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**Faculty of Social Sciences, School of Economics and Business
administration**



Master's Thesis:

**Entrepreneurial education as the source of
entrepreneurial opportunities**

Students' name: Zaur Ayrarov, Gultaj Ibrahimova

Supervisor: Iuliia Trabskaia

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We have written this master's thesis independently. All viewpoints of other authors, literary sources and data from elsewhere used for writing this paper have been referenced.

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Abstract

We investigate entrepreneurial education and its impacts on entrepreneurial activities using data from the online survey among 56 university students. The result from the survey demonstrates that entrepreneurial education increase intention among students and has a direct influence on opportunity creation. Both factors are the main source of entrepreneurial activities. Nowadays, technology, globalization, and the supply chain process have changed traditional entrepreneurship activities. The traditional approach in the business world is getting older, and we have to create new aspects in the process. Without education and investigation, it is impossible to improve entrepreneurship education. It is the reason the number of entrepreneurship training and courses is increasing year by year.

Resüme

“Ettevõtlusharidus kui ettevõtlusvõimaluste võimaldaja”

Magistritöös uuriti ettevõtlusharidust ning selle mõju ettevõtlusele kasutades veebiküsitluse andmeid. Küsitluse vastas 56 üliõpilast. Uuringu tulemusena leiti, et ettevõtlusharidus suurendab üliõpilaste tahtmist tegeleda ettevõtlusega ning omab otsest mõju võimaluste loomisele ettevõtluses. Mõlemad asjaolud on ettevõtluse peamisteks allikateks. Tänapäeva tehnoloogia, globaliseerumine ja tarneahela protsess on muutnud arusaama traditsioonilisest ettevõtlusest. Muutuvas maailmas, kus traditsiooniline lähenemine ärimaailmas taandub, tuleb leida uusi lahendusi. Ilma hariduse ning uuringuteta, ei ole võimalik parandada ettevõtluse õpetamist. Sellel põhjusel suureneb ettevõtluskoolituste ja -kursuste arv iga aasta.

Introduction

Entrepreneurship is the process of developing and growing a company to create market value and get profit. However, as a fundamental concept of entrepreneurship, that is somewhat limited. The contemporary concept of entrepreneurship also involves changing the markets by resolving significant issues or offering a much more efficient model to solve problems, such as progressive transformation or developing innovative products that change the status quo of customers' daily routines. Those innovations created opportunities in the market. Entrepreneurial opportunity is a value-creation process. Entrepreneurial opportunities are commonly characterized as conditions in which goods and services can be marketed at a value above manufacturing costs. A business opportunity is therefore a circumstance in which entrepreneurs may operate to generate a profit. However, it is still open to discussion topic for researchers that it is a naturally generated process or something to create.

Entrepreneurial education lets students understand the market flows and recognize the opportunities in it. The main objective of the research to reveal the relation between entrepreneurial education and entrepreneurial activities. I believe students who take entrepreneurship courses at universities are the source of entrepreneurial activities. They comprehend the market structure, its gaps, opportunities, and possibilities for future changes. Investigations show that people who get entrepreneurial education have extra intention to be an entrepreneur. Entrepreneurial programs teach critical skills such as teamwork; presentation skills in public; collection and review of data; using social media as a method; complementary approaches, solve complex issues; finding a creative solution to solve problems. Students study the product development process, supply chain management, implement strategic business plans and give many pitch speeches.

I believe that entrepreneurial education has a direct impact on entrepreneurial activities in the market. However, literature about the topic is limited, and just a few researchers have few investigations. It is not enough to understand the importance of education in the market and not appropriate to compare the data. Modern problems require modern solutions. Classic management skills on a business cannot follow the present-day market structures and insufficient to endure the innovation in the market. Universities have a direct influence on students' career and their

intentions. It is needed to prepare students for future changes. We live through a worldwide and technological transition that is unimaginable. Students confront an unpredictable future with complicated worldwide, economic and environmental problems. According to the study about future employment at the World Economic Forum, most modern workplaces will be replaced and automated by 2055, and the labor force will face entirely new positions, tasks, and obstacles. People need to learn innovative business models in the automated world. Entrepreneurship education will be the solution to solve the issue.

The research focus on the gap in the literature. Most of the researchers have investigated the process of entrepreneurial education and its application on universities. The relevance of entrepreneurship for a nation's economic growth and development has long been recognized. According to the literature, the evidence reveals that there are positive relationships among education, venture formation, and entrepreneurship activities, as well as between entrepreneurship education and activities in the market. The main contribution of the study is to offer some perspectives on entrepreneurial education and elucidate the opportunities it creates. The definition of entrepreneurial education is discussed, as well as the tremendous increase in such education programmes. However, several other researches show that the outcomes of these programmes are not immediate.

According to the country entrepreneurship education survey, it can be said that there are signs of a potential connection between entrepreneurial courses and subsequent enterprise activities. Research also shows that there are long-term interactions between education and market actions. European Commission findings indicate that courses in entrepreneurship are primarily given for individuals who have the intention to be an entrepreneur (2008). However, twelve years passed, and the Globalization-V process influences the market in many ways including entrepreneurship opportunities. The methodologies and curriculums for learners may not always appear to become the most effective and transmittable.

Objectives: The idea of entrepreneurial activity into education has developed considerably over the decades and, now it is becoming more vital as a pedagogical initiative. We can measure the outcomes of entrepreneurial education with activities in the market, and it doubled with the entrepreneurial knowledge and intention of the participants. Entrepreneurial education prepares students for an up-to-date workplace and helps recognize, discover and create the right

opportunities. In the research work, we will focus on the relations between entrepreneurship education and its effects on student career choices. We will find how entrepreneurial education influences students' career choice intentions and preferences. The essential aspect of EE in the world is rising day by day. The number of entrepreneurial courses is rising and, people do understand the intentions and opportunities it creates. Nowadays, youth do not trust the corporate world cares about them anymore, and they are right. University students observe their parents and relatives invest years of struggle and loyalty in corporate life that promised job growth and protection. The same people consternated that businesses decrease their employees and repeat the theory that used to rewrite the contracts for employers. It is the reason the value of entrepreneurship is increasing day by day. That is how entrepreneurship significance is rising every day. The relation between entrepreneurship and entrepreneurial (EE) education is often direct. The root of opportunities in many ways is entrepreneurial education. The research I conduct focuses on the activation process and its interaction with entrepreneurial education. Some objectives are listed up below:

- Determine the importance of entrepreneurial education in entrepreneurship
- Defining the contribution of entrepreneurship education in opportunity creation

The question mentioned below will be addressed:

- Do entrepreneurship education courses play a crucial role to formalize students' behavior to become an entrepreneur?

Practical Implication: The research structured in the following way: the first part of the research explained the existing literature of entrepreneurial education, entrepreneurship mindset in education, and entrepreneurship as a teaching methodology. Those three parts are crucial to evaluate the EE in the literature and its role in a university curriculum. The following stage comprises both entrepreneurial intention and opportunities. At the end of the research, the online survey and interviews were discussed to have a summary and critique of the findings.

Literature Review

Entrepreneurship in literature

As mentioned above, education is a valuable instrument for transforming the environment. Entrepreneurial ecosystems remain the same. Information and being knowledgeable are still the key tools for having creative moves in the market. Having reflective moves in the market makes you a successful entrepreneur. It was always challenging to define the term “entrepreneurship”. Entrepreneurship is indefinable due to some technical and managerial influences. If we want to understand entrepreneurial education, we should first investigate entrepreneurship. According to *Defining and Measuring Entrepreneurship* book, two different periods defined: Early Discussions and Recent Theories (Iversen, Jorgensen, & Malchow-Moller, 2008).

The below-mentioned studies have influenced modern entrepreneurship theories. "Entrepreneurship entails the combination of 2 characteristics: the existence of profitable resources and the availability of new entrepreneurs," Shane and Venkataraman say (Shane & Venkataraman, 2000). Venkataraman's arguments are based on the Kirznerian entrepreneurship discovery phase however, they stress the importance of prior knowledge in completing the discovery of investment opportunities. These theories are close to Schultz's studies, who believes that human resource is a crucial component of business capacity (Iversen, Jorgensen, & Malchow-Moller, 2008).

