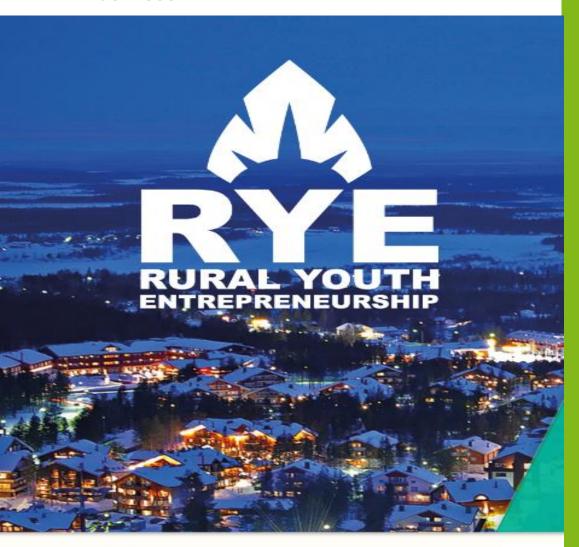
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Importance of Environment for Young

Students as a Factor for Starting Their Own
Business



Bachelor in Business Administration

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## **ABSTRACT**

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**Title of the Publication:** Importance of Environment for Young Students as a Factor for Starting Their Own Business

Degree Title: Bachelor of Business Administration, International Business

Keywords: student, entrepreneurship, attitudes, environment

The main objective of this thesis is to explore key factors determining students' decisions to start their own business or become an entrepreneur. The authors of this work tried to discover the correlation between environment, family influence and personal qualities and young students' intentions to run a business.

In autumn 2016 the Rural Youth Entrepreneurship Workshop was held among the first-year students of Kajaani University of Applied Sciences. It concerned modern ways of making business and young people attitudes towards it. Later a survey among the students took part in the RYE Workshop was conducted and its results became basic data for this research (The questionnaire forms are attached In the Appendix 1).

The theoretical base of this thesis is grounded on the works of such authors as R. Cantillon, M. Casson, F. Knight and others. During the research Kruskal-Wallis test and Holm-Bonferroni methods of statistical analysis were used.

The research results it was determined that young people's decisions about running their own business are made under the influence of not the one specific factor, but a number and combination of various ones.

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### 1 INTRODUCTION

There is a wide choice of professions and ways to get them. As authors both study the International Business degree, it was decided to try to understand the reasons why young students go to this program all over the world. Is there any connection between relatives-entrepreneurs or place of growth and students' attitude to become businessmen? How big is the influence of environment and surrounding people's attitude towards entrepreneurship? What chances to succeed has a modest person or it is very important to have great leadership skills? Aim of this work is in answering these questions.

Today entrepreneurship plays a big role in economy of many countries, including United Kingdom, Finland, USA. According to M. Morris (2012), entrepreneurship is a fashionable and reasonable profession nowadays. Grown-up people go to business mainly either to exploit potentially profitable opportunities or as a respond to absence of any other prospect of earning for life (Morris, 2012). Moreover, entrepreneurship is the way of working not for someone else, but oneself. Despite the fact of great responsibility, it is among popular reasons as well. (Shane, 2008)

In this work, based on the research replies by Kajaani University of Applied Sciences (KAMK) students, the authors plan to discover the correlation between factors, such as family, environment, personal skills, and will to become a businessman or entrepreneur and define the situation in which it is more likely for young people to start wanting their own business.

For collecting data, authors made a survey among KAMK students taking part in Rural Youth Entrepreneurship (RYE) master-class.

## 1.1 Entrepreneurship

Before starting the research, it is good first to know the term "entrepreneurship". According to economic historian Arthur H. Cole (1959), entrepreneurship is "... a profit oriented business unit for the production or distribution of ... goods and services". In his turn, Mark Casson (1972) claims entrepreneurship to be, along with the sport and entertainment, one of the driving forces towards social and economic progress. In other words, commonly, entrepreneurship is an ability of turning ideas into action (European Comission, 2006). These days it is an important part of modern world.

Thus, who is an entrepreneur? According to Meriam-Webster dictionary, "Entrepreneur is one assumes risks and management of business". Dewing has rightly put it in as follows: "The function of entrepreneur is one that promotes ideas into business". J.A. Schumpeter is of the view that "A person who introduces innovative changes is an entrepreneur and he is an integral part of economic growth." (E.Gordon, 2009)

Investopedia says it is an individual playing a key role in economy. He runs a small business and is responsible for its idea, its risks and reward for taking them. It is a person having skills and initiative enough to bring new ideas to the market and lead his company to profit (Investopedia). He is a specialist on taking risk (Casson, 1993). Frank H. Knight, an economist, had improved this theory by widening it. In his book "Risk, Uncertainty and Profit" Knight (1921), author described risk as situation in which it is possible to determine the outcome and try to insure it thanks to past experience. As for uncertainty, it is unique event with probabilities almost impossible to estimate and depending on context. In his article "Entrepreneurship" (1993) Mark Casson gives the following example: insurance organisations can predict, for example, the number of forty-year-old people die in the following year, using the law of large numbers (in that case, knowing approximate amount of deaths each year), and according to this charge the prices for life insurance. Though what about uncertain and unexpected situations? Entrepreneurs can reduce the risks occurrences, but he cannot do that with what is impossible to

predict – uncertainties. According to Knight (1921), businessman agrees to pay that psychological cost for financial profit.

However, entrepreneur as a risk bearer is not the only view on his role. Veerabhadrappa Havinal in his work "Management and Entrepreneurship" (2009) classifies entrepreneurs into two more types: organisator and innovator. Talking about the first, organizer role, it was described by Jean Baptiste Say in his "A Treatise on Political Economy; or the Production, Distribution, and Consumption of Wealth" (1803). He introduced an entrepreneur as a key coordinator of both production and distribution, as a man who combines labor and capital and then manufactures product.

As for innovator role, Hanival (2009) remembers Joseph A. Schumpeter (1883-1950), Austrian-born economist and political scientists, who considered entrepreneur as someone who introduces either products (services) of process of its selling, identifies new export markets and supply sources or introduces new types of companies. In Schumpeter's vision, a man doing this has "joy of creating" and is moved by desire "to prove oneself superior to others" (Casson, 1993). Thus, Schumpeter divided the concepts of inventor and innovator: the first one discovers new ideas and materials, the second one applies them (Havinal, 2009).

In Casson's (1993) opinion, to get the full understanding of who is entrepreneur and what his role is about it is good to combine all three theories and synthesize them. Entrepreneur is a specialist using estimation for dealing with complex problems. He may bring new mechanics in the way of making business, new types of goods or services; as organiser he combines the components (such as ideas, labor and capital) altogether for the work of the company and bears the majority of risks and uncertainties the organisation has and will have. However, entrepreneur does not necessarily own the company, but can be employed by the owners. (Casson, 1993)

It is worth noting, nowadays there are numerous examples describing the differences between terms "entrepreneur" and "businessman". The most popular idea is that an entrepreneur is someone who embodies new business ideas into reality, he creates a new product or services, or significantly improves

(modernizes) existing ones. Elon Mask is an example of the standard entrepreneur of the 21st century who not only tries to make money but does worthwhile things as well, taking into account the needs of the population of the whole planet with a look into the future. On the other hand, somebody is usually called as businessman if he or she uses an already made business model and creates nothing exceptional. For instance, it could be a grocery store, a car repair station or a bookshop.

