.

Reliability refers to the degree to which, on different occasions, a particular approach to data collection can produce the same results (Lancaster, 2005). This work has been specifically designed to examine the Finnish startups and growth-makers studying in Finland, based on their mindsets and education. This work is, therefore, unique and valid at this particular moment only in this study.

The relationship between the researcher and the participants in the study remains neutral, which means data collected from beginning to end at a research setting (Eriksson et al. 2008).

## 4 ANALYSIS AND RESULTS

The interview, survey results, and analysis from different data collection, i.e., qualitative and quantitative sessions (from entrepreneurs, and from growth makers students), are shown in this chapter. The chapters start with SWC 2019, “Y-kampus” results, and eventually progress towards the “Y-kampus” student survey and interview.

### 4.1 Research results from SWC 2019 and “y-kampus.”

The answers to the interview questions divided into three main themes. They are, in the first question, about the importance of networking events is generally finds, at what scale entrepreneurs find networking events are helpful. The second question brings the essential tools and know-how of entrepreneurship in the future. The third and last question helps to reports on the best way to teach entrepreneurial education at the university.

The actual question asked in the SWC 2019 interviews are as follows:

- Are these kinds of networking events important to entrepreneurs?
- What are the skills that are important to entrepreneurs in future?
- What would be the best way to teach an entrepreneurial mindset for students at universities?

The below table shows more insights of the analysis.

TABLE 8: Interview questions and its themes

Interview question	Main themes
Importance of the networking events	At what degree or scale the entrepreneurs thinks it is important
Entrepreneurial skills for future	Primary know-how, practicalities, and knowledge for future entrepreneurs
Best way to teach entrepreneurial mindset at university	Universities courses and role on entrepreneurship studies

The following section is delineating interview results.

#### 4.1.1 Importance of networking event

Most of the startup owners or entrepreneurs agreed that networking events such as startup competition, pitching events, matchmaking, coaching are the excellent addition and these events helps entrepreneurs to meet people or stakeholder in the ecosystem. The importance of the events also depends upon the stage of a startup. For example, for early-stage startups, these events bring light on them and signals that they exist in the market, whereas a more mature startup, these events might not bring additional importance. In addition to that, entrepreneurs can get more visibility, and they get to know like-minded people in the industries. Few entrepreneurs agreed that from networking events, they could meet investors and get more contacts. The only drawback shared by one entrepreneur is that these pitching events are time-limited, so they cannot get real feedback. So, an entrepreneur cannot improve anything. Some citations describing the importance of networking events:

*"Networking events are a nice addition."*

*"Yes, it is important because investors and different stakeholders meet."*

*"Pitching competitions are also a good way to market your solution to investors and the startup community."*

The necessity of the social networking for the foundation and growth of entrepreneurs is significant increases nowadays. The concept of network-ties also comes into reality. Opportunity identification, resources acquiring, and gain legitimacy can be achieved by network ties according to (Elfring and Hulsink, 2007). Their study also identified three distinct categories where networking plays a vital role. Independent startups, spin-offs, incubator-driven companies are the categories, and they can also be sub-divided by incremental innovation and radical innovation. The network-ties concept showed that social event creates strong or weak ties for the entrepreneurs and thus helps them to receive feedback and guidance. Also, interaction between string ties and weak ties brings a new perspective, new way of thinking, and new business models. Initial funding and post entrepreneurial process are also associated with network-ties and thus enhance network evolution, renewal, and revolution (Elfring and Hulsink, 2007). In other research shows networking event create a system or chain of information, contacts, and supports at the same time networking is essential skills that enhance career and entrepreneurial skills (Friar and Eddleston, 2007). This research outlined that networking events build more capable relationships with customers, financial, and support organizations and thus helps for the continual development of the businesses. Networking events allows entrepreneurs to compare the prices, services, taxes, and marketing hence these events help entrepreneurs to analyze their effectiveness, performances and help them to make possible connection towards future collaborators and investors (Friar and Eddleston, 2007).

In contrast, our research findings are very much in line with the discussion above that networking events help entrepreneurs to create social capital and transparency as well as help them to achieve access to other elements and information associated with entrepreneurs.

#### **4.1.2 Entrepreneurial skills for future**

All the entrepreneurs find this question bit difficult to answers because of the merit of the question. So, we received a mixed answer to this particular question. One entrepreneur emphasizes that primary skills for a future entrepreneur will be to know the product first and find out what someone's expert area. In other words,

it can be described as the end of doubt. Secondly, they shared that onboarding the right peoples and fill the gaps are significant. It merely means that at the beginning, it is imperative to keep in touch with the right people who will be valuable for the company. Pitching, do stuffs (hands-on project work), and ready to take the risk (being fearless) comes as another top skill that required for future entrepreneurs. Other soft skills, such as being visionary, self-driven, self-motivated, and influencing others, are the necessary skills.