Casson argues that entrepreneurs are the individuals who practice solving problems and making decisions, which suits Schumpeterian and Knight's concepts (Casson, 2003). The Schumpeterian entrepreneurs benefit from innovation knowledge to produce new product combinations, and they are eventually responsible for determining whether or not the new products are competitive in the market. The Knight's entrepreneur evaluates the circumstances that will occur in the future and takes initiatives on decision-making about how to benefit from them. Although both Knight and Schumpeter's businessmen are solution-focused however, it does not mean that all decision-makers are entrepreneurs (Iversen, Jorgensen, & Malchow-Moller, 2008).

Nowadays, we have to add some concepts to find out a definition for entrepreneurship. Those concepts include marketing, the advance of technology, management strategy. As we know, investment in the industry is not enough to maintain the success of a company. Entrepreneurs are critical to the success of every economy because they have the expertise and ambition to foresee

necessity and bring some new ideas to the economy. Entrepreneurship that succeeds in bringing on the challenges of launching a business award revenue, recognition in the market, and available opportunities for ongoing growth. When an entrepreneur fails, he or she loses money and loses a portion of the market (Hayes, 2021).

There are also some initiatives in the market that provide innovative business models that calls “startup”. Oxford dictionary describes the term such a new company that is just getting started. However, it is not just enough to describe the startup ecosystems. With VC (Venture Capital), startups, angels, investors, it is a unique ecosystem. Entrepreneurship in the modern period is a mechanism used by a person or group of people known as "entrepreneurs", to discover and future development of market opportunities, usually by introducing new products to the local market or significantly enhancing an old good or service, or manufacturing system (Feld & Hathaway, 2020). This process usually carries out via the formation of a new business, through which the founders take significant market risks.

Having started and expanding businesses are just a small part of entrepreneurship. An "entrepreneurship mentality" can be used to solve a variety of issues and work with a variety of groups. Intentions of entrepreneurs give them particular ability to solve the issues in the market and growth fast among competitors. Startup founders are distinguished from conventional small businesses by their desire to develop anything new, gap-focused intention, and significantly expand their company to the IPO¹ level (Feld & Hathaway, 2020). Startup concepts base on creative and innovative ideas for selling. Many companies struggle as a result of failing to follow this rule: you should create products that consumers demand. *“Anything that won't sell, I don't want to invent,”* added T. Edison, the US inventor of the light bulb and the recorder. What has been over a century later still holds true for markets nowadays (Sartorelli, 2017).

Entrepreneurial Education

We have to dig deep and look through entrepreneurial education to understand well. The question “why this is important” coming first. As we know Generation-Z will be the one who is interested in self-employment than other generations. According to Kauffman Foundation surveys,

¹ IPO- An initial public offering or stock market launch is a public offering in which shares of a company are sold to institutional investors and usually also retail investors. An IPO is underwritten by one or more investment banks, who also arrange for the shares to be listed on one or more stock exchanges.

Generation Z would probably be more business-oriented than previous generations. Economic development has been one of the most seriously affected in modern years and, the divide between high education and employment demands is rising. High-skilled employers' incomes during a depression stagnate, and the amount of universities' tuition makes people think again about their career differently. All these reasons and statistics show how the new generation is more interested in self-employment. 40% of young people between 18 and 24 years old are keen to start up a business of their own. (Kauffman-Foundation, 2015) It was the reason universities like North Carolina designed particular programs to help students to find out in case they have entrepreneurship abilities. (NCUniversity, 2021) With its research, the university found out the three optimal ways to improve the interest in entrepreneurship among students.

To find the definition for entrepreneurial education, the Finnish researcher Malhberg found the direct relation between entrepreneurship and its education. From her point-view, entrepreneurial education teaches what businesses do the best in their challenges. She supported that entrepreneurial education should be part of economic studies, not just the education (Erkkilä, 2000). If we consider entrepreneurship as an education, it is always questioning that is entrepreneurship is the process to teach. Most of the surveys indicated that yes, it might be a part of education. For example, the American scholar Karl H Vesper surveyed university professors and economists and, it arrives at a result, 93 percent of interviewees accepted entrepreneurial education. (Erkkilä, 2000) Although, the number of courses was increased from 85 to 369 till 1991 in the United States. During the time the number of business schools raised too. (Karl H. Vesper, 1994).

Many scholars have described "business education" as a mechanism by which people provide the principles and vital role in the growth of recognition the new business chances and self-qualifications. Additionally, identifying the potential for the mobilization of capital in the challenges, the official seed period of startups, implementation of business plans, wealth creation and, cash-flow forecast are crucial aspects that should also contain in this form of training and courses. (Fayolle, 2007) Moreover, there is indeed a discussion in the literature regarding the possibility of teaching entrepreneurial skills and qualities, and the argument concerns how the educational reach of business should be (Dutta, 2017). In reality, entrepreneurial scholars are not conclusive in describing entrepreneurship education accurately. Some scholars have figured out that there are two streams regarding the essence of education: the first stream focuses on small

businesses and the others on the seed period startups and their development. (Fayolle, 2007) One recurring factor in both streams is that business training should include a wide variety of innovative management competencies and experience. The differences between the two forms of curricula are related to a disparity in the end goal: whereas small business classes tend to give a strong background in the leadership and functioning of existing businesses. The importance of "fresh" courses on entrepreneurship and business management is crucial and, the whole curricula focus on the creation and production of new projects and initiatives.

The quality of business courses and studies is now well understood for the economic development of nations. The research indicates the importance of business development among countries in their studies and, it is the most acceptable metric for evaluating the outcomes of entrepreneurial education. A great number of entrepreneurship activities in the economy promote competitiveness, idea variety, economic and market development, employment, and citizens' living standards. The quality of entrepreneurial education economic development can maintain. Global Entrepreneurship Monitor (GEM) reports on the value for venture capital industry and entrepreneurship. (Mario Raposo, 2011) Entrepreneurs are accelerating innovation: accelerating systemic economic reforms and forced the old incumbents to change it indirectly. Public policies can affect entrepreneurs in various ways while they decide: utilizing concrete initiatives and implicitly using standard measures. For example, governments can affect the market dynamics and, it is the way to manipulate the competition among players. Not only a legislative system but also educational systems let the government handle the business ecosystem. For the sake of encouraging entrepreneurship and its level, EE seems crucial for many reasons. (Paul D. Reynolds, 2001) First of all, entrepreneurial education assures individuals with a sense of personal freedom and self-confidence in their decisions. Secondly, education increases awareness of appropriate career decisions. Thirdly, entrepreneurial education expands personal horizons and increases the capacity of self-satisfaction, and lets individuals see possibilities and opportunities and. Lastly, EE offers information that entrepreneurs can use in creating new business models. (FAYOLLE, 2006) Three key influences of demand for entrepreneurial education, according to Alain Fayolle, exist:

1. Authorities pursuing economic development by generating jobs and innovating.
2. Students who would like to start or develop their job opportunities.

3. Entrepreneurs are open to innovative business models. The number of innovators is increasing.

The definition of business education should be the key purpose of the description of entrepreneurial teaching. However, it is not always the case since some of the meanings have connected with social or financial goals. Additionally, it is substantial to clarify the concept of business teaching to understand the entrepreneurial market activities. We will illustrate this first and then prove that we can teach entrepreneurship. This segment has concluded by addressing different potential concepts of entrepreneurial education. (Fayolle, 2007) In this sector, the two most distinguished words are enterprise and entrepreneurial education. In the United Kingdom, the term "enterprise education" is used mainly and has already been described as individual improvement, mentality, qualifications. Generally, whereas the phrase "business education" has been described as more concentrated in the particular sense of business. In the United States, entrepreneurial education is the only word used as a terminology. (Lackeus, 2015)

In the academic literature, the two terms enterprise education and entrepreneurship education signify that there have been two various observations on what is intended by entrepreneurial activities, one considered "wide" but one referred to as "narrow". The potential for uncertainty and ambiguity is high, and any debate on EE requires making it clear than the concept should be. According to the "narrow" notion, EE is a significance of the opportunity recognition, employment, initiatives on the market, and growth in the market. According to the "widespread" sight clarify self-development, creativity, self-confidence, initiatives, behavior. The methodology and concept used deep impact education priorities, audience segmentation, curriculum design, pedagogical methods, and participant evaluation methods, resulting in several approaches. (Lackeus, 2015)