Nevertheless, it is possible to use words "businessman" and "entrepreneur" as synonyms, as it is in earlier works of economists, such as Richard Cantillon (ZERA, 2015) who said: "All persons engaged in economic activity are entrepreneurs; it is a person who buys factor services at certain prices with a view to selling its product at uncertain prices". Modern people usually do not separate the categories, whether an individual is entrepreneur or a businessman. Moreover, today those professions combine in themselves specialties of both, having a sense of duality. New ideas create new marketplaces in need to be explored – here comes business to do it. In a like manner, good business needs to be creative in a constant attempt to answer the question "how can I be better?"

On purpose to not to confuse the reader by subtleties of difference and to ease the way of information sharing, hereinafter authors of this research will use both terms with equal meaning. Students are not necessarily ready to create a whole new market, but are able to improve things already created and start working on their own.

## 1.2 The significance of entrepreneurship for modern European countries

Currently, there is no doubt about the significance of entrepreneurship for Europe and other countries. According to the last actual Eurostat data (for year 2015), average percentage of the share of 5-year-old enterprises of the business population increased by 3,625 percent comparing with the previous 2014 year. The share of 3-year-old enterprises in the business population grew up in 2014 by 1,107 percent and by 0, 91 in 2015. In Appendices 5 and 6 it is possible to see

both the percentage of population involved in setting up a new business (2016) and new business ownership rate in Europe. All of those companies have been founded and the numbers have grown after The Entrepreneurship 2020 Action Plan had started to work.

What was this Plan made for and what does it say? The following answers those questions.

After a series of events and seminars in 2012 and 2013, a survey "What kind of activities do you prefer: business or as an employee?" was conducted. Compared to China (nearly 51%), Europeans expressed less desire (37%) to engage in entrepreneurial activities (Eurostat, 2013). To change this fact, the EU set itself a number of main goals, such as:

- 75% of the population aged between 20 and 64 should be employed;
- 3% of the EU GDP should be invested in research and development;
- Achieving the goals of energy policy and policy on climate change (including a 30% reduction in environmental pollution);
- The proportion of pupils dropping out of school should not exceed 10%. At least 40% of young people should have a higher education;
- Reducing the number of people at risk of falling below the poverty line by 20 million. (European Commission, 2012)

The Entrepreneurship 2020 Action Plan was developed in 2012, when the increasing independence of the economy required decisive and concerted action from the Parliament. The increased level of unemployment led to increase in debt obligations for many years, as well as an increase in social tension. The problems of the European economy came to the surface.

To achieve sustainable growth in the framework of the strategy for economic growth and employment rates "Europe - 2020", "The Entrepreneurship 2020 Action Plan" was developed. The main goal of it is the revival of the

entrepreneurship spirit in Europe. Among others, it includes the following components, describing the steps that may attract new entrepreneurs and help them in their aspirations:

- Training in the field of entrepreneurial learning for the creation of new generations of entrepreneurs and improving access to financial resources.
   For that it is supposed to develop old and open new organizations, for instance, "Erasmus for young entrepreneurs". New business opportunities are planned and new skills and qualifications in the digital age are introduced as important.
- 2. The plan as well mentions the creation of an environment, favorable for the development and growth of entrepreneurs that can be done with effective support or a policy of non-interference in the activities of entrepreneurs. Half of the European states are involved in the process of reforming the education system, accenting the field of entrepreneurship.

Thus, the importance of creating good environment for business growth in the EU is big and the topic of this work is actual.

### 2 REVIEW OF THE TOPIC IN THE LITERATURE

In the book "Entrepreneurship and Development" (E. Gordon et al. 2009) it is said, "entrepreneurs do not come spontaneously on their own". Besides the desire to make money by his own, the outcome of interaction between various factors of environment has an effect on the person's decision. According to Gordon (2009), such factors as political situation in a country and its government policy, social attitude for entrepreneurship, family background and its influence, education quality, religious affiliation, presence of supporting capacities, achievement motivation and personal skills play main role in formulation entrepreneurial intentions among youngsters.

The authors of this work decided to allot three main factors directly affecting the personality formation (parents, infrastructure environment and education) and tried to discover if there are average characteristics (personal qualities and skills) for students having intentions to become entrepreneurs.

### 2.1 Family influence

Such studies as "Igniting the entrepreneurial spirit: is the role parents play gendered?" (Kirkwood 2007) and "Emerging Paths of Family Entrepreneurship Research" (Heck et al. 2008) support the opinion that parents is a strong factor influencing person's decision. Sorenson (2014) claims forming attitude to entrepreneurship and its behavior development can be achieved through establishment and gear of values by sharing information. Commonly during the childhood people spend much time with their parents, communicating at them and seeing an example how grown-up people behave. When children become able to observe and even assist parent' business, they start to accumulate the way of work demeanor as values and norms, at the same time getting necessary experience and knowledge of running a business (Randerson et al. 2015). Depending on positive or negative entrepreneurship experience in the families, business

behaviors can be either induced or inhibited (Kenyon-Rovinez 2001; Mungai and Velamuri 2011).

Moreover, family can play a role of assistance for family members across generations when it is needed. The support may appear as financial resource or social capital (Randerson et al. 2015).

### 2.2 Environmental influence

Besides relatives' opinion, people are often influenced by attitudes of other people surrounding them. Personality is the individual being of social relations. Among the factors that determine its characterization, apart from class affiliation, relations inside a collective, acting as the primary cell through which the individual joins society, play an important role. The diversity of personalities in the context of the unity of basic relations in socialist society in every aspect of individual experience in the collective, the nature of upbringing, and the peculiarities of individual experience. The collective as a social organism in which individuals communicate directly is characterized by its specific "psychology", expressed in the presence of a special collective opinion, commonality of assessments, norms of relationships, behavior. (Hossain, 2014)

A person is subjected to a variety of influences. The formation of individual consciousness occurs as a result of the interaction of the individual with his environment, primarily the social. The attitude of man to the world, and entrepreneurship in particular, is mediated by his attitude to people, communication with them. The world of things and relations is perceived through the prism of the ideology and psychology, traditions and customs, views and assessments of the surrounding people. (Hossain, 2014)

The development of mass communication (modern means of transport, printing, radio, etc.) makes it possible for the individual to absorb social values, the culture of society directly. Thus, influenced by someone's opinion a young person may be inspired to become an entrepreneur as well as start being afraid of it and leave a dream about setting own business. (Hossain, 2014)

## 2.3 Presence of special qualities.

According to Lee et al. (2006), many studies have been made in attempt to identify factors, differentiating successful entrepreneurs from non-successful one. As an example author uses the work of Watson and Hogarth-Scott (1998), who classified businessmen into two groups in obedience to their organisations' survival or failure and compared them. In the issue, most of "survivors" have apprenticeships experience, shorter frost history, management skills and aspiration for being independent; they used creativity and followed market changes.

Morris (2012) describes entrepreneurs as people restless in their aspiration to rival with the existing course of life in order to "make future better than the past". McDaniel (2014) distinguished ten characteristics, combinations of which modern entrepreneurs mostly have:

- self-esteem (belief in oneself);
- intention and concentration on successful finishing a task;
- tenacity to keep trying;
- readiness to take calculated risks;
- optimism about success of endeavour;
- creativity (ability to see things differently from common view);
- focus (concentration on continuous achievement of the goal);
- ability to "see into the future", predicting as it may be;
- reluctance to accept failure and capacity to learn from mistakes;
- ability to accept control and willingness to response for the results.

According to McDaniel (2014), the conjunction of such qualities gives entrepreneurs instruments needed to anticipate the changes, make changes and work with them until goal is achieved.