The different types of mindset found in the interview are given below:

- Problem-solving mindset
- Growth-oriented mindset
- Resource-fullness
- Goal-oriented
- Detail-oriented
- Analytical mindset
- Realistic
- Strategic mind
- Fast thinking and never freaked out

The following quotes illustrate some thought of the respondents:

*"End your uncertainty."*

*"Recognize your technology and what you are good at."*

*"Influence other people to get excited as well."*

*"Mental agility, grit (sisu), understanding of AI, sales and marketing skills, people skills."*

*"I want to know what my passion is, then I will start doing entrepreneurship. I do not want to do it only for money."*

*"I am ready to take the risk and finding my passions."*

*"Yes, I have an entrepreneurial mindset, and they are a collection of analytical mindsets, realistic, strong feelings, strategic mind, never freak out, and thinking fast."*



The Finnish word “*SISU*” stands for a cultural construct. It is an extreme psychological strength that comes with grit and perseverance. It is an extra gear (Melissa, 2019). The top five minds from Howard Gardner's book, *Five Minds for the Future* (Gardner, 2008) for future or digital ages, are disciplines, synthesis, creativity, respectful, and ethical minds.

The entrepreneurial skills for future results and findings are in line with Howard Gardner's cognitive skills. According to Duening (2010), few skills or minds are essential for the future, and they are opportunity recognition, designing, risk managing, resilient, and effectuating. The entrepreneurs who participated in the program resonate with these skills quite intuitively. Risk-taking, handling uncertainty, learning as a team, and emotional intelligence is the most potent experiences by Arpiainen (2019). These findings also aligned with our results. Frank (2007) illustrated the difference between the skills for entrepreneurs and planners. Calculated risk-taking, creativity, communication, and negotiating skills, and independent decision making are the top skills required for entrepreneurs.

In a nutshell, seeing the problem and defining it, finding out individuals' expert zone and leadership skills are entrepreneurial skills that synced most of the time by researchers. This research finding also brings light on these top skills.

#### **4.1.3 Best way to teach entrepreneurial mindset at university**

We received a mixed reaction from the entrepreneurs when we asked this question. Most of the entrepreneurs find it difficult to answer in one line or few sentences. The main idea we gathered from the entrepreneurs mentioned above are given below sequentially:

- Promoting entrepreneurship as a career path
- More customer projects work, i.e., hands-on experiences along with theoretical and practical lessons.
- Sharing ideas with people and learn networking techniques
- Camping, training, and participation in a real team for a while enhancing entrepreneurial mindset where coach or teacher will be a team member.

- Also, introducing cutting edge concepts and its applications will help to develop an entrepreneurial mindset at university.
- Lastly, entrepreneur B has advised using *Proakatemia* based education system can help universities to build entrepreneurial students.

Some citations describing teaching entrepreneurial mindset at the university:

*"Courses, hands-on workshops, meeting with startups (especially the new and small)"*

*"Promoting entrepreneurship is a career path."*

*"participation in a real team for a while."*

*"Hands-on experience, meeting lots of entrepreneurs, coaching, and facilitator of the education."*

*"Coaching, different company speakers, meeting new peoples, shorter (15cr) courses, fewer theories, and more trips."*

*"Proakatemia based study model and adding experts from different areas."*

*"Nothing specific, but Proakatemia or Demola based model would be ideal at TAMK."*

*"Meeting new people, experts talk, more Youtube videos, any other way than traditional way will be ideal for TAMK."*

The term *Proakatemia* here describes one of the Finnish education systems where students usually teamed up for entrepreneurial studies. They received training by a coach and form a small company. The idea is to make money by making tangible product or service for the real-life customer and earn something (Brandt et al., 2019).

So, to conclude this the best way to teach entrepreneurship according to the interviewees are given below sequentially:

- More hands-on experience or project work
- More networking events at the campus
- Modern coaching methods and new facilitators are necessary
- More study trips to different locations and fewer theories

It is also needed to engage economist as well as experts available from engineering and science in the project work. In contrast, the *Proakatemia* and *Demola*, Tampere model received more attention, and the interviewee wants Growthmakers or entrepreneurial courses to be like above mentioned two. Some of them suggested that more practical training, structured, and well-planned courses are always excellent. A study framework is necessary for Growthmakers or entrepreneurs.

It was also found that the attitude of the teacher is also essential when delivering entrepreneurial courses at university. The students are more likely to get an idea about entrepreneurship from coaches who have experienced entrepreneurial challenges in their careers.

Our research findings are aligned with (Pihie and Sani's, 2009) findings. The top three-technique considered by students are given as follows, (a) running a real business (b) visiting to a business places and (c) conversation or interviewing entrepreneurs (Pihie and Sani, 2009). These three essential learning techniques help students to get prepare and motivate them to start their own business. Collins (2003) also suggested that entrepreneurial study can learn from one another, also entrepreneurship can be learned by doing stuff, learned by discovery or mistake, or solving a problem. In addition to that, students need to make self-analysis and own competences to understand readiness is also falls under entrepreneurship study. According to Dale's (1969), the most effective way of learning is doing "hands-on." The hands-on working principle is also coming out from our findings. Lastly, Gibb (2002) illustrated that students need to know their own goals and task; they should take ownership of their learning and thus will develop the entrepreneurial mindsets at universities. Gibb's (2002) illustration is also in-line with this research.