As a result, some definitions for entrepreneurial education appeared in the literature. Entrepreneurial education to grow self-employed individuals or to coordinate, fund, and/or manage a business. (Hon. Emmanuel Joel J. Villanueva, 2010) Entrepreneurial education described as a set of official business courses. If anyone willing to take part in socio-economic progress across entrepreneurial awareness, business, or startup development projects. Business education (also known as entrepreneurship training) is typically structured more broadly, aiming to encourage self-consciousness and trust by building on the skills and imagination of participants while developing

the related competencies and principles, which allow students to expand their viewpoints of resources and support. (Unesco, 2006) To this end, entrepreneurial education described an operation of enabling graduates to develop ideas and capabilities for their implementation. EE provides additional expertise, strengths, and skills for graduates to apply such skills in the context of creating a new enterprise or enterprise. (QAA, 2012)

Entrepreneurial mindset as a teaching methodology

It is another subject to discuss how entrepreneurial education should be at universities. For Michael Kleemann, three parts include during the processes. (Kleemann, 2011) It is another subject to discuss how entrepreneurial education should be at universities. For Michael Kleemann, three parts include during the processes. In his book, three various components lined up: The influence of organizational impacts and mechanism; Pedagogical dimensions of entrepreneurial education; Business activities, tasks, and business cases. Altogether, EE is the process of value creation. The diverse concepts and the shifts in pedagogical methods resulted in challenges for professors to provide firm guidance regarding handling business learning. The community and educators could benefit properly if a definition is explained clearly. (Lackeus, 2015)

The idea of delivering people with the qualifications and theories to recognize opportunities that other people have underestimated and to have the awareness, consciousness, and real understanding to operate where others would be hesitant" is entrepreneurial teaching. Learning

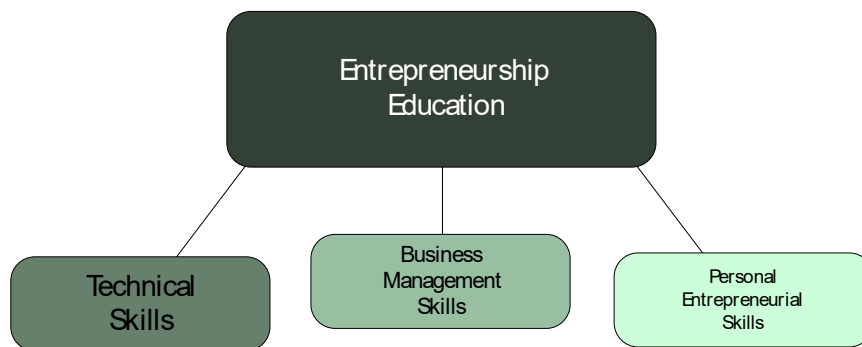


Figure 1- Entrepreneurial teaching methods

entrepreneurial spirit is aimed at inspiring students, encouraging and mindset of business. (Carlos Albornoz, 2013) According to Carlos Albornoz’s research of entrepreneurship teaching, over time teaching habits of professors have been changed. Mentors and teachers suggest various ways of

teaching entrepreneurship. This could be clarified in part by following various ways of thinking and entrepreneurship concepts.

However, the traditional entrepreneurial teaching model aimed at introducing organizational techniques to participants, illustrate quantitative data, and train students for tight deadlines and routine work. In determining what entrepreneurial teaching can be and confuse scientists and professionals, traditional methods cannot help explaining new fields of experience using old interpretative frameworks. Classic entrepreneurial training considers students and individuals as impartial logical decision-makers. Enterprise training involves a new theoretical body in which people and relationships with the environment can describe. (Tonette S. Rocco, 2013) There are several reasons for changing and updating the mechanism. The environment has changed over time. It is now more complicated and out of the standards. Giant companies, destructive innovations, startups, and new business models in the environment changed the aspect of the teaching methodology. A review paper by Ahlia University also shows that there are new ways of entrepreneurial teaching. (Fatima Fouad Almahry, 2018) The research assessed how the degree of many entrepreneurial qualifications, technological know-how, managerial skills, and personal business spirit influence entrepreneurial training. The following criteria would help boost entrepreneurship activities by creating strong foundations for entrepreneurs to prosper and achieve in their companies. Improving entrepreneurial preparation plays a significant and essential interest in facilitating entrepreneurs with the requisite skills to meet their everyday business needs and for overcoming difficulties and barriers in their entrepreneurial activities. Additionally, it will help educational institutions to provide governmental assistance to institutions to develop programs that specialize in entrepreneurs, thereby enhancing the educational opportunities and generating knowledge that emphasized the value of qualifications and knowledge in entrepreneurship.

Francisco Liñán points to the value of different initiatives for entrepreneurial teaching methodologies in various universities. Researchers say that the essential training programs in business are tailored for novice students to the business world. (Liñán, 2004)The courses will encourage students to develop entrepreneurship qualifications and choose the specific industry as a career path. The key focus of these training materials is on creating business awareness and helping business owners choose this career route for work.

Patricia G. Greene defined the four different methods to teach the entrepreneurship.

- Launch of businesses
- Extreme experiments and simulations
- Learning based on style
- Practice of contemplation

In the past few years, universities have become increasingly popular as part of the entrepreneurial study. For instance, in 1996, Babson College in the US began its FME course, which called for participants to establish their business for that first year. FME focuses on the opportunities, the parsimony of capital, the formation of teams, holistic ideas, and sustainability by harvesting. The training vehicle is a limited-term business organization that is devoted to organizational management and basic knowledge of all business operations. (Greene, 2021) Some companies like Google, Facebook, Reddit, WordPress, Time Magazine, Snapchat, FedEx launched by university students. (Chloe_L, 2020) Secondly, universities build games and software to assist students to learn how to think in terms of risk, ambiguity, and unawareness. Software developed to supersede a case study for an enterprising debate. Overall, games include in the methodology; enable participants to practice business in a different environment. It's a funny way to produce strict results. Moreover, with little research conducted to determine the efficacy of entrepreneurial intention, the impact of business research is not apparent. Nobel Prize winner Herbert Simon claimed that the design-based teaching methods better represent relevant fields. Development is a divergence method and a method of convergence that involves the ability to track, synthesize, search and create alternatives, think objectively, retroactively, visually reflect, creatively, address issues, and generate value. Because of the essence of entrepreneurial activity as a continuous process of learning, evaluating, and experimentation, it is crucial in a pedagogic collection, that students become reflective entrepreneurs. Deep learning is the ultimate purpose of contemplation. Marton classified analysis as surface and deep. (F. MARTON, 1975) Surface education correlated with a much more passive argument based on a research paradigm that relies on education, absorption, and regeneration. Deep learning address to an active approach that defined by a willingness to comprehend and refine useful and deep knowledge. (Greene, 2021)

Nowadays, the methodology has changed and, the radical way of learning is in our life. The 2004-2005 survey showed that the dynamics were continuing in a better path, widely in the field of innovation and technology initially explored during the previous US business studies. (Solomon, 2007) The latest research indicates that the conventional way of educating

people is being used and common as they build business plans. Eventually, the results indicate that entrepreneurial teachers use guest speakers and group discussions increasingly far more than conventional classroom approaches.

According to Heidi M. Neck, Andrew C. Corbett's research on Teaching and Learning Entrepreneurship evaluate the modern entrepreneurial teaching methodologies. (Heidi M. Neck, 2018). First one is the adult learning which is developed by Malcolm S. Knowles in the Adult Learner (Malcolm S Knowles, 2015) book. Malcolm Knowles took the understanding of learning methods further than its homogenous vision and, he claimed that the learning mechanisms of adults and children are different. This created immense discussion and a new area of training for adult learning. Theorists argue that adult education involves various logically developed and differentiated guidance and training approaches from how children are taught. For entrepreneurial education, andragogy is beneficial than pedagogy.

The second version of the modern methodology is Self-Directed Learning (Brookfield, 2016). The function of self-directed learning in adulthood theory is considerable. Adult students have a passion to learn; they want a safe atmosphere focused on confidence, honesty, transparency, and freedom of thought; they link their objectives to the targets, and they own an educational experience (Knowles, 1980). Due to such educational environments in the Adult Learning market, andragogy has gained the most interest in its possession and involvement in developing real learning environments. (Malcolm S Knowles, 2015) While Knowles established 16 training standards based on andragogy (page 129–130), he proposes the four most significant principles for entrepreneurial education. The teachers introduce participants to new self-fulfillment opportunities.