## 3 Research methodology

### 3.1 Data collection method. Quantitative research

The research in this work is based on quantitative method of analysis. Oxford Dictionary states the official definition of it: "Analysis of a situation ... by means of complex mathematical and statistical modelling". In other words, it is used to examine the relationships between variables and to describe given data. There is a wide variety of methods and tools are used during the quantitative analysis, such as observation (may not be included), poll (conversation, questioning and survey), experiment (controlled and uncontrolled). (Investopedia, 2017). Among all the methods listed above in this work was used survey.

The quantitative method differs fundamentally from other methods. Among pros, it underlines comprehensive and independent result of the research because of wide filtering of external factors and unchangeable to narrow the possible directions for the development of the study. However, the quantitative method has its disadvantages. For quantitative analysis, it is necessary to involve many people, either the ones who will be interviewed or researchers, who will process the statistical data. Moreover, the quantitative research method often involves financial expenses, therefore it is necessary to be prepared for expenditure. All respondents need to be provided with questionnaires and sometimes need to be transported to the place for the interview. (Investopedia, 2017)

The reasons this method was be chosen as the basic one is its applicability to the research topic. The survey that was conducted provided the authors with various data useful for the work they did. Questionnaire form as an instrument of quantitative method allows to attract a large number of respondents in a short period of time. Moreover, it provides the researchers with more truthful and open statements than an interview, as for many people it appears to be important to answer anonymously. However, the survey has its disadvantages as well, for instance, dependence on representativeness of choice and influence of subjective factors, such as reluctance to give truthful answers, haste and rashness of

answers. Nevertheless, the authors decided to use this method of quantitative research for its advantages and suitability for this work.

## 3.1.1 Validity

For this work, the survey was done among first-year students of Kajaani University of Applied Sciences who took the three-hour course of business development (Rural Youth Entrepreneurship Workshop) in autumn, 2016. It is worth noting, among the amount of the RYE aims is contribution to local and international rural economic development by stimulating latent entrepreneurial abilities among young people. RYE is collaborating with Northern Ireland, Faroe Islands, Finland and Greenland. Representor from KAMK in the RYE organization is Anne Määttä, developer of Business and Innovation Competence Area.

In the spring, 2017, students who participated in the RYE master class were given questionnaires (Appendix1). The main part of the questions was related to entrepreneurship. The questionnaire forms were written in English so that the participants could easily understand the full meanings of the questions. Students of business, gaming, sport, tourism and engineering, 111 people in total, shared their opinion. They were asked offline and were ready to answer properly; however, there is a chance of small percentage of answers that may appear as not honest enough. Nevertheless, based on their answers the similarities between the chosen for the research parameters and the students' choice of involvement into entrepreneurship were analyzed.

## 3.1.2 Reliability

Representation of the sample ensures that it reflects the essential characteristics and measures the sample size. The reliability of the sample allows the researches to state that when the research is repeated at the same level of reliability, the same result will be obtained. The sampling accuracy characterizes the deviation of the results (standard error) from the obtained average value.

According to Tom Belin the Margin of Error is a statistical value that determines, with a certain degree of probability, the maximum value that the results of the sample differ from the results of the population. It is half the length of the confidence interval.

Different parameters have their own standard error. Applied formula to measure standard error of proportion of alternative sign is given below. The standard error can be estimated by a proportion or percentage (p), and the number of polled respondents (n).

Standard error of proportion= 
$$\sqrt{\frac{p(1-p)}{n}}$$

The method of confidence intervals was developed by the American statistician Jerzy Neumann, based on the ideas of the English statistician Ronald Fischer.

Confidence interval is a term used in mathematical statistics for interval estimation of statistical parameters, which is more preferable for a small sample size than for a point value. Confidence is the interval that covers an unknown parameter with a given reliability.

The reliability of the survey was clarified with Margin of Error, calculated at the Survey Monkey's Margin calculator site. This is the percent showing the probable deviation of the survey results from "total population" (Survey Monkey, 2017) – in case of this research, from the students taken part in RYE master-class.

Thus, the population size was about 223, 111 of which have filled the questionnaire forms. According to the Survey Monkey calculator results, the researches get 7% Margin of Error, considering 95% normal confidence level.

#### 3.1.3 Limitations with the research

The most important limitations during the survey were the long period between RYE master-class itself and the time the survey was done. For most of the students, almost half a year is enough to forget about taking part in it. Thus, to make the questionnaire clear, the researchers had to explain and remind the participants of the course they had taken part in. However, questions used in the research did not concern the RYE master-class directly, but were about environmental, family and personal issues.

Another limitation was that some respondents did not answer all the questions, skipping the ones they thought as tough to understand or answer.

#### 3.1.4 Holm-Bonferroni method

Multiple comparisons occur when it is necessary to test a number of statistical hypotheses on the same sample in parallel. One way to overcome the problem of multiple (multiple) comparisons of means is Holm-Bonferroni method. (Holm S., 1979).

The Bonferroni amendment is one of the methods for controlling the group error probability (the first kind), which states that to achieve the level of  $\alpha$  it is sufficient to reject the  $H_i$  hypotheses for which  $p_i \leq \alpha/m$ , where m is the number of hypotheses.

It is applied as a correction to the level of significance calculated using the criterion of paired comparisons.

The definition reads as follows. Let  $H_1$ , ...,  $H_m$  be a family of hypotheses, and  $p_1$ , ...,  $p_m$  be their corresponding significance levels. Denote by  $I_0$  an unknown subset of true null hypotheses of cardinality  $m_0$ .

The group error probability, or FWER, is the probability of rejecting at least one hypothesis from  $I_0$ , i.e. obtaining at least one error of the first kind. The Bonferroni correction method asserts that the deviation of all  $p_i < \alpha/m$  makes it possible to obtain FWER  $\leq \alpha$ .

Calculations will occur based on the Boolean inequality (Dohmen, Klaus, 2003):

$$FWER \ = \ \mathbf{P}(V \ge \mathbf{1}) \ \le \ \mathbf{P}\!\!\left(\bigcup_{i=1}^{m_0} \left\{ \widecheck{P}_i \le \alpha \right\} \!\right) \le \ \sum_{i=1}^{m_0} \mathbf{P}\!\!\left(\widecheck{P}_i \le \alpha \right) \ \le \ \sum_{i=1}^{m_0} \alpha/m \ = \ m_0 \alpha/m \ \le \ \alpha$$

where V is the number of rejected true hypotheses

Although the Bonferroni method is very simple to implement, it has one significant drawback: when the number of hypotheses tested increases, the power of this method is drastically reduced. In other words, as the number of hypotheses increases, it will be more and more difficult to turn many of them away, even if they are wrong and must be rejected.

There are procedures (for example, the Holm method), which are uniformly superior in power to the procedure based on the Bonferroni amendment, and do not make any additional assumptions.

## 3.1.5 Kruskal-Wallis one-way analysis of variance

The Kruskal-Wallis criterion is intended to verify the equality of medians of several samples. This criterion is a multidimensional generalization of the Wilcoxon-Mann-Whitney criterion. The Kruskal-Wallis criterion is rank, so it is invariant with respect to any monotonic transformation of the measurement scale. (Kruskal; Wallis, 1952).

This criterion is used to compare three or more samples and verifies null hypotheses according to which different samples were taken from the same distribution, or from distributions with the same medians.

The calculation takes place in SPSS in 5 stages:

1. Identify the null and alternative hypotheses.

H<sub>0</sub>: each group has the same distribution of values in the population.

H<sub>1</sub>: each group does not have the same distribution of values in the population.