These results also aligned with the survey and interview conducted on growth makers. They suggested that more practical and hands-on activity, coaching, and coaching styles needed at the university to create more entrepreneurs.

To sum up, in this research and interview brings the insights aligned with earlier studies. Considering entrepreneurship is a career path, real-life project work, and

active participation in a camping, industry, or business place visits has been the fundamental idea and still impacts the learning entrepreneurship at the universities.

#### **4.2 Entrepreneurial personality and traits from “Y-kampus” survey**

The “Y-kampus” student survey on entrepreneurial traits and personality was conducted via a google survey, where a google form link was sent to their email addresses. The survey question focuses on the common entrepreneurial traits and personality among “Y-kampus” students. Entrepreneurial personality traits such as new ideas, inquisitiveness, ambiguity, problem-solving, networking, performers, motivation from resistance, risk-taking, coping up complex situations. Personality based question focuses on openness or open-minded, focused, influential, wilful, modest, self-reflective, process-oriented, charismatic, daring, empathetic.

The survey questions are given below:

TABLE 9: Survey questions related to entrepreneurial traits and personality

Question on entrepreneurial traits	Do you constantly have ideas running through your head?
	Are you inquisitive? Do you want to know more?
	Do you find it easy to move away from familiar patterns?
	Can you structure problems clearly and solve them?
	Do you know many people? A wide range of different and interesting people?
	Do you enjoy being a performer?
	Do you find it easy to cope with a setback? Is hitting resistance a source of motivation for you?
	Are you comfortable with the idea of taking risks?
	Can you cope if, all of a sudden, everything is different?
	Are you up to speed on the sources, strategies, marketing, organizations, and financing of innovation?
Entrepreneurial personality	Open-minded
	Focused
	Influential
	Will full
	Modest
	Self-reflective
	Process-oriented
	Charismatic
	Empathetic
	Daring

The survey responses are analyzed here in the following sections.

TABLE 10: Survey responses related to top entrepreneurial traits and personality

<b>Entrepreneurial personality traits</b>	<b>Entrepreneurial personality</b>
Inquisitiveness	Open-minded
Problem-solving	Focused
Risk-taking	Daring
Motivation from setback or resistance	Wilful
Coping in different situations, performer	Influential
New ideas	Self-reflective
Networking or meeting new peoples	Empathetic
Moving away from familiar patterns	Charismatic

Regarding entrepreneurial personality traits, top traits are inquisitiveness, problem-solving, risk-taking, motivation from setback or resistance, coping different situations, performer, new ideas, networking, and last is ambiguity. In terms of entrepreneurial personality, the top personalities are open-minded, focused, daring, wilful, influential, self-reflective, empathetic, and charismatic.

All the respondents have entrepreneurial traits and personality based on the survey. It was reflected that all most all the participants have personality traits such as innovativeness, curiousness, ambiguity, problem-solving, networking, resilience, risk-taking, and coping with stressful situations. The survey findings aligned with Singh & Rahman (2013) studies, where he showed that innovation, problem-solving, risk-taking are essential traits for entrepreneurs. Thesis findings also in line with Desai's (2009) suggestions. According to Desai (2009), common traits for entrepreneurs are networking and tactfulness. According to Dhliwayo and Vuuren (2007), McGrath and MacMillan (2000) and Haynie et al. (2010) entrepreneurial mindset definition, opportunity creation, focusing on execution (performer), engaging natures, dynamic personality are essential for the entrepreneurs.

About the entrepreneurial personality, our research survey follows the findings of Nandram & Samsom (2007). Abdullah et al. (2009) showed that the top entrepre-

neurial personality is staying focused, daring, open-minded, empathetic, self-reflectiveness, charismatic, wilful. All the respondents have these essential entrepreneurial personalities.

According to de Pillis and Reardon (2007), the top three personality traits are achievement motivation, tolerance for ambiguity, and personal efficacy. Also, achievement motivation is vital for economic advancement and progress. De Pillis and Reardon (2007) mentioned that some studies found that it is positive, and some found it as unfavorable. Entrepreneurs take risks, face embarrassment, and financial failure. While entrepreneurs succeed, they receive wealth, independence, and feel accomplished. Entrepreneurs also shows a higher degree of ambiguity tolerance, such as solving the problem or intricate patterns. Entrepreneurs also possess adventurousness, such as new ideas, daring attitude, performance. The focused, hard work are the traits of internal locus of control, and it means that individual believes that their outcomes are the results of their actions. Internal locus is associated with the entrepreneurial personality.