1. The instructor aims to create connections with each other by promoting cooperation and preventing competition and appreciation within learners.
2. Instructor allows individuals to coordinate themselves in the framework of collective inquiry.
3. The instructor allows learners to provide their perspectives as educational materials, using methods such as debate, role-play, case studies, etc.
4. The instructor allows learners to use new learning to improve their understanding and integration of training.

Self-oriented training is related to the readiness of an individual to participate in educational processes based on andragogy (Pratt, 1988). Concerning the paradigm of Grow², it is highly possible that a participant relies on one lesson and participates in another. Pratt tackles this problem with a view to student instruction (instructor support) and moral assistance (inducement from the professors).

The last version of the methodology is learning through practice and experience. Adult learning literature revealed issues such as learning interactions, the possession of training, educators as coordinators and assistants, ability to participate, and dedication to learning. In general, adult students participate in constructive learning to fix practical issues in real environments. The relation to entrepreneurial education is clear, but adult models sometimes neglect the definition of practice in entrepreneurial professors' teaching vocabulary. (Baron R. A., 2010) However, Billet pointed out that university education lacks practical training, although that isn't surprising that considering the EE at all stages is dominated by "pedagogy." (Billet_S, 2010)

Entrepreneurial intention

The entrepreneurial intention and its effects described in the various studies. For example, the business intention described as the exploration of expertise as well as other tools to start a business by Katz and Gartner. (Katz&Gartner, 1988) Barbara Bird described the intention as an emotional affair that focused on a particular purpose and experience in beginning a new initiative (Bird, 1988). Reynolds and Miller claim that business intention is the individual undertaking for new initiatives (Reynolds&Miller, 1992). Similarly, Norris Krueger debate that intention is an accurate indicator of entrepreneurship which could contribute to startups (Norris_Krueger, 1993). Many business activities, including the formation of a new company, are regulated voluntarily and with the strongest predictions. (Ajzen, 1991)

² **The GROW Model**- As the GROW Model image above shows, the name is an acronym for the four key steps in GROW coaching: G-oals, R-eality, O-ptions and W-ill. With a few powerful coaching questions, a leader or coach can quickly raise awareness and responsibility in each area- <https://www.performanceconsultants.com/grow-model>

If we are talking about entrepreneurial education, it is the way to create entrepreneurial activities. As we mentioned above, two factors affect directly: entrepreneurial intention and entrepreneurial opportunity. Altogether are the source of entrepreneurial activity. As mentioned in

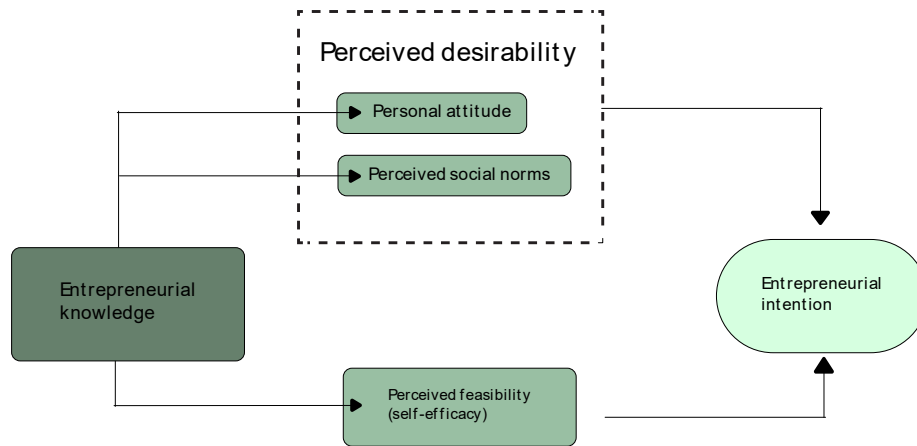


Figure 2- Entrepreneurial intention model (Liñán (2004) page 15))

the book of Intention-Based Models of Entrepreneurship Education (Liñán, 2004), entrepreneurial knowledge comes through entrepreneurial intention. Knowledge of the business climate allows people to build their own opinions of these career opportunities and increase the need for intention. These evaluations classify into two groups. The perceived desire to set up the business would be assessed and focused on personal attractions to it (convictions of positives and negatives of enterprising) and perceived social expectations. From the other side, perceived feasibility will apply to the extent to which individuals find themselves to be capable of conducting themselves in a particular way of behavior (A Shapero, 1982). Shapero and Sokol defined the perceptions of desirability with some contents such as culture, family, peers, colleagues, and mentors. Financial support, Demonstration effect, Models, Mentors, Partners, and Other supports are part of perceptions of feasibility. A design of variables influences the business intentions. They clarified the attractiveness, viability, and willingness. Entrepreneurial activities in the markets are significant factors that influence the intention of desire to develop a new enterprise.

The decision to develop and launch a new business is a carefully considered choice that needs time, significant planning, and a strong level of social preparation. Pillis and Reardon describe entrepreneurship purpose as the intention to launch. (Pillis E.D., 2007) A professional activity choice can therefore be called a prepared action that clarify patterns of intention. The

analysis of entrepreneurial intentions focused on social cognition models was an effective method for evaluating new venture development to identify the enterprise phenomena. (Zhao H., 2005)

Krueger defines perceived desirability "as beneficial to a company's prospects (Norris_Krueger, 1993); essentially, it represents an appreciation of business." Such an enterprise willingness can also be a mixture of individuals' attitudes and social expectations in the Theory of planned behavior model by Icek Ajzen (Ajzen, 1991). In other words, the company is not just a companion. The definition of perceived desirability is analyzed by Shapero and Sokol using data on the community, peer communities, academic, and employment perspectives, and the traditional influences kept by prospective entrepreneurs.

Entrepreneurial opportunities

Entrepreneurial opportunity generally characterizes circumstances in which goods and services can also be marketed at a cost higher than the manufacturing cost. A "market opportunity" is, therefore, a condition in which individuals can earn a profit through the market chances (Autio, 2015). Several companies make money or manipulate the market structure. Those are the way to create market opportunities. But there is an issue with the concept of entrepreneurial opportunity is that business is forward-looking. It is also mentioned in the literature about entrepreneurial opportunity.

For example, Schumpeter assumed that individuals generate value in the market (Schumpeter J. A., 1910). Creating value is also creating opportunity. It is a standard rule for economic markets. However, there are some confusions mentioned by J. A. Zoltan and J. S. McMullen. Researchers investigate several of the key causes of uncertainty about the construction of opportunities: 1) the "rationality" of opportunities, 2) the presumed value of one single person in deciding the socio-cultural context, and 3) what makes the "entrepreneurship" subclass more general than the larger category of opportunity (Zoltan Acs, 2007). The entrepreneurial opportunities are described by Venkataraman and Shane as the research "how, who and what effects discover, evaluates and exploits opportunities for creating potential G&S". Market opportunities "are circumstances in which new products and methods of organization are implemented and marketed at a higher profit margin" (Shane&Venkataraman, 2000). I like the

point mentioned by Greg Clydesdale about the entrepreneurial opportunity. The Right Place at the Right Time (Clydesdale, 2010) book name was the best example to describe my point in that topic.

According to A. Ardichvili and R. Cardozo, the successful formation of companies is a successful production of opportunities. This requires acknowledgment of an opportunity, its assessment, and growth rate. The method of opportunity development is cyclic and repetitive: a contractor is likely to perform assessments multiple cycles during the various development phase; appraisal may also contribute to the identification of new possibilities or improvements to the initial concept. Relevant factors influencing this central phase of opportunity identification (Alexander Ardichvili, 2003):

1. Entrepreneurial agility;
2. Discrepancy of knowledge and prior information;
3. Networking;
4. Characteristics of personalities, such as enthusiasm and creative thinking;
5. Opportunity itself.

Peter Vogel explained the importance of opportunities on emerging entrepreneurial activities. (Vogel, 2016) In his opinion, in the business world, opportunities are a central factor. Hansen, Shrader, and Monllor researched on entrepreneurial opportunity and it has been done by 3 investigators in different rounds (David Hansen, 2011). Every co-author created a list of the components in round one that defined opportunities and entrepreneurial opportunities from the 56 publications. They agreed on opportunity definition and opportunity-related process definitions. All those discussions concluded that opportunity is a conceptual process not operational.