2. Select the necessary data from two interrelated samples.

3. Calculate the value of the statistics of the criterion corresponding to  $H_0$ . Rank all n values and calculate the amount of ranks in each of the groups: these amounts are  $-R_1...R_k$ . Criteria statistics (which should be modified if there are many related values) is expressed by the formula:

$$H = \frac{12}{n(n+1)} \sum_{i=1}^{n} \frac{R_i^2}{n_i} - 3(n+1)$$

- 4. Compare the value of the statistics of the F-test with the value from the known probability distribution.
- 5. Interpret the value of p and the results.

Interpret the value of p, and if the result is statistically significant, use two-sample nonparametric criteria, adjusting them for multiple testing.

### 3.2 Aim of research

The aim of this research is to discover the correlation between student's attitude to become entrepreneur and following factors: 1. Parents having business and level of income in the family, 2. Development of leadership qualities, 3. Presence of urban environment.

The authors of the work decided to examine these factors as most influential ones because they are integral parts of student's life. Parents are people who are, most often, become the first and most bright example of adult life. Life in the big cities shows number of possibilities for future: more job vacancies, more finance, more places to let the imagination grow in comparison with rural (Stathopoulou et al., 2004); at the same time many young people living in smaller localities dream to move to cities, such as Helsinki, Moscow, Rotterdam, with confidence they will have more abilities there. People from rural watch at the cities from different point of view, and that gives them chance to discover new opportunities.

As for leadership qualities, authors want to discover if the person decided to be entrepreneur is necessary a leader according to his characteristics or a man, deprived by these qualities has his right to start a business.

## 4 DATA ANALYSIS

Frequency tables for the findings are allocated in Appendices 2-4 in the order presented at the research. As it was said earlier, the questionnaire forms can be found from Appendix 1.

## 4.1 Descriptive statistics of data

First of all the age and gender of the respondents were analyzed. It helped to categorize students, who participated the questionnaire. The results in the Figures 4.1, 4.2 show that among whole respondents 1978-1998 year of birth were represented mostly men (78%), average belonging to the age of 20-23.

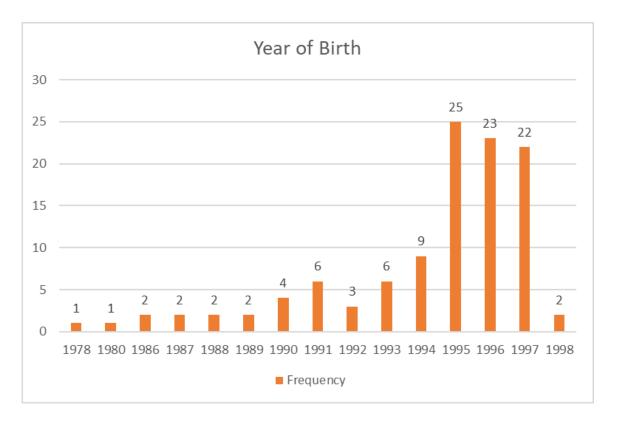


Figure 4.1 The age of respondents (n = 111)

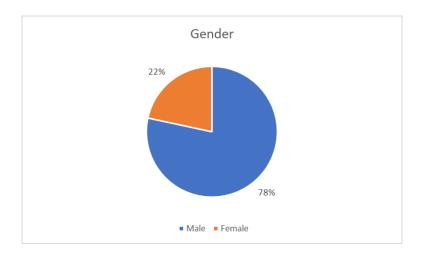


Figure 4.2 Gender of respondents (n = 111)

## 4.2 Family influence

As it was discovered earlier in paragraph 2.1.1, many authors are certain in the interdependence between being grown up in the business family and intention to become entrepreneur. However, Mann-Whitney U Test has shown (Appendix 2) no correlation between those two factors in mathematical understanding. U Test showed significance equals 0.103 which is higher than normative p<0.05.

As for interconnection between the entrepreneurial intention and household income, Kruskal-Wallis Test has been used in that the variable "Compared to other families, do you feel like your house hold income is..." has three ranks. The research has shown statistically significant correlation in mean values with this question and "My goal is to become entrepreneur" (Appendix 2). To determine the significant difference between the ranks, the Bonferroni method of multiple comparisons was used. As it can be seen from the figure 4.3, the mean values for the ranks are "average" and "above average". Furthermore, the rank "above the average" does not have a significant difference from the other two ranks.

In other words, students from families with the average income and higher one intend to start business more likely, than students from families with income below average.

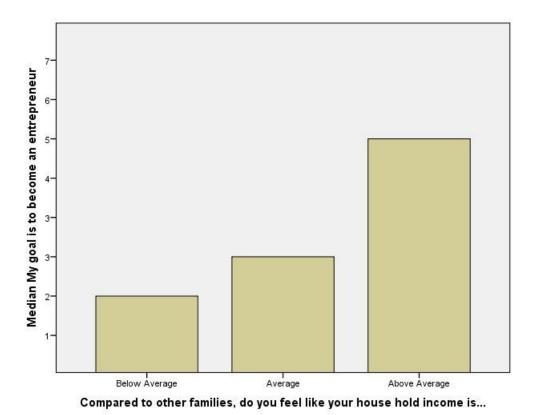


Figure 4.3 The dependence of entrepreneurial ambitions from family income, (n=101)

Thus, this research revealed that the family environment affects to a person much more than the parent's activity specifically. Quite important is the fact that the parents' and family senior members' occupation by business does not affect the ambition to continue this tradition. However, it is interesting enough that children from well-off families (whether related to entrepreneurship or not) show a strong desire for the subsequent study of business and finance.

At first, it seems that these two facts contradict each other, but looking deeper into the causal relationship, this behavior becomes obvious. It is known there are families which are strict in descendant's future profession which should continue the family tradition. For example, there is a large number of doctors, police officers and lawyers that have chosen their professions according to the (grand-) parental ones. Today, however, in most cases, everyone is free to choose his or her own career. Growing up with parents-entrepreneurs children have possibility to see the pros and cons of this profession from the inside, and that helps to understand

whether they need to associate themselves with this deal or not, - but the same is applicable to other occupations. (Daily Mail, 2016)

Thus, life in a business oriented family itself does not influence a person choosing the future profession. However, fairly often a man accustoms to feel oneself free in money issues during the life with parents getting average and higher income. That means he would not be reconciled with the less in his future, so it is most likely that while obtaining the higher education a choice will be made in favor of a profession with high income. Research has shown that most of such persons choose business for this goal. (Chung, 2006)

### 4.3 Environmental influence

Environmental situation and people around somehow or other influence human's decisions. For analyzing of interconnection between surroundings and intention to entrepreneurship, following survey questions and statements have been used: "Do you think there are good conditions to start in a business in the next 6 months in the area that you live?"; "Do you think people in your area consider it's a good career to be an entrepreneur?"; "In what type of municipality did you grow up in?"; "My goal is to become an entrepreneur".

Most of the students in the survey (50.5%) consider the area they live in (predominantly, Kajaani) has good conditions to start business in the next six months (figure 4.4).

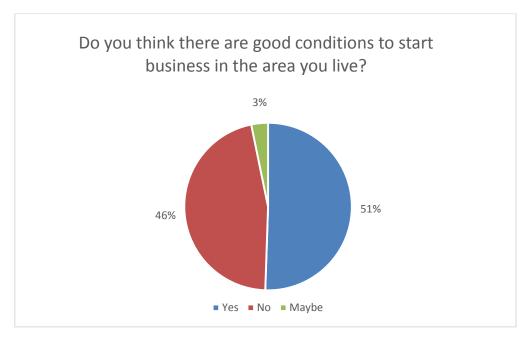
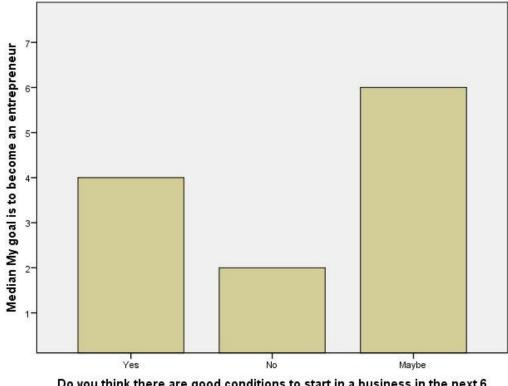


Figure 4.4 The percentage of students considering they live in a place with good conditions for starting business (n=87).