Whereas according to Baum & Locke (2004), top entrepreneurial skills are a passion, tenacity, and new resource skills. In our studies, we have seen that our findings are aligned with previous findings. The mostly used entrepreneurial traits and personality we have got in our survey are new ideas, inquisitiveness, problem-solving, risk takings, motivations, and meeting new people. At the same time, the personality skills such as open-mind, focused, self – reflective, process-oriented, charismatic are the top skills have seen in the results.

### **4.3 Entrepreneurial course at “Y-kampus.”**

The thesis also studied that how has the EE learning places or growth-makers school such as “Y-kampus” courses helping students. The question was selected based on the courses available at the “Y-kampus.” Growth-makers courses are given below:

TABLE 11: Survey question on Entrepreneurial courses at the "Y-kampus."

Growth-makers activity (Based on course)	Learning Leaderships
	Learning sales and marketing
	Learning growth strategy and business models
	Growth Ecosystem
	Professional growth experience
Independent Question	How growth makers activity helping an individual to build entrepreneurial mindsets

While the survey identified the impact on growth makers activity based on the coursework, participants all most all agreed that they had learned leadership, sales and marketing, strategy and business, growing ecosystem, and growth experience. Only one person disagrees with learning growth strategy and business. Otherwise, all the cases respondents agree that the growth makers coursework and activities are helping them.

Growth makers Activity (Based on courses) [For example, if you think Learning leadership course is helping you in a great extent please mark Strongly Agree, if not mark Disagree or Strongly Disagree]

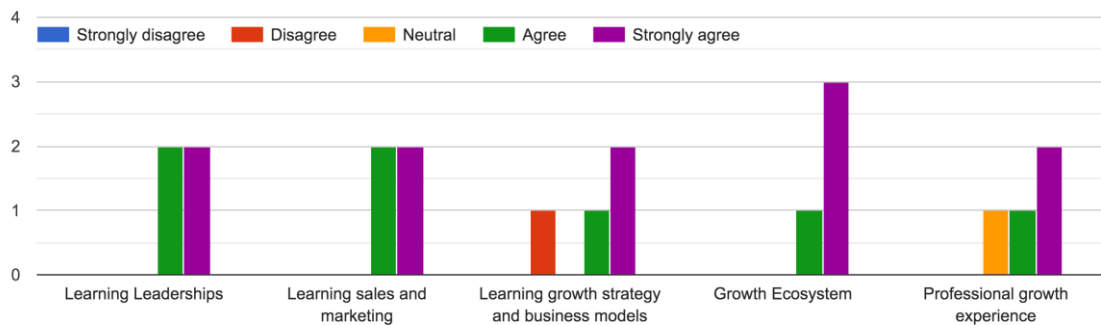


FIGURE 5: Response of the question "Growth makers Activity (Based on the courses)"

It is important here to discuss some more responses related to the growth maker's activity answered for independent questions. One respondent says that different tours were very informative for them. Also, they emphasized that meeting new peoples or networking helped them a lot.



*“Especially both learning tours to Helsinki and Israel have provided an excellent and concrete example of an entrepreneurial mindset. We have been able to meet many convincing and experienced people and learn from them. The enthusiasm to find your passion grabs others. The course has blown my mind, and I am full of new ideas for my life.”*

One respondent quoted that ownership and meeting new people from the same ecosystem was the key learning from growth-makers.

*“Networking and ownership are the powerful assets that growth makers gave me.”*

Another response emphasized the changing mindset due to the growth-makers course and activity. The growth-makers course helped students to stretch their limit, open their mind, and share knowledge about the businesses.

*“The Growth-makers program has changed a lot of my usual mindset when it comes to business. I had learned to stretch my limits further and open my mind up for some ideas or knowledge that I before did not have the capability of / agreed upon.”*

It is evident from the participants that the Growthmakers program impacted them a lot. From this course, they have attained enough knowledge so that they can start an actual business on their own. They have learned ownership, planning, responsibility towards business from this course. They have also felt inspired and positive after the course.

Few quotes are given below:

*“This course opened my mind, and now I am more curious.”*

*“Growthmakers impacted me very much, and I have now the strength to start my own business.”*

*“Growthmakers helped me to learn how to push yourself and how to become responsible for your task. Few trips and expert talks helped me a lot.”*

All the participants said they are positive about the growth makers course. Trips to Israel and meeting new people, this two has been the most valuable takeaways for them.

“Y-kampus” or growth makers program is a mainstreaming entrepreneurial study module for TAMK or T3 students. This program helps individuals to study entrepreneurial education, attending different mentoring and events activities, and also provided dedicated spaces for entrepreneurs. Y-kampus courses can be added to the student’s study module as a free choice study. Y kampus uses Proacademy base study models. Y-kampus is also helping domestic startups, which are up and running. According to TAMK, 20-25% of its graduates started business or company compared to less than 5% for all university graduates (Gareis, 2017). Almost the same comments come from the respondents, as well. Most of the respondents say that they are now more confident, inspired, responsible, organized, more open-minded, curious though the growth makers or “Y-kampus” course. Their suggestions to make this course more robust are as follows: more practical training and courses required than theoretical lessons, more pitching, more networking, and field trips to the different business hubs, more organized study models.