The conclusion is discussed by Per Davidson that "entrepreneurial opportunity" is an elusive concept for researchers as a combination of pre-existing conditions and situations that would ensure performance properly utilized. These "events" cannot be defined, proven, and calculated by scholars. Even further, we don't conform to the function of many investors, even if we were to recognize their presence. (Davidsson, 2015) I think we need three independent definitions to get deeper through several thoughts explained previously under the name "entrepreneurial opportunity":

1. External influences in the market. For example, new technologies emerging through research and development, major deregulation. It might play a critical role in creating and/or encouraging several entrepreneurial opportunities, but in no scenario can guarantee sustainable prosperity.
2. New Concept of business models: a futurist synthesis of products or services, a new approach to the existing business structure, new potential markets.
3. Opportunity to assess the potential futurists or a new startup concept as a foundation for a new company from unfavorable to optimistic.

Creating a new form of value in a market is the potential opportunity creator for entrepreneurs. By that, we take new products or a new form of business models into consideration. (Clydesdale, 2010) However, it sounds so simple to come up with new products. In reality, there are always obstacles to new ideas: time, environmental situation, market accessibility, resources, etc.

Since it encourages students to believe beyond the box and sustains innovative abilities and talents, entrepreneurial education (EE) provides students from all social and economic backgrounds. It also provides opportunities, promotes social equality, builds trust, and boosts the economy. Most of the time, universities create an entrepreneurial community for students. Here is the list you can find; universities and their initiatives in the market. According to Insider, those 25 universities have experienced in the startup ecosystem. For example, startups from New York University have raised 6.77 billion dollars in the market and 367 entrepreneurs had entrepreneurship course at the university (Wolfe, 2018). It is just one of the examples from the list³. According to Jonathan Fay, "university students have recognized a demand for the creative entrepreneurship mentality to provide adaptability in the market." It explains why the university's entrepreneurship course enrollment has increased by 65 percent in the last five years. (Cobo, 2019)

Limitations: This study has potential limitations. For example, most definitions determined decades' ago, and modern markets have different characteristics. Another limitation of past studies

³ Data- <https://www.businessinsider.com/top-colleges-for-startup-founders-pitchbook-2018-9>

is that they are all trying to introduce the importance of Entrepreneurial Education. However, the significance of EE is obvious to the students and it is needed to define its influence on a market. There were also technical limitations while researching. First, due to privacy constraints, we could not collect the information about students' activities and success in the EE courses. Additionally, our pre-inquiry showed that students do not have enough self-confidence to talk about their failures and past experiences. The reasons make us do some changes to the survey and interview questions. In addition to the study limitations, survey results do not reflect the world average. We must consider the data as a regional survey. To get clear information and understanding, there must be interviewers from all around the world. The current situation demonstrates the Estonian entrepreneurial education and its opportunity creation in the local market. Future research could, for instance, investigate how entrepreneurial education may impact students' business activities and its statistical explanation.

Originality/value: This is original research that intends to elaborate entrepreneurial education and its further implications. The research showed the relations between EE and activities through entrepreneurial opportunities. The literature specifies that entrepreneurship education is the source of intention. The research covers two different dimensions of entrepreneurial opportunities, and intentions to find a direct relationship between education and business activities.

Practical implications: The study outcomes allow researchers and entrepreneurs to understand the view of students on entrepreneurial education. Interviews clearly explained the gap in the teaching methodologies and suggest a new way of education. The research has uncovered how universities can create entrepreneurial opportunities and push students' intentions in the market. This investigation has demonstrated the practical implications for scholars and students to understand the direct impact of education in their activities.

Data

There are 57 responses for the online survey. Just two questions are technical to list the applicants for their names and ages. Rest is about entrepreneurship education and its impact on entrepreneurial activities. Such questions give proper understanding of entrepreneurial education.

The research methodology base on the online survey that received more than 50 responses from university master's degree students who wanted to share their experience about

entrepreneurial education. We will discuss the importance of entrepreneurial education in their lives, their intentions for pursuing entrepreneurship education, and the opportunities that entrepreneurial education can provide. With 2 personal and 16 technical questions, I am going to find the significance of entrepreneurial education on candidates' life. The first two questions asked for candidates' names and ages to categorize them in a group. However, all our survey participants are young people due to their ages. According to the National Library of Medicine (Petry, 2002), candidates are divided into three age groups: younger people (18-35 ages), middle-aged adults (36-55 years old), and old people (over 55 years old). The youngest candidate among them is 18 years old and the oldest one 31. It still can be categorized as a survey among young people. Most of the participants (29 people) are 23-24 age old university students and both together calculated as 50 percent.

All technical questions are from recent works of literature. For example, most of the questions have taken from Luyu Li and Dandan Wu (2019) and Tobias Gruffman and Mackenzie Ward (2017) studies about entrepreneurship and entrepreneurial education. Questions start with candidates' current situation in the entrepreneur world and continue with their plans. Approximately 66 percent of entrants (37 people) do not consider themselves as an entrepreneur. However, half of them (28 p.) have intended to be an entrepreneur in the future, and 19 students (34 percent) are suspicious to be a businessman for their future career. Just nine people do not have any plan to do entrepreneurial activities in the market.

In addition to the online survey, there are six interviewees who shared their experience in the sector. Questionnaire is based on recent studies and six well-prepared questions introduced to the master's students. Following questions are from interviews:

- 1) What was the main reason for participating in the course? (Gruffman & Ward, 2017)
- 2) Have you ever seriously considered becoming an entrepreneur? (Liñán, 2004)
- 3) Did entrepreneurial education courses give you a chance to attend business incubators, startup hubs or any kind of environment where you can realize your business ideas? (Li & Wu , 2019)
- 4) Do you think taking other entrepreneurial education courses will support you to become a better entrepreneur? (Gruffman & Ward, 2017)

- 5) Did you get practical experience from entrepreneurial education courses? (Gruffman & Ward, 2017)
- 6) What were your expectations about the course before participating and did the course meet them? (Gruffman & Ward, 2017)

Methodology

Existing literature investigated to gain a better insight into the possibilities for improving entrepreneurial education and business activities. The research study mainly focused on qualitative methods of classification, designation, knowledge assessment, and generalization. Qualitative approaches represent the most suitable way to do the research because an online survey provides the answers to the research question. If we evaluate personal decisions and opportunity creation, we cannot just measure the data and come up with a result. It is the real case study of today's world. To find the best method for the investigation, I decided to appraise the students' intentions and the importance of entrepreneurial education in their life. To find out the structure and model, it is needed to take entrepreneurial education into consideration. I created the model to investigate the topic efficiently.

This research uses a quantitative and qualitative research study of sixty researches including international organizations' reports. To have clear understanding on entrepreneurial education, we decided to dig deep and find the early definitions about entrepreneurial education and opportunity. The methodological variability under considering in the literary works actually gives a significant benefit to the outcome of the research. Evaluating the existing literature, preparing the survey, and having the interviews present well-informed research study. During the investigation, survey results and interview responses will be the primary source of the research. To conclude our main objectives, we have to set a survey and evaluate the result. The following steps were to set up a survey and share it with university students. I have created eighteen questions based on existing literature reviews (Li & Wu , 2019), (Gruffman & Ward, 2017). At the end of the survey, I asked participants to share their experiences and ideas about entrepreneurial education and its impact on activities.

Surveys and interviews are appropriate to identify a huge number of population characteristics. This wide capacity ensuring a much more efficient mechanism to collect specific results to make meaningful conclusions and determination. This possible outcome cannot be supplied by other methods of research. In the Ph.D. dissertation of the impact of entrepreneurship education on students' career reflections, K.K. Longva uses survey methods as a research methodology (Longva, 2019). K.K.Longva's accomplished method was enough to explain and evaluate students' academic success and its career reflection. The surveys and interviews comply with our research methodology to figure out university students' approach to Entrepreneurial Education.

The research has three different methodologies to investigate a direct relation between entrepreneurial education and business activities. Starting with a literature review, surveys and interviews were attached to the study. The questionnaire had eighteen general questions and was prepared to ascertain the role of EE courses in entrepreneurial activities and their potential to create business opportunities. The questions are organized along with three sophisticated phases. The importance of the age factor is high in business activities. The first question intends to categorize the participants with their ages. To the next, yes/no questions have a direct focus on students attends in the university EE courses. In the last section, we have added an open-ended question and six interviews to learn the students' view and their intentions about entrepreneurial education.