The criterion of Kruskall-Wallis (Appendix 3) was used to determine the correlation. A statistically significant difference in mean values was found (p=0,006) that means a high degree of results reliability.

The multiple comparisons by Bonferroni method was used on purpose to determine the significant difference between the ranks (Appendix 3). Figure 4.5 shows the result. As it can be seen, respondents who do not see the opportunity to start business in the next six months in their area are minimally striving to become entrepreneurs, while most of students answered "maybe" predominantly have intentions for starting business. Those answered "yes" are opened to entrepreneurial type of career as well.



Do you think there are good conditions to start in a business in the next 6 months in the area that you live?

Figure 4.5 The dependence of entrepreneurial ambitions from conditions of area business infrastructure, (n=87)

Talking about the area the students are from, 86 respondents have answered the question, whether people from their surrounding consider entrepreneurship as a good career or not. The distribution of responses is shown on the figure 4.6:

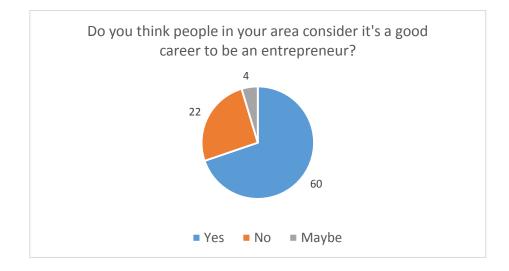


Figure 4.6 The percentage of students considering people surrounding perceive entrepreneurship as a good career (n=86)

The criterion of Kruskall-Wallis (Appendix 3) was used to determine the correlation. A statistically significant difference in mean values was found (p=0,006), that means a high degree of results reliability.

The multiple comparisons by Bonferroni method was used on purpose to determine the significant difference between the ranks (Appendix 3). Figure 4.7 shows that students not considering to become entrepreneurs mainly do not suppose people surrounding think differently.

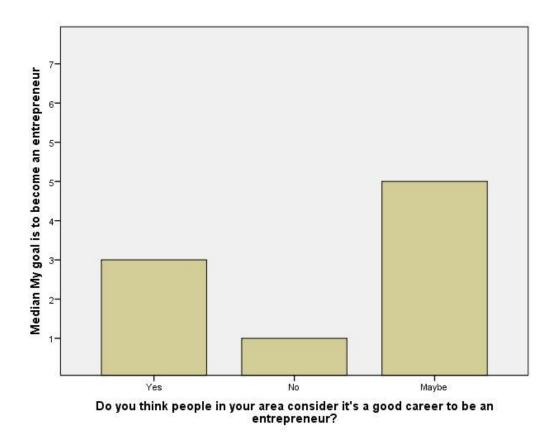


Figure 4.7 The dependence of entrepreneurial ambitions from the surroundings' opinion about business career, (n=87)

The interdependence of entrepreneurial intentions and the type of municipality where the respondents have grown up was not found so it is not possible to draw any conclusion about correlation between such factors.

Young people who want to become entrepreneurs believe that there are good conditions in their city for starting and developing their own business. At the same time, respondents see the support of the people around them, and can rely on

their help from outside to some extent. Those who consider entrepreneurship a good profession also see the support surrounding. At the same time students without wish to start business in the closest month do not notice any backing opinion about entrepreneurship from people surrounding.

The interest of such situation is added by the fact that all the respondents have been living in the same city while interview (Kajaani), so the research shows different opinion about business environment in the same place. That could mean people with entrepreneurial intentions are optimistic enough to see the opportunities for business, while others, who are not interested in it, do not see any.

## 4.4 Leadership qualities presence

It is supposed that people-entrepreneurs should have a number of specific qualities, such as leadership, sociability, optimism, readiness to risk etc. For understanding if it is true, following survey questions and statements have been used: "I deal with sudden changes and surprises easily"; "I form partnerships in order to achieve goals"; "I see opportunity where others see the risk of failure"; "I'm easily recognized as a leader".

The analysis of correlation between entrepreneurial intentions and the ability of dealing with sudden changes and surprises had shown no interdependence. Due to the fact both variables were represented in the ordinal scale, ordinal regression was used. There was not found any significant difference, because the significance level does not reach a statistically significant level p<0.05 (Appendix 4).

Nevertheless, the rho-Spearman method of correlation analysis showed a weak, statistically significant p = 0.019 relationship between the respondents' intentions to become entrepreneur and capability of forming the relationships with people that could help in achieving the respondent's goals (the value of it is in the table from Appendix 4, figure 4.8).

The research has shown people aspiring to start a business more often look for interaction with others in order to achieve their goals, than ones answered "no" to the statement "my goal is to become entrepreneur". It is possible to say students with entrepreneurial intentions understand the importance of communication and knowing people that may help in the future as well as they are just more sociable than others.

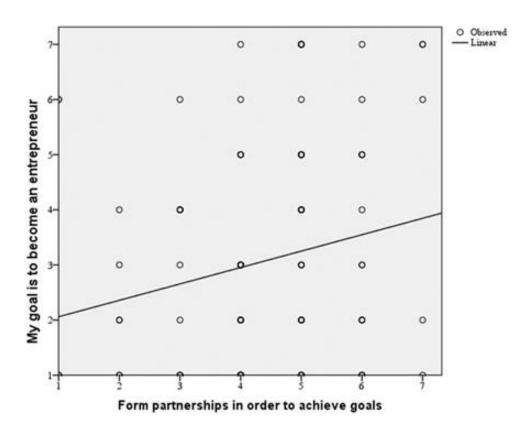


Figure 4.8 The dependence of entrepreneurial ambitions from the ability of forming business partnerships, (n=100). 1-7 values are respondents' answers where 1 means "I strongly disagree', 7 – "I totally agree".

As for the ability to see the opportunities where others see risk of failure, it was statistically established that the independent variable affects the dependent one. The rho-Spearman method showed the variables interact with each other reliably at an average level (p = 0.001) (Appendix 4, figure 4.9). Thus, most of students having intention to become entrepreneurs see the opportunity the moments and places where other people see only the risk of failure.

In other words, it is possible to say those who plan to start business are openminded to the ideas the world can offer and are not afraid of risk, being optimistic at the time many others would stop.

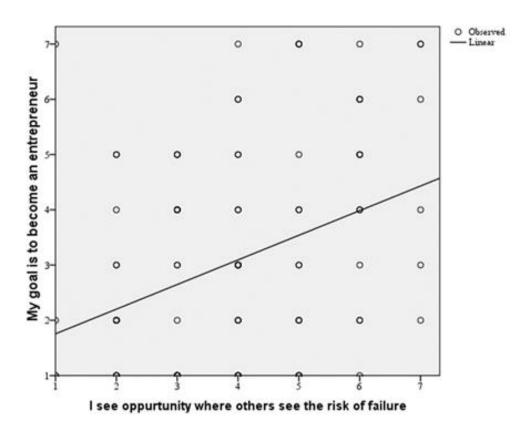


Figure 4.9 The dependence of entrepreneurial ambitions from the ability to see opportunities instead of risk, (n=99). 1-7 values are respondents' answers where 1 means "I strongly disagree', 7 – "I totally agree".