#### **4.4 Family and cultural background on entrepreneurship**

A semi-structured interview was conducted with the individuals who responded to the survey. The idea was to find more concrete answers about the effects of cultural and family background on entrepreneurship. A few questions were carried out to know the in-depth idea of entrepreneurial mindsets. The question related to family and cultural linkage into the entrepreneurship are highlighted in this section. Regarding family background on entrepreneurship, the question is given below:

*Is there anybody in your family have entrepreneurial activity? Parents or siblings?*

While we asked this question as an opener interview question, we received some mixed reactions. Half of the participants said that they have a family member who is involved in entrepreneurship, and others declined the family involvement.

The following quotes illustrate some though of the respondents:

*"Both my parents are entrepreneurs, and they have gift shops in our country."*

*"My whole family members are involved in the business."*

*"Nobody in my family has a history of entrepreneurship."*

So, in a nutshell, it is a mixed response about family history towards new entrepreneurship. Regarding the cultural background:

*How your cultural background affects your attitude towards entrepreneurship?*

This question was one of the important in this research. Response relates that the cultural influence is high while starting new business. Due to the lack of salaries, easy entrepreneurial initiatives helped them to start new businesses.

These excerpts illustrate how cultural background effects on respondents' entrepreneurial attitudes:

*"In our country, salaries are low, so people go for entrepreneurship such as food cart or giftshops or flee market."*

*"My parents are entrepreneurs, so they inspired me to study entrepreneurship and eventually start a business in the future."*

*"Cultural traits such as determination, humble, do stuffs are key things that inspired me to study entrepreneurship."*

To conclude this, it is evident that cultural background helps new peoples to start in entrepreneurial worlds. Different cultural traits such as risk-taking, strong determination helped people to join in the entrepreneurship.

The combination of family and cultural background on entrepreneurship studies showed us that family and cultural background helps entrepreneurs to start a business, and at the same time, it has no impact. Few of the respondents shared that parents, siblings, less salary structure in the respondent home country, less social security lead them to start the entrepreneurial activity. Besides, other's shared that foreign country's study and living (in this case, it is Finland), helped respondents to learn Finnish cultural traits such as determination, do – stuff, sound social security system, which eventually lead them to start entrepreneurial study or entrepreneurship. This idea of company formation resonated with Shapero & Sokol's entrepreneurial event model (Shapero & Sokol, 1982). The Shapero & Sokol's entrepreneurial event model says that three things create the perception of desirability (willingness to do something). They are negative displacement (emigration, fired, angered, divorced, middle-age) between things (out of the army, out of jail and out of school), and positive pull (from peers, partners) lead people towards perceptions of desirability. This willingness consists of cultural, family, peers, colleagues, or mentors, which lead people to another stage, and that is perceptions of feasibility, and the main index of this stage is financial support, demonstration effect, models. Thus, lead people to the final stage, which is company formation. So, the family and cultural impact of entrepreneurial is a systematic way and comprises different states.

The Shapero's theory and TPBs are linear to each other, according to Krueger et al. (2000). Theory of planned behavior (TPB) (Ajzen, 1991) also suggested that the higher the positive attitude and subjective norm toward a behavior are, the stronger the behaviors mindsets. If the mindset is accurate and high, then the individual performs the specified task efficiently. Both models speak about the self-efficacy and willingness of the behavior or desirability of the behavior. Shapero's model more focuses on individual alertness, whereas TPB focuses on environmental context towards a behavior.

The effect of family ties in entrepreneurship is understudied. Some researchers found that relative to the amount of time and effort involved in maintaining these connections, the knowledge and value given by family relations created a downside for people considering a startup business, whereas other studies show that entrepreneurial family member's involvement raises entrepreneurial aspirations

because they can act as role models. Some researchers proposed that such specific results may contribute to the various stages of the life cycle of entrepreneurship. Studies also found a positive correlation between business formation and family ties. Family ties mean parents, close friends, siblings, family members not only pass on information relevant to trade but also provide their successors with the business skills required to conduct daily operations (Altinay et al., 2012).

According to Shapero & Sokol (1982), the cultural background has relevance for entrepreneurship and economic behavior. In other words, when a person develops business in a specific cultural setting, this business or company represents that cultural environment. Using the culture theory of Hofstede (1980), researchers have generally assumed that entrepreneurship is encouraged by cultures those who are high in individualism, low in uncertainty avoidance, low in power distance and high in masculinity. Although the work has generally shown that cultural variables affect entrepreneurship, in many cases, cultural variables have been theorized and modeled as moderating entrepreneurial outcomes (Hayton et al., 2002).