To conduct the online survey, more than 60 people received an invitation to participate. As in previous studies, we did not differentiate the participants due to their race, gender, ages, and academic grades.

Results

The following questions are about entrepreneurial education and idea creation. 65% of participants had entrepreneurial education in their academic life (36 p.). The result is enough to evaluate the data for getting an appropriate outcome about EE. However, 47 percent of candidates who already had experienced entrepreneurial education did not satisfy with course quality. It does not mean that the quality of entrepreneurial education courses affects their career choices. 61 percent of them (28 p.) did not change their point of view. 33 students believe that entrepreneurial education is crucial for entrepreneurial activities, and about 85% of them believe the motivation

and intentions of entrepreneurial education increase. Those people who believe that entrepreneurial education increase intention for entrepreneurial activities, also think EE courses create opportunities for students to build and realize their business ideas (47 people counted). 38 students stated that entrepreneurial education increase opportunity in the market. No doubt, entrepreneurial education courses allow you to attend business incubators, startup hubs, or any kind of environment where they can realize your business ideas.

Survey participants are highly motivated to recommend entrepreneurial courses with high numbers to a person who wants to be an entrepreneur. For example, 25 of them satisfy with their courses and be sure it is the way to be an entrepreneur. However, 26 of them ranked the necessity of courses as “3” for its importance.

At the end of the survey, I have attached the space for students to share their experiences with us. The question “*Can you please explain the significance of entrepreneurial education in your life?*” and we get 20 different responses. I have listed some of the responses to make it clear:

- Before participating in the course, I had some ideas but 1st of all courses gives me a great intention to work on my ideas hard, and 2nd it made my knowledge wider and gave men an opportunity to know the starting point.
- I had not had any idea before participating but I was always interested in this area. Because of the course that I have taken, I got a basic understanding of entrepreneurship and it motivated me a lot to think about being an entrepreneur in the future. And I have started to get more knowledge by reading and thinking more. I have researched my interest market and got an idea that I am working on it right now.
- It gives the knowledge to understand how the startup environment is, how to realize your ideas, what is opportunities in the market.
- I do not think it is crucial to entrepreneurial education for becoming an entrepreneur but somehow, I think it is very good to open up, share an idea and learn new things on topic. Overall, I can say that if I was given a chance to participate in entries once again. course, most probably I would not take it as it is not technical things, today individually without any guidance anybody can learn and enhance his/her knowledge on this topic.

- It played a considerable role by providing useful knowledge regarding relevant steps to accomplish my business ideas in the future.
- It was not effective for my life.
- Entrepreneurship education provides budding entrepreneurs with the skills and knowledge to come up with business ideas and develop their own ventures. And this includes helping me to learn about core business areas such as finance, sales, marketing, management, and accounting, not to mention, broader-ranging skills such as adaptability, effective communication, and confidence.
- It gives me the drive to pursue opportunities.
- Entrepreneurial education can give you fundamental knowledge that is important to further investigate the field and can increase your success rate in the market.
- Entrepreneurial education can play a vital role in becoming an entrepreneur. Among various benefits, they provide the necessary knowledge, introduce the process, help avoid common mistakes, and build a network of like-minded people. Apart from the theoretical part, these courses should have also a practical part. The practical part should focus on applying the gained knowledge and making mistakes in controlled settings, with the possibility to continue working on the projects in the future. Thus, practical help to make first steps with the project. However, the courses that I visited lacked practical parts and were exclusively focused on theory or included practices that were poorly related to entrepreneurship. There are various practical opportunities at business incubators and so on, but the courses lack connection to them. In general, entrepreneurship education is significant for me since I work with entrepreneurs and plan to become one too. I tend to seek materials on entrepreneurship on the web and prefer self-education to university courses. The most valuable materials for me are webinars with practicing entrepreneurs and specialists in the field. The knowledge I gain from this education is useful not only for entrepreneurship but also for product management and business administration.

I just added few comments to show the participants' views about entrepreneurial education and its benefits. Few of them mentioned that they never had entrepreneurial education in their academic career, and the rest stated EE is crucial for entrepreneurial activities and opportunity creation. As we mentioned above, doing just a survey sometimes may not demonstrate the whole

framework of the topic. Interviews with six master's students will provide extra information of their intentions and opinions about EE and entrepreneurial activities. All interviewees are studying at Estonian universities, and Estonia is a technology hub in the region. The results provide the market situation clearly. According to the interviews, students satisfy with the entrepreneurial environment in Estonia and they appreciate the quality of entrepreneurial education in their universities. All of the applicants have intentions to be an entrepreneur in the future. However, two of them are not satisfied with the practical base of the courses. They think universities need to focus on practicing more than the theoretical part. Another issue is that students desire to have more, and detailed courses about starting the business and the first phase of startups. In addition, they consider the EE useful to find a route for acceleration centers, hubs, and investment platforms.

Conclusion

The main goal of this research article was to give an analysis of relevant evidence on the influence between entrepreneurial education and entrepreneurship activities. Entrepreneurial education influences the knowledge, abilities, prediction skills, and attitudes that are the basis for future career opportunities. All these options are crucial to a student's future activities and opportunities. Universities must teach applicants and prepare them for a variety of business opportunities. According to the findings, an entrepreneurial education help entrepreneur improves their entrepreneurial activities by building a strong base of motivation, entrepreneurial skills, and business skills. These concepts must put in the framework of courses, with a strong focus on the development of such skills. These entrepreneurial education models should be applicable for managing startups, small companies, and existing companies.

As I mentioned above, entrepreneurial education creates opportunities in the market. Business-related universities have startup hubs that provide mentorship, investment allocation, and seed period needs for startups. Entrepreneurial activities have a direct effect on a nation's ranking in terms of technological development, productivity, innovation, and infrastructure investment, and economic growth. Consequently, universities and governments have begun to encourage entrepreneurial education to increase entrepreneurial spirit. Especially university students who

have the intention to develop a startup. Academic entrepreneurial education has now been granted the same weight as the academic investigation at universities. Several universities have begun to deliver advanced entrepreneurship courses in business management education that are not limited to class instruction. They offer entrepreneurship experience to students through case studies, business simulations, live ventures, and real-time startup interaction, allowing learners to fully establish and evaluate their entrepreneurship.

The existing literature presented some presence of a strong connection between entrepreneurship education and activities. That proof provides principles for promoting educational opportunities for individuals of all ages. For example, Gabriela Boldureanu and others have clarified the role of EE in creating successful entrepreneurial models (Boldureanu, Ionescu, Bercu, Bedrule-Grigorut, & Boldureanu, 2020). Furthermore, entrepreneurial courses and training have to focus on changing business mindset rather than understanding, as the impacts can be significantly more important to the process of creating companies and overcoming the perceived obstacles to entrepreneurial activities. To encourage a business culture, education standards have to be directed to emphasizing and appreciating entrepreneurship. Maria Raposo and Arminda Maria Finisterra do Paço's research on Entrepreneurial Education described the relationship between education and entrepreneurial activity. The scholars used to review recent academic literature and having a conclusion. Our research has combined both research methodology and demonstrate the direct relations between EE and entrepreneurship activities. Additionally, the study has described the potential gap in the university entrepreneurship course and possible solutions via surveys and interviews.

The online survey and interviews showed that university students believe in the market opportunities created by entrepreneurial education and they see the EE courses as an opportunity to have interaction with startup hubs and acceleration centers. Most of the students who got entrepreneurial education have the intention to establish a startup. Almost 50 participants in the survey and 6 interviews believe the impact of EE on developing their entrepreneurial intentions. However, half of the participants did not satisfy with the quality of entrepreneurship courses in their universities. Business-related universities have to improve their course style and quality. The survey shows that entrepreneurial education courses play a crucial role to formalize students'

behavior to become an entrepreneur. To increase the entrepreneurship activities in the market, universities should increase the number of courses and their quality.