Furthermore, it was statistically identified that students having intentions for business rarely recognize themselves as leaders. The Spearman's rho correlation analysis (p = 0.024) has shown a weak positive correlation, statistically reliable, relationship between the variables (Appendix 4).

It is common thought that businessman should have leadership qualities. On the contrary, as it was discovered, those who want to become entrepreneurs think of themselves as hardly recognized leaders. That could mean such people are interested in no managing people but controlling the situation generally and share own idea with other people to make life better or with another goal.

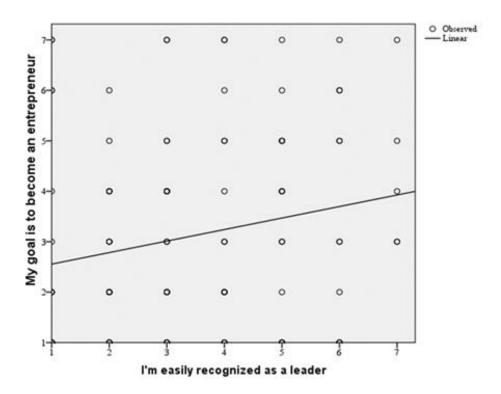


Figure 4.10 The dependence of entrepreneurial ambitions from the leadership abilities presence, (n=104). 1-7 values are respondents' answers where 1 means "I strongly disagree', 7 – "I totally agree".

It can be summarized in a couple brief conclusions based on graphical analysis of the statistical data. First of all, the results of the analysis revealed the binding between entrepreneurship and the availability of a way of forming relationships with people who are unquestionable in further achievements of future goals. The ability to easily connect with a large number of people is an important quality for entrepreneurs, because it is difficult to predict what kind of business development sector will require the right people. The results of this study indicate that a good entrepreneur assuming a rapid and successful development of his business is a communicative, versatile, charming interlocutor.

The next criterion formed as a result of analyzing students' answers is the representation of the entrepreneur as an optimistic person. It is widely known that large amounts of money are associated with risky operations. It is for this reason that people who have chosen for themselves a path of business and private entrepreneurship do not concentrate on future obstacles, as a result they see the world lighter than those who are afraid of complexities.

Last but not least, surveyed represent themselves in the role of future entrepreneurs without outstanding leadership qualities. Despite the fact that the generally recognized representation of a businessman as the leader of his own organization, as a result of the research it was discovered that those who want to become entrepreneurs do not see themselves as outstanding leadership qualities. It is possible that the younger generation of entrepreneurs sees importance not in personnel management, but in stress-resistance to environmental factors, in conveying their thoughts and ideas to people. Certainly some of the respondents had leadership qualities, otherwise it is simply impossible in the future to compel people to listen to themselves and lead them. However, as a result of the research it was found that leadership is not a decisive quality for a person who wants to create their own business.

### 5 CONCLUSIONS

The decision to choose the direction of the future profession is one of the most significant in the life of each person. Adoption of it is rather difficult, considering that few people have had the opportunity to try themselves in several specialties in order to make a choice according to comparison.

Based on the literature review and the research results, it is possible to say that students have different motivations to start a business, and this is not necessarily one of the factors investigated earlier, but more often a combination of them and many others.

While making decision, a person takes into account various factors. However, not all of them are obvious. Intuition, desires, surrounding people's opinion, family life – there are so many issues and features in each person's life that influence decision this or that way. Thus, behind the original idea there is a whole set of factors from the past and present. Therefore, the decision is usually based on knowledge gained in the past.

There is no secret that behind the majority of actions of each of us in the present is our family and the upbringing that was given to us.

To investigate the influence of factors on the choice of the future profession, the questions that are not obviously concerned business were asked (for instance, a place of birth and residence, parents' professions, family wealth). These ones, as well as a number of other factors, were considered not only individually, but also in the aggregate.

During the study, personal qualities were also considered in connection with the desire to choose a profession. An unusual fact is that leadership qualities do not seem to be of paramount importance to future entrepreneurs. Not all those surveyed who want to start their own business have identified strong leadership qualities. Based on the research conducted in this group, the conclusion is that young people believe that it is possible to build a successful business, not focusing on leading people, perhaps relying on their own knowledge and strength. This

position is not innovative. In most companies, the distribution principle operates. The HR department is responsible for hiring the employees, for the manager and for further actions, and for attracting the employees of the marketing department. Therefore, the creator of the business can afford to engage in a search for the development of his own deal, without being distracted by the leading people.

Analysis of the data obtained during the survey showed that the propensity to entrepreneurship does not depend on the place of birth and residence. Correlation was not possible to draw because there was not found any connection between type of municipality and desire to become entrepreneur.

Moreover, according to respondents, entrepreneurship is considered a promising career. And despite the fact that most of the students were not issued this year, the desire to create their own business in the next six months (combining with studies) does not cause any difficulties. The region of residence and an accumulated knowledge do not create barriers, but rather create opportunities for the creation of one's own business.

In this study, the influence of personal characteristics, the professions of parents and close family members, prosperity, residence on the formation of desires and own preferences of becoming a businessman were considered from all sides. Undoubtedly, each of them influences, to a greater or lesser extent, the adoption of the final solution. On the basis of this work, one can state how many people with a probability of a percentage of the provided family business would create their own. However, in order to answer the question whether a person should be bound to associate his life with entrepreneurship, it is necessary to consider many factors and criteria directly related to him in the compartment.

### LIST OF REFERENCES

### References

- A practical guide to entrepreneurship (2012). London: Kogan Page.
   Retrieved from http://ebookcentral.proquest.com/lib/kajaani-ebooks/detail.action?docID=939392 (April 21, 2017)
- 2. Alstete, J. W. (2014). Strategy choices of potential entrepreneurs. Journal of Education for Business, 89(2), 77-83. (April 13, 2017)
- Brown, C., & Thornton, M. (2013). How entrepreneurship theory created economics. Quarterly Journal of Austrian Economics, 16(4), 401-420. Retrieved from https://search.proquest.com/docview/1547942854 (May 13, 2017)
- Casson, M. "Entrepreneurship." The Concise Encyclopedia of Economics (1993). Library of Economics and Liberty. Retrieved from: http://www.econlib.org/library/Enc1/Entrepreneurship.html (May 13, 2017)
- Casson, M. (2003). The entrepreneur: An economic theory (2nd ed.).
   Cheltenham, Gloucestershire: Edward Elgar Publishing. Retrieved from http://lib.myilibrary.com?ID=322126 (May 13, 2017)
- 6. CAVANAGH, S. (2013). Student engagement. Education Week, 32(19), 5. (May 3, 2017)
- 7. Chung, R. R. (2006). Evidence in Teacher Education: The Performance Assessment for California Teachers. Journal of Teacher Education, 57(1), 22-36. (May 3, 2017)
- 8. Cooper, I. (2013). Entrepreneurship. Booklist, 109(15), 48. (May 3, 2017)
- 9. Dohmen, Klaus (2003), Improved Bonferroni Inequalities via Abstract Tubes. Inequalities and Identities of Inclusion–Exclusion Type, Lecture Notes in Mathematics.