#### **4.5 Future supports from growth makers program for enhancing the entrepreneurial mindset**

While we asked what kind of support students need in future for enhancing their growth-oriented mindsets, we have found different and mixed answers. Few of them asked more theories where others supported hands-on stuff. Few quotes are given below:

*"More theory related to business will be appreciated."*

*"All the things are available on the internet, no more new courses, but importance should be given on coaching, pitching, challenging situations."*

*"Hands-on company projects, more responsibility, more Proakademia model."*

To sum up, participants suggested not to add more courses while they should give more focus on organizing and more structured way to deliver the current courses. As this is the first-time courses are not well organized, so students feel

it messy. Also, more networking events and their project work should be there in the future. *Proakatemia* study model can be seen to improve this course.

While this finding aligned with Arpiainen (2019), where it was found that valuable experiences for entrepreneurs are handling uncertainly, learning as a team, and learning emotional intelligence. According to Gibb (2002), Hampden-Turner (2002), and Politis (2005) studies resonated with the same idea, students should focus on hands-on stuff. Rae et al. (2001) also mentioned that teachers or coaches are an integral part of entrepreneurship education, and entrepreneurship can be learned outside formal studies.

## 5 CONCLUSION

In this chapter, the summary of the research results and conclusions are shown. Finally, the research limitation is provided, and some recommendation for future research is provided.

The thesis subject is on the entrepreneurial mindset and entrepreneurial education. The thesis is an empirical study on different entrepreneurs with their heterogeneous technological innovation, and at the same time, it studied the entrepreneurial-minded student who is participated in the growth makers study program. The sample size was six startup companies and four entrepreneurial-minded students.

The main findings of this research can enlighten the upcoming entrepreneurs, entrepreneurial-minded students, and entrepreneurial education providers among the globes. This research will help to understand the necessity of networking, the useful skills for future entrepreneurs, how to teach entrepreneurship at universities, and lastly, how cultural and family background can impact on entrepreneurs. Furthermore, the research result can help the startup ecosystem and associated stakeholders. Universities can understand the need for different activities and how they can develop best practices for bringing more people in the startup pipeline.

### 5.1 Discussions

The key research questions of this thesis shown in chapter one, followed by a comprehensive analysis in chapter four. In this section, discussions will be presented on the crucial research questions. The critical research question highlighted in this thesis is given as follows:

- The necessity of networking events such as SWC 209, match-making events,
- Future skills for an entrepreneur
- What are the best ways to teach entrepreneurship?

- Key entrepreneurial traits and personalities
- Cultural and family background on entrepreneurship
- Growth maker's activity based on the courses.
- Future supports required for growth makers.

### **5.1.1 The necessity of networking events**

It is found in the research that the necessity of networking events such as startup world cup, matchmaking, pitching, are enormous. It brings like-minded people in one place and let entrepreneurs show their product and solutions. Networking events enabled entrepreneurs to achieve feedback and lead them to much better success. The only demerit of networking events is that they are time-bounded, so getting real and right on target feedback is difficult. Due to that fact, after each pitching, presenters get less than 5 to 7 minutes, so that it is difficult to show the total solutions. Networking events strengthen the networking ties. Networking ties such as opportunity identification resources acquiring, and gain legitimacy (Elfring and Hulsink's, 2007). In other studies by Friar and Eddleston (2007) identified that networking events create a chain of informations, supports, and contacts; thus, networking skills boost career and entrepreneurial skills. Besides, networking events help entrepreneurs to measure their competitiveness and performances among their counterparts also provide entrepreneurs essential contacts such as future investors or collaborators.

### **5.1.2 Entrepreneurial skills for future**

Skills for entrepreneurs are found to be one of the difficult questions to be answered. Despite that, it is found that few skills are critical in the venture creation journey. First one is knowing the products and technology at its best, secondly surrounded by the right peoples. If these two goals achieved, then some other skills, for example, pitching, hands-on project works, risk-taking attitudes, are essential skills for entrepreneurs. In Gardner's (2008) books, *Five Minds for the Future*, where it was mentioned that disciplines, synthesis, creativity, humbleness, and ethical minds are top minds for future entrepreneurs. According to Arpiainen



(2019), top skills for future entrepreneurs are uncertainty-handling, risk-taking, teamwork, and lastly, emotional quotient. Being equipped with all these skills can help entrepreneurs. Frank, (2007) also illustrated that calculated risk-taking, being creative, excellent negotiating and communication skills, quick and unbiased decision making are the top skills for entrepreneurs.

### **5.1.3 Best way to teach entrepreneurship at university**

Considering entrepreneurship as a career path than considering it as something else can be a proper mindset for the students who are studying entrepreneurship at universities. Customer-centric project work, a study trip to different business places, learning cutting-edge technologies is the best way to teach entrepreneurship according to this study. Another point that resonated by all the respondents is the following "Proaktemia" based study models. The "Proaktemia" based study models are less hierarchical, which means teachers act as a coach and help students to build a small firm since the beginning of the studies.