Appendix A. Survey Questions and Responses

- Do you consider yourself an entrepreneur? *Yes- 19 (33.9%), No- 37 (66.1%)*
- Do you have the intention to be an entrepreneur in the future? *Yes- 28 (50%), No- 9 (16.1%), Maybe- 19 (33.9%)*
- Have you ever got entrepreneurial education in your academic life? *Yes- 36(64.3%), No- 20 (35.7%)*
- Do you have any idea before participating? *Existing and experienced business ideas- 17 (30.4%), Innovative approach/ Startups- 14 (25%), I do not have any intention- 25 (44.6%)*
- Did the entrepreneurship course meet your expectations? *Yes- 25 (53.2%), No- 22 (46.8%)*
- Does this course affect your career choice? *Yes- 18 (39.1%), No- 28 (60.9%)*
- Do entrepreneurial education crucial for entrepreneurial activities? *Yes- 33(58.9%), No- 23 (41.1%)*
- Do entrepreneurship education courses increase the entrepreneurial intentions of students? *Yes- 47 (83.9%), No- 9 (16.1%)*
- Do entrepreneurship education courses create opportunities for students to build and realize their business ideas? *Yes- 47 (83.9%), No- 9 (16.1%)*
- Do entrepreneurship education courses play a crucial role to formalize students` behavior to become an entrepreneur? *Yes- 37 (66.1%), No- 19 (33.9%)*
- Do entrepreneurial education increase opportunity in the market? *Yes- 38 (-), No- 18 (32.1%)*
- Did entrepreneurial education courses give you an opportunity to attend business incubators, startup hubs, or any kind of environment where you can realize your business ideas? *Yes- 40 (71.4%), No- 16 (28.6%)*
- How can you rate entrepreneurial education courses for creating a network around you for entrepreneurial activities? *1- (0%), 2- 1(1.8%), 3- 29(51.8%), 4- 20(35.7%), 5- 6(10.7%)*
- Would you recommend the entrepreneurial courses to a person who wants to be an entrepreneur? *1- 1(1.8%), 2- 4(7.1%), 3- 26(46.4%), 4- 12(21.4%), 5-13(23.2%).*

Appendix B. Interview Questions and Responses

1. What was the main reason for participating in the course? Tobias Gruffman, Mackenzie Ward (2017)
2. Have you ever seriously considered becoming an entrepreneur? Francisco Linan, Yi-Wen Chen (2006)
3. Did entrepreneurial education courses give you a chance to attend business incubators, startup hubs or any kind of environment where you can realize your business ideas? Luyu Li and Dandan Wu (2019)
4. Do you think taking other entrepreneurial education courses will support you to become a better entrepreneur? Tobias Gruffman, Mackenzie Ward (2017)
5. Did you get practical experience from entrepreneurial education courses? Tobias Gruffman, Mackenzie Ward (2017)
6. What were your expectations about the course before participating and did the course meet them? Tobias Gruffman, Mackenzie Ward (2017)

Person. A

- I want to get information about the startup environment and entrepreneurial activities. I thought that this course could help me to formalize the idea of entrepreneurship in my mind.
- Yes, me and most of the people around me consider themselves to become entrepreneurs in the future. I think that many students from business and economy related courses want to become entrepreneurs.
- I can say yes and no to this question. Because there are many startup events in Estonia, most of them give a chance to attend business incubators or hubs. When you attend these entrepreneurship courses, you will be informed somehow about them all (from course mates, newsletters). On the other hand, if you are interested in startups, you can follow some newsletters and can take part in these events.

- For me definitely yes. Although it will give us mostly theoretical knowledge, we have workshops, homework which help at least to know the basics about entrepreneurship.
- Too little. This course mainly focuses on the theoretical part and the main ideas. Although we have learnt what are stages of startup, what are mistakes, but I think it is way more different in real life.
- My expectations at least to understand entrepreneurship and how things work there. I think that mostly the course met my expectation, but the theoretical part should be less focused on these kinds of courses.

Person B.

- It was a compulsory course. So, I had to participate since it was in my curriculum.
- Yes, actually it was one of the reasons why I moved to Estonia.
- Yes, I have been informed about the local incubators and it gives me a chance to attend the events in these incubators.
 - I think there are some courses that need to be taken. For example, if there were courses about pitching and budgeting, I think it is kind of a "must" course for entrepreneurs.
 - No, we mainly focused on the theoretical aspects.
 - I was expecting to pitch the idea and do more practical experiences. But it did not happen. At the same time, it was amazing to learn about some local incubators.

Person C.

- In the future I would like to be an entrepreneur; I have some ideas in my mind, but I did not know where to start that's why I joined the course.
- Yes, I have some ideas that I want to make them real, I have already taken action.
- Joining the startup was part of our course and the lecturer was always motivating us to participate in them to present ideas and make a practice.

- I think yes, because firstly the education courses guide where to start, secondly it gives proper knowledge, 3rd it teaches some strategies how to use the knowledge applicably. And all of them create confidence to start a project.
- Yes, we were doing a lot of case studies, projects within the course and also joining the startups hubs was the part of the course.
- My big expectation was to get a guide to make the first step and it met my expectation and already during the course I have made my actions.

Person D.

- To understand how to think and behave as an entrepreneur. What is the most challenging part of being an entrepreneur?
- Not yet but when I have enough confidence, finance and enough experience.
- Yes, in startup hubs we had a chance to share our thoughts and to see real examples.
- I don't think more courses will make me better because to my mind, entrepreneurship can be better learned by doing than attending and listening courses.
- Yes, in some sense it will give us practical knowledge.
- I was expecting to be able to assess if my abilities and mindset are suitable for starting a business. So, in practical parts, it helps me to assess myself in real life examples.

Person E.

- I want to learn the principles of starting a business, pitch ideas more effectively, and to understand how to develop business models.
- Yes, it is my dream and I have many plans about it.
- Yes, there are many events in startup hubs which help us to learn the creation of a startup from beginning to end. Even during Covid-19 period, we are informed about many virtual events in our course page.

- It depends on the course and its curriculum. I cannot say that all of them can support me.
- For me yes, because we attended the workshop together with a startup company where we have learnt quite a lot of hands-on experience from the people who created this startup.
- My expectations are mainly to increase my skills for beginning the startups, to create know-how for myself about the startup environment and recognize networks for the future. I can say the course met all of these expectations.

Person F.

- I always would like to be an entrepreneur, but I have not had any idea. I have participated mainly to get some knowledge how to do proper research in the market and find the gap.
- In the beginning it was just a desire for me but after participating in the course my confidence increased and I have started to think about it seriously.
- Unfortunately, no, we did not have a chance to participate in startup hubs or incubators but the lecturer herself was trying to create this environment inside the course (between the students) by arranging some project contest to do some practice and also to create some real competition.
- Yes, I think taking more courses increases knowledge, practical skills which are the main factors to start an idea.
- Yes, we have done some practical cases during the course and I think they are good to put knowledge to practice.
- My expectation was to get to know the market well, find what is demanded and how to launch a startup. I got my knowledge and did some practice.

References

- Longva, K. K. (2019). *The impact of entrepreneurship education on students' career reflections*. Tromsø : UiT The Arctic University of Norway.
- A Shapero, L. S. (1982). *The social dimensions of entrepreneurship*.
- Ajzen. (1991). "The theory of planned behavior". *Organizational Behavior and Human Decision Processes*. -: -.
- Alexander Ardichvili, R. C. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 105–123.
- Autio, E. (2015). *Entrepreneurial opportunity: Is it an illusion?* Retrieved from The Global Entrepreneurial and Development Institute: <https://thegedi.org/entrepreneurial-opportunity-is-it-an-illusion/#:~:text=Entrepreneurial%20opportunities%20are%20usually%20defined,action%20to%20make%20a%20profit.>
- Baron R. A., H. R. (2010). How entrepreneurs acquire the capacity to excel: Insights from research on expert performance. *Strategic Entrepreneurship Journal* , page 49-65.
- Billet_S. (2010). *Learning through practice: Models, traditions, orientations, and approaches*. London: Springer.
- Bird, B. (1988). *Implementing Entrepreneurial Ideas: The Case for Intention*. Washington: Academy of Management.
- Boldureanu, G., Ionescu, A., Bercu, A.-M., Bedrule-Grigorut, M., & Boldureanu, D. (2020). *Entrepreneurship Education through Successful Entrepreneurial Models in Higher Education Institutions*. Romania: Alexandru Ioan Cuza University of Iasi.
- Brookfield, S. (2016). *Self-directed Learning: a conceptual and methodological exploration*. New York: Teachers Collage.
- Carlos Albornoz, T. S. (2013). *Revisiting Entrepreneurship Education Literature: Implications for Learning and Teaching Entrepreneurship*. Florida International University, USA.
- Casson, M. (2003). *The Entrepreneur: An Economic Theory*. Lincolnshire: MPG Books Ltd.
- Chloe_L. (2020). *7 Of The Most Successful Student Businesses Started At University*. Retrieved from <https://www.topuniversities.com/student-info/careers-advice/7-most-successful-student-businesses-started-university>: <https://www.topuniversities.com/student-info/careers-advice/7-most-successful-student-businesses-started-university>
- Clydesdale, G. (2010). *Entrepreneurial Opportunity: The Right Place at the Right Time*. New York.
- Cobo, M. C. (2019, June 25). *College Towns Are The Next Big Thing For Startups*. Retrieved from Forbes: <https://www.forbes.com/sites/mariacclaracobo/2019/06/25/college-towns-are-the-next-big-thing-for-startups/?sh=403d38653b76>