- 10. Dynamics of entrepreneurship (2011). Oxford: OUP Oxford. Retrieved from http://ebookcentral.proquest.com/lib/kajaani-ebooks/detail.action?docID=3055090 (April 13, 2017)
- 11.Emmett, Ross B. (December 15, 2010). Frank H. Knight on the 'Entrepreneur Function' in Modern Enterprise. Retrieved from: https://ssrn.com/abstract=1698107 (May 3, 2017)
- 12. Entrepreneur. Retrieved from http://www.investopedia.com/terms/e/entrepreneur.asp (April 13, 2017)
- 13. Entrepreneurship and family business (2010). Bingley: Emerald Group Publishing Limited. Retrieved from http://ebookcentral.proquest.com/lib/kajaani-ebooks/detail.action?docID=554816 (May 3, 2017)
- 14. Entrepreneurship and innovation: An economic approach (2002). Armonk:

  Taylor and Francis. Retrieved from http://ebookcentral.proquest.com/lib/kajaani-ebooks/detail.action?docID=1900115 (April 13, 2017)
- 15. Entrepreneurship development (2009). Mumbai: Himalaya Publishing House. Retrieved from http://ebookcentral.proquest.com/lib/kajaani-ebooks/detail.action?docID=587950 (April 13, 2017)
- 16. Entrepreneurship education and training (2014). Herndon: World Bank Publications. Retrieved from http://ebookcentral.proquest.com/lib/kajaani-ebooks/detail.action?docID=1719962 (April 13, 2017)
- 17. Fisher, R.A. (1956) Statistical Methods and Scientific Inference. Oliver and Boyd, Edinburgh. p. 32.
- 18. Gordon, E., Dr. Natarajan, K., & Dr. Arora, A. (2009). Entrepreneurship development. Kundanlal Chandak Industrial Estate, Chat Road, Nagpur -440 018: Jeetanjali Press Pvt., Ltd. (April 13, 2017)

- 19. Heck, R. K. Z., Hoy, F., Poutziouris, P. Z., & Steier, L. P. (2008). Emerging paths of family entrepreneurship research. Journal of Small Business Management, 46(3), 317-330. (April 21, 2017)
- 20. Holm, S. (1979). "A simple sequentially rejective multiple test procedure". Scandinavian Journal of Statistics. 6 (2): 65–70
- 21. Hossain, F. M. A., & Ali, M. K. (2014). Relation between individual and society. Open Journal of Social Sciences, 2(8), 130-137. doi:10.4236/jss.2014.28019
- 22. Kirkwood, J. (2007). Igniting the entrepreneurial spirit: Is the role parents play gendered? Int Jrnl of Ent Behav & Res, 13(1), 39-59.
- 23. Knight, Frank H. Risk, Uncertainty, and Profit (1921). Library of Economics and Liberty. Retrieved from: http://www.econlib.org/library/Knight/knRUP.html (May 13, 2017)
- 24. Kruskal; Wallis (1952). "Use of ranks in one-criterion variance analysis".

  Journal of the American Statistical Association. 47 (260): 583–621
- 25. Mail Online. (2018). Children tend to make career choices based on the jobs of their parents and siblings. [ONLINE] Available at: http://www.dailymail.co.uk/sciencetech/article-3504404/Taking-family-business-Children-tend-make-career-choices-based-jobs-parents-siblings-have.html. [Accessed 03 April 2018].
- 26. Management and entrepreneurship (2009). Daryaganj: New Age International Pvt. Ltd., Publishers. Retrieved from http://ebookcentral.proquest.com/lib/kajaani-ebooks/detail.action?docID=424102 (April 13, 2017)
- 27. Margin of error calculator. Retrieved from https://www.surveymonkey.com/mp/margin-of-error-calculator/ (October 13, 2017)

- 28. Meyer; Seaman (April 2006). "Expanded tables of critical values for the Kruskal–Wallis H statistic". Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- 29. Mungai, E. and Velamuri, S. R. (2011), Parental Entrepreneurial Role Model Influence on Male Offspring: Is It Always Positive and When Does It Occur?. Entrepreneurship Theory and Practice, 35: 337–357. (April 21, 2017)
- 30. Plotkin, H. (1996). Student uprising. Inc., 18(11), 30. (April 21, 2017)
- 31. Quantitative analysis. Retrieved from http://www.investopedia.com/terms/q/quantitativeanalysis.asp (April 12, 2017)
- 32. Randerson, K., Bettinelli, C., Fayolle, A., & Anderson, A. (2015). Family entrepreneurship as a field of research. Journal of Family Business Strategy, 6(3), 143-154. Retrieved from http://www.econis.eu/PPNSET?PPN=840120923 (April 21, 2017)
- 33. Rural entrepreneurship (2006). . Bradford: Emerald Group Publishing Limited. Retrieved from http://ebookcentral.proquest.com/lib/kajaani-ebooks/detail.action?docID=258143 (May 3, 2017)
- 34. Say, J.B. A Treatise on Political Economy; or the Production, Distribution, and Consumption of Wealth, ed. Clement C. Biddle, trans. C. R. Prinsep from the 4th ed. of the French (1855). Philadelphia: Lippincott, Grambo & Co. Retrieved from: http://oll.libertyfund.org/titles/274 (15.05.2017)
- 35. Shinnar, R., Pruett, M., & Toney, B. (2009). Entrepreneurship education: Attitudes across campus. Journal of Education for Business, 84(3), 151-159. (April 21, 2017)
- 36. Sorenson, R. (2014). Values in family business. In L. MelinM. Nordqvist & P. Sharma The SAGE handbook of family business (pp. 463-479). London: SAGE Publications Ltd. (April 21, 2017)

- 37. Starting up your skilled trade business enterprise EFQM 2013 (2011). .

  Turku: Benchmarking. Retrieved from http://ebookcentral.proquest.com/lib/kajaani-ebooks/detail.action?docID=3384331 (April 13, 2017)
- 38. Stathopoulou, S., Psaltopoulos, D. & Skuras, D. (2004). Rural entrepreneurship in Europe: A research framework and agenda. International Journal of Entrepreneurial Behaviour & Research, 10(6), 404 425.
- 39. Stokes, Lynne; Tom Belin (2004). "What is a Margin of Error?". What is a Survey? Survey Research Methods Section, American Statistical Association. p. 64.
- 40. The economics of self-employment and entrepreneurship (2004).

  Cambridge: Cambridge University Press. Retrieved from http://ebookcentral.proquest.com/lib/kajaani-ebooks/detail.action?docID=256688 (April 13, 2017)
- 41. The evolution of entrepreneurs` fund-raising intentions (2008). Wiesbaden:

  Gabler Verlag. Retrieved
  from http://ebookcentral.proquest.com/lib/kajaaniebooks/detail.action?docID=748879 (May 3, 2017)
- 42. The factors shaping entrepreneurial intentions (2014). Newcastle-upon-Tyne: Cambridge Scholars Publishing. Retrieved from http://ebookcentral.proquest.com/lib/kajaaniebooks/detail.action?docID=1725915 (May 3, 2017)
- 43. The illusions of entrepreneurship (2008). New Haven: Yale University Press. Retrieved from http://ebookcentral.proquest.com/lib/kajaani-ebooks/detail.action?docID=3420974 (April 13, 2017)
- 44. Wu, S., & Wu, L. (2008). The impact of higher education on entrepreneurial intentions of university students in china. Jrnl of Small Bus Ente Dev, 15(4), 752-774. (April 21, 2017)

45.ZERA. (2015). Richard Cantillon uncertainty and the entrepreneur. Ritreived from http://www.economictheories.org/2008/08/richard-cantillon-entrepreneur.html (May 13, 2017)

## APPENDICES

Appendix 1 Questionnaire form for the survey

Appendix 2 Family influence analysis data

Appendix 3 Environmental influence analysis data

Appendix 4 Personal qualities influence analysis data

Appendix 5 New business ownership rate in Europe

Appendix 6 Percentage of population involved in setting up a new business

# Start Workshop Evaluation (Progress)

Please fill out correctly, if you don't know or don't want to answer, leave blank.