Current research findings follow Pihie and Sani's, (2009) studies, where it was shown that the three ways for entrepreneurial learning are conducting real business, visiting business hubs, and conversations with entrepreneurs. Collins, (2003) studies stated that learning by doing real stuff, learning from failures or mistakes, or analytical ability are the ways of learning entrepreneurship. Moreover, the study suggested that entrepreneurship can be learned from another person. Dale's (1969) illustrated that hands-on doing is the effective way to learn entrepreneurship.

### **5.1.4 Entrepreneurial traits and personalities**

The fundamental five personality traits in the theories are openness, carefulness, extraversion, geniality, and neuroticism, which are the constituents of individual personality (Murugesan & Jayavelu, 2017). According to this research, vital entrepreneurial traits and personalities found in the survey are given below:

Traits	<ul style="list-style-type: none"> <li>• Inquisitiveness</li> <li>• Problem-solving</li> <li>• Risk-taking</li> <li>• Motivation from setback or resistance</li> <li>• Coping in different situations, performer</li> <li>• New ideas</li> <li>• Networking or meeting new peoples</li> <li>• Moving away from familiar patterns</li> </ul>
Personalities	<ul style="list-style-type: none"> <li>• Focused</li> <li>• Daring</li> <li>• Wilful</li> <li>• Influential</li> <li>• Self-reflective</li> <li>• Empathetic</li> <li>• Charismatic</li> <li>• Focused</li> </ul>

Different research found that few characteristics and personalities are important to entrepreneurs. To be creative, curious, problem-solving, communicating, risk-taking, execution-focused, flexible, engaging in nature are essential traits for an entrepreneur. Whereas top entrepreneurial personalities are remained focused, daring, open-minded, empathetic, willing, personal effectiveness, tolerance of ambiguity, motivations (Singh and Rahman, 2013; Desai, 2009; Haynie et al., 2010; Nandram and Samson, 2007; De Pillis and Reardon, 2007).

### **5.1.5 Effectiveness of growth makers or “Y-kampus” course**

Currently growth makers courses at the "Y-kampus" consisting of courses related to leadership, growth strategy & business models, growth ecosystem, sales & marketing, and professional growth experiences.

Most of the respondents agree that these courses are helping them to learn entrepreneurship effectively. Two things are beneficial in recent times for the students, and they are trip to Israel and meeting entrepreneurial-minded peoples. Students also pointed out that the growth makers program equipped them with all the necessary tools and knowledge required for future venture creation.

### **5.1.6 Cultural and family background on entrepreneurship**

Cultural and family background on entrepreneurship has been the under-research topic in the current situation. A mixed response was found about the family linkage towards venture formation among the participants. Our research shows that cultural and family background helps to start entrepreneurship, while at the same time, there is no connection to forming a venture. Respondents cited that low family income, entrepreneurs' parents or siblings, cultural characteristics such as dedication, humbleness, doing things helped them start a new business or at least led them to study entrepreneurship. This result confirms Hofstede, (1980) cultural theory, where studies have shown that the highly individualistic environment, have low uncertainty avoidance, and low power distance produces more entrepreneurs. Altinat et al. (2012) also argued that family ties create an enterprise. Family ties mean that parents, siblings pass on business information and support them with the necessary business skills simultaneously.

### **5.1.7 Future supports for enhancing growth makers program**

The "Y-kampus" entrepreneurial study also helps students in their entrepreneurial journey to become successful. Respondents suggested that they need more business-related theories, as well as more modern coaching techniques, business projects, to make their study and career more efficient. A study by Gareis (2017) showed that TAMK is developing more successful entrepreneurs (20%-25%) than other Finnish universities.

There are many factors associated with entrepreneurial success. Academicians and researchers have different arguments about the influence of different factors

on company formation or entrepreneurial journey. However, it has been seen by the researchers and academicians that different entrepreneurial activities, entrepreneurial studies, entrepreneurial traits, and personalities have an impact on company formation. Due to the sheer number of publication and research on entrepreneurial characterizes, and at the same time, it is a multi-disciplinary study, so literature is not straight forward to have a direct result in the thesis. This challenge is likely to overcome with time progresses.

This thesis studies entrepreneurs who are already in the market with their products as well as students who are studying entrepreneurship. This study shows the importance of networking and networking events, cultural and family background on entrepreneurship, effective ways to teach entrepreneurship and future skills for entrepreneurs.

The study reveals that there is a close connection between successful entrepreneurs and different entrepreneurial personalities and traits among entrepreneurs. As entrepreneurs are very heterogeneous, so does their personality and traits. This empirical study shows that entrepreneurs have mixed personality characteristics.

The thesis also found that entrepreneurial traits and personality are essential and can be a success indicator. Problem-solving, innovative thinking, curiousness, risk-taking, openness, goal-oriented, wilful, adaptive to change, daring, endurance, self reflects are essential traits for entrepreneurs.