- David Hansen, R. S. (2011). Defragmenting Definitions of Entrepreneurial Opportunity. *Journal of Small Business Management*, 283–304.
- Davidsson, P. (2015). *Entrepreneurial opportunities and the entrepreneurship*. Retrieved from The Australian Centre for Entrepreneurship Research: <https://core.ac.uk/download/pdf/33501333.pdf>
- Dutta, A. (2017). *Can You Learn Entrepreneurship Or Are People Born With It?* Retrieved from entrepreneur.com: <https://www.entrepreneur.com/article/292622>
- Erkkilä, K. (2000). *Entrepreneurial Education: Mapping the Debates in the United States, the United Kingdom and Finland*.
- European_Commission. (2008). *Entrepreneurship in higher education, especially within non-business studies*. Brussels: Final Report of the Expert Group.
- F. MARTON, R. S. (1975). *ON QUALITATIVE DIFFERENCES IN LEARNING: I—OUTCOME AND PROCESS**. Sweden.
- Fatima Fouad Almahry, A. M. (2018). *A REVIEW PAPER ON ENTREPRENEURSHIP EDUCATION AND ENTREPRENEURS' SKILLS*.
- FAYOLLE, A. (2006). *Essay on the Nature of Entrepreneurship Education*.
- Fayolle, A. (2007). *Handbook of Research in Entrepreneurship Education: Contextual perspectives*.
- Feld, B., & Hathaway, I. (2020). *The Startup Community Way*. New Jersey: John Wiley & Sons Inc.
- Greene, P. G. (2021). *FOUR APPROACHES TO TEACHING ENTREPRENEURSHIP AS A METHOD*. Retrieved from <https://www.babson.edu/>: <https://www.babson.edu/academics/executive-education/babson-insight/entrepreneurship-education/four-approaches-teaching-entrepreneurship-method/#>
- Gruffman, T., & Ward, M. (2017). *Entrepreneurial Intention/ The awakening of new businesses*. Retrieved from <http://www.diva-portal.org/>: <http://www.diva-portal.org/smash/get/diva2:1141801/FULLTEXT01.pdf>
- Hayes, A. (2021, Feb 26). *Entrepreneur*. Retrieved from <https://www.investopedia.com/>: <https://www.investopedia.com/terms/e/entrepreneur.asp>
- Hebert, R., & Link, A. (1989). *In search of the meaning of entrepreneurship*. New York.
- Heidi M. Neck, A. C. (2018). *The Scholarship of Teaching and Learning Entrepreneurship*.
- Hon. Emmanuel Joel J. Villanueva, M. D.-H. (2010). *The TVET GLOSSARY OF TERMS*. Manila: TVET.
- Iversen, J., Jorgensen, R., & Malchow-Moller, N. (2008). *Defining and Measuring Entrepreneurship*. Hanover: Publishers Inc.
- Karl H. Vesper, W. B. (1994). *Experiments in entrepreneurship education: Successes and failures*. Washington.

- Katz&Gartner. (1988). *Properties of emerging organizations*. *Academy of Management Review*. Massachusetts: Babson College.
- Kauffman-Foundation. (2015). *The Future of Entrepreneurship: Millennials and Boomers Chart the Course for 2020*. Kansas: Kauffman Foundation.
- Kleemann, M. (2011). *Insight's in Entrepreneurship Education*.
- Knight, F. H. (1942). *Profit and Entrepreneurial Functions*. Illinois: University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy*. Cambridge: Englewood Cliffs.
- Lackeus, M. (2015). *Entrepreneurship in Education What, Why, When, How*.
- Li, L., & Wu, D. (2019). Entrepreneurial education and students' entrepreneurial intention: does team cooperation matter? *Journal of Global Entrepreneurship Research*, 1-13.
- Liñán, F. (2004). *Education, Intention-Based Models of Entrepreneurship*. Sevilla: Universidad de Sevilla.
- Malcolm S Knowles, E. F. (2015). *The Adult Learner*. London, New York.
- Mario Raposo, A. M. (2011). *Entrepreneurship education: Relationship between education and entrepreneurial activity*.
- Marshall, A. (1895). *Principles of Economics*. California: the University of California.
- NCUniversity. (2021). *Entrepreneurial Education*. Retrieved from <https://iei.ncsu.edu/>: <https://iei.ncsu.edu/entrepreneurial-education/>
- Norris_Krueger. (1993). *he impact of prior entrepreneurial exposure on perceptions*. *Entrepreneurship Theory and Practice*.
- Oxford_Dictionary. (2021). *start-up*. Retrieved from www.oxfordlearnersdictionaries.com: https://www.oxfordlearnersdictionaries.com/definition/english/start-up_1?q=startup
- Paul D. Reynolds, P. L.-G. (2001). *THE GLOBAL ENTREPRENEURSHIP MONITOR (GEM) MODEL FOR ECONOMIC GROWTH: A STUDY OF VENTURE CAPITAL IN 19 NATIONS*.
- Petry, N. M. (2002). *A comparison of young, middle-aged, and older adult treatment-seeking pathological gamblers*. Farmington: University of Connecticut Health Center.
- Pillis E.D., R. K. (2007). *The Influence of Personality Traits and Persuasive Messages on Entrepreneurial Intentions: Across Cultural Comparison*. *Career Development International*.
- Pratt, D. D. (1988). *Andragogy as a relational construct*. *Adult Education Quarterly*. Columbia: Columbia.
- QAA. (2012). *Quality Assurance Agency for Higher Education*. Retrieved from <http://www.qaa.ac.uk/en/Publications/Documents/enterprise-entrepreneurship-guidance.pdf>: <https://www.qaa.ac.uk/en-US/error-pages/404?redirect=true>

- Reynolds&Miller. (1992). New firm gestation: Conception, birth, and. *Journal of Business Venturing*, page 405-418.
- Sartorelli, D. (2017). *Startup Smart*. Static.America.gov.
- Schoorl, E. (2013). *JEAN-BAPTISTE SAY REVOLUTIONARY, ENTREPRENEUR, ECONOMIST*. London, New York: Routledge.
- Schumpeter, J. (1911). *The Theory of Economic Development/ An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Cambridge: Harvard University Press.
- Schumpeter, J. A. (1910). *Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung*. Harvard University Archives.
- Shane&Venkataraman. (2000). *The Promise of Entrepreneurship as a Field of Research*.
- Shane, S., & Venkataraman, S. (2000). *The Promise of Entrepreneurship as a Field of Research*. Virginia: University of Virginia.
- Śledzik, K. (2013). *Schumpeter's View on Innovation and Entrepreneurship*. Žilina: University of Zilina .
- Solomon, G. (2007). *An examination of entrepreneurship education in the United States*. Washington.
- Tonette S. Rocco, C. A. (2013). *Revisiting Entrepreneurship Education Literature: Implications for Learning and Teaching Entrepreneurship*.
- Unesco. (2006). *UNESCO Towards an Entrepreneurial Culture for the Twenty-First Century stimulating entrepreneurial spirit through entrepreneurship education in secondary schools*.
- van Praag , M. (1999). *Some Classic Views on Entrepreneurship*. Amsterdam: University of Amsterdam.
- Vogel, P. (2016). *From Venture Idea to Venture Opportunity*. SAGE Publications Inc.
- Wolfe, S. (2018, Sep 4). *The top 25 colleges that produce the most startup founders*. Retrieved from Insider: <https://www.businessinsider.com/top-colleges-for-startup-founders-pitchbook-2018-9>
- Zhao H., H. G. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 1265–1272.
- Zoltan Acs, L. P. (2007). *What Is an Entrepreneurial Opportunity?*

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