It was also noted that the impact of entrepreneurial studies over formal studies is enormous, while the study also focuses on the roles of the teacher or coaches on entrepreneurship education.

The thesis results highlighted characteristics more than skills, hands-on doing as a future of entrepreneurial education, and meeting new people or networking is the best way to showcase individuals' innovation and meet like-minded industry peoples. Both the hard skills and soft skills are an essential tool for the entrepreneurship journey. The importance of networking has seen a vital factor in this

thesis for entrepreneurs. Also, it was seen that trips to different business hubs also bring a positive impact on entrepreneurship education.

## **5.2 Research limitation and suggestions for improvement**

The thesis studies startup companies as well the student studying to become entrepreneurs in their near future. The selection of companies could comprise some other companies, who are actually very successful in their field and also could bring more students who are studying entrepreneurship and already started their companies. This arrangement could have provided a more vivid and insights on entrepreneurial journey or company formation. However, the objective of this research was well achieved, and data collected through a semi-structured interview as well as surveys.

## **5.3 Further Research**

The entrepreneurial education and mindset have gained significant momentum in recent times due to its nature and how it can be resourceful for national economic growth. Further research can be done on the more technology-specific field. For example, in this thesis, diversified companies were studied, but closer research on industry-specific companies can be made in the future. Another future research can be on the entrepreneurial students and comparing their success between different growth programs. How university offerings study helping students to achieve an entrepreneurial goal can also be a topic of further research. As this research studies data collection was limited to Finland, other Nordic countries can be studied on the same scale. Other geographically divided countries can research their country on a similar scale so that more rigors understanding can be made on entrepreneurial mindset and education. It would be valuable to know is the differences between different country's entrepreneurial mindset and their education.

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## **APPENDICES**

### Appendix I. Research questions from SWC2019

- Are this kind of networking events important to entrepreneurs?
- What are the skills that are important to entrepreneurs at future?
- What would be best way to teach entrepreneurial mindset for students at universities?



## Appendix II. Survey Questions

## Entrepreneurial Mindsets (An MBA in IBM Thesis studies)

Please submit this simple questionnaire. This questionnaire helps us to get deeper idea about entrepreneurial quality, personality and growth makers influence.

Name of the thesis topic is : Educating the entrepreneurial and growth-oriented mindset.

\* Required

Name \*

Your answer \_\_\_\_\_

Age \*

Your answer \_\_\_\_\_

Sex \*

- Female
- Male
- Prefer not to say
- Other: \_\_\_\_\_

1. Do you constantly have ideas running through your head?

- |            |                       |                       |                       |                       |                       |           |
|------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
|            | 1                     | 2                     | 3                     | 4                     | 5                     |           |
| Not at all | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very much |

2. Are you inquisitive? Do you want to know more ?

- |            |                       |                       |                       |                       |                       |           |
|------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
|            | 1                     | 2                     | 3                     | 4                     | 5                     |           |
| Not at all | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very much |

## Appendix II Continued

3. Do you find it easy to move away from familiar patterns?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much

4. Can you structure problems clearly and solve them ?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much

5. Do you know many people ? A wide range of different and interesting people?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much

6. Do you enjoy being a performer?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much

7. Do you find it easy to cope with setback? Is hitting resistance a source of motivation for you ?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much

8. Are you comfortable with the idea of taking risks?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much

9. Can you cope if , all of a sudden, everything is different ?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much

10. Are you up to speed on the sources, strategies, marketing, organisations and financing of innovation?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much

Entrepreneurial Personality (Appraise yourself in regard of following qualities) \*

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Open-minded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Focused	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Influential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Willfull	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Modest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self-reflective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Process-oriented	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Charismatic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Empathetic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Daring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Growth makers Activity (Based on courses) [For example, if you think Learning leadership course is helping you in a great extent please mark Strongly Agree, if not mark Disagree or Strongly Disagree] \*

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Learning Leaderships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning sales and marketing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning growth strategy and business models	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Growth Ecosystem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional growth experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Growth makers Activity (Please explain how growth makers activity helping you to build entrepreneurial mindsets) \*

Your answer

---

### Appendix III. Interview Questions

- Please tell me your name and age.
- Is there anybody in your family have entrepreneurial activity? Parents or siblings?
- How your cultural background effects on your attitude towards entrepreneurship?
- Do you have entrepreneurial mindset? And if so, which kind of mindset that is (which kind of entrepreneurial mindset you have)?
- How has the Growth Makers program impacted on your entrepreneurial mindset?
- What kind of support you would need more for entrepreneurial mindsets from the Growth Makers' program?
- What would be ideal program for entrepreneurship at TAMK, if they would not be any restrictions?
- Can you please tell me the best way of teaching entrepreneurship at the university?
- Where do you see yourself in 5 years?