Please rate your ability from 1 to 7. (1 = I'm not good at this; 7 = I excell at this)

Creativity	
Come up with new ideas	100000007
Come up with new and different solutions	10000007
Find new ways of doing things	10000007
Ambiguity	
Deal with sudden changes and surprise	100000007
Work under stress or pressure	100000007
Manage uncertainty in projects and processes	10000007
Marshalling	
Form partnerships in order to achieve goals	100000007
Network (i.e. make contact and exchange information with others)	100000007
Establish new contacts	100000007
Finance	
Read and interpret financial statements	100000007
Estimate a budget for a new project	100000007
Control costs for projects	100000007
Entrepreneurial self-efficacy	
Start my own company	100000007
Pursue a career as self-employed	100000007
Manage the challenges (high risk and working hours) of being an entrepreneur	100000007

Please rate your attitude from 1 to 7. (1 = I strongly disagree; 7 = I agree)

Entrepreneurial intentions before completing this course	
My goal was to become an entrepreneur	10000007
I had business ideas that I wanted to implement	100000007
I had intended to start a business within the next three years	10000007
Entrepreneurial intentions after completing this course	
My goal is to become an entrepreneur	10000007
I have business ideas that I want to implement	10000007
I intent to start a business within three years	100000007
Intrapreneurship (innovative employee)	
I would like a job that will allow me to solve problems in new ways	10000007
I would like a job that will allow me to work on my own ideas	10000007
I would like a job that will allow me to define my own tasks	10000007
Risk assessment	
Failing in your business venture is just another learning experience	10000007
Getting payed according to results is the same or better than a fixed paycheck	10000007
I see opportunity where others see the risk of failure	10000007
Leadership	
I am easily recognised as a leader	10000007
I frequently take the role of spokesperson for the group	10000007
I can inspire enthusiams for a project	10000007
Persistence	
If there is something that I cannot do, I keep practising until I can do it	10000007
If I start something, I keep going until it is done	100000007
I dislike unfinished work	100000007

# Start Workshop Evaluation (background)

Group:	
Gender: male □ female □	Year of Birth:
Please fill out correctly, if	you don't know or don't want to answer, leave blank



		ENTREPRENEU	
Have you ever started a business before?	☐ Yes ☐ No		
How many of your parents, or the grown-ups you	□ Both of them		
with, are working?	□ One of them		
	□ None of them		
Do any of your parents, or grown-ups you live	with, have a	□ Yes	
higher education degree (university or college)		□ No	
Has any of your parents, or grown-ups you live		☐ Yes ☐ No	
started a company?	• ••••••		
Do you know anybody, who have started a bus	inass in tha	☐ Yes ☐ No	
past 2 years?	iness in the		
Do you plan to take a university / higher educate	tion	□ Yes	
degree?	lion	□ No	
. •	lucation		
(or, have you already got a university / higher ed	lucation		
degree?)	faal	□ Delevi evere re	
Compared to other families in your country, do	you reei	☐ Below average	
that your household income is		☐ Average	
		☐ Above average	
Do you think there are good conditions to start		□ Yes	
business, in the next 6 months, in the area you		□ No	
Do you think people in your area consider it a g	good career	□ Yes	
to be an entrepreneur?		□ No	
In what type of municipality did you grow up in	?	☐ City	
		□ Town	
		☐ Rural	
Have you already received training in entreprer		☐ Yes	
innovation / self-employment before this RYE S	START	□ No	
workshop?			
If yes, where have you received this training? (mul	□ RYE Pre Start		
allowed)		☐ School /	
		University	
		☐ Public	
		workshop	
		☐ Private training	
If yes, what kind of skills did you learn? (multiple	☐ creative tl	hinking	
x allowed)	with new ideas		
,	ideas to action		
		eate a business	
		eurs' role in society	
		aluate business	
	aradio baomicoo		
Do you volunteer (in a youth organisation, club	ideas o. or other)?	☐ Yes ☐ No	
Do you work in addition to studying? (or do you		☐ Yes ☐ No	
secondary job?)			
Have you been in charge of an activity or proje	ct outside	□ Yes	
of school / work?	J. Jaijiao	□ No	
o. consor, work.		110	

## Do any of your parent or grown-ups you lived with started a company

Mann-Whitney U Test for this question showed no significant relationships. The obtained value does not reach statistically significant (p>0,05).

#### Ranks

Tulino				
	Has any of your parents, or grown ups you lived with started a company?	Z	Mean Rank	Sum of Ranks
	Yes	40	57,33	2293,00
My goal is to become an	No	62	47,74	2960,00
entrepreneur	Total	102		

## Test Statistics<sup>a</sup>

1001 0141101100			
	My goal is to become an		
	entrepreneur		
Mann-Whitney U	1007,000		
Wilcoxon W	2960,000		
Z	-1,630		
Asymp. Sig. (2-tailed)	<mark>,103</mark>		

a. Grouping Variable: Has any of your parents, or grown ups you lived with started a company?

#### Compared to other families, do you feel like your house hold income is...

A statistically significant correlation was found in the difference in mean values with this question. The variable has three rangs, so Kruskal Wallis Test has been used:

#### Ranks

	Compared to other families, do you feel like your house hold income is	N	Mean Rank
	Below Average	14	44,61
My goal is to become an	Average	66	48,03
entrepreneur	Above Average	21	64,60
	Total	101	

## Test Statisticsa,b

	My goal is to	
	become an	
	entrepreneur	
Chi-Square	6,112	
df	2	
Asymp. Sig.	<mark>,047</mark>	

a. Kruskal Wallis Test

b. Grouping Variable: Compared to other families, do you feel like your house hold income is...

The significant value of p is less 0,05.

## **Multiple Comparisons**

Dependent Variable: My goal is to become an entrepreneur

#### Bonferroni

(I) Compared to	(J) Compared to	Mean	Std. Error	Sig.	95% Conf	idence Interval
other families, do	other families, do	Difference (I-			Lower	Upper Bound
you feel like your	you feel like your	J)			Bound	
house hold	house hold					
income is	income is					
	Average	-,251	,565	1,000	-1,63	1,13
Below Average	Above Average	-1,452	,662	,092	-3,07	,16
	Below Average	,251	,565	1,000	-1,13	1,63
Average	Above Average	-1,201 <sup>*</sup>	,481	<mark>,043</mark>	-2,37	-,03
	Below Average	1,452	,662	,092	-,16	3,07
Above Average	Average	1,201*	,481	<mark>,043</mark>	,03	2,37

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

# Do you think there are good conditions to start in a business in the next 6 months in the area that you live?

The independent variable has three ranks, respectively the criterion of Kruskall-Wallis was used. A statistically significant difference in mean values with a high degree of reliability was found p=0,006:

Rank	S

	Do you thinк there are	N	Mean
	good conditions to start		Rank
	in a business in the		
	next 6 months in the		
	area that you live?		
	Yes	45	50,40
My goal is to become	No	39	34,45
an entrepreneur	Maybe	3	72,17
	Total	87	

Test Statistics<sup>a,b</sup>

	My goal is to
	become an
	entrepreneur
Chi- Square	12,607
df	2
Asymp. Sig.	, <mark>002</mark>

- a. Kruskal Wallis Test
- b. Grouping Variable: Do you think there are good conditions to start in a business in the next 6 months in the area that you live?

## **Multiple Comparisons**

Dependent Variable: My goal is to become an entrepreneur

## Bonferroni

(I) Do you thinκ there	(J) Do you thinκ there	Mean	Std.	Sig.	95% Confidence Interval	
are good conditions	are good conditions to	Differenc	Error		Lower	Upper Bound
to start in a business	start in a business in	e (I-J)			Bound	
in the next 6 months	the next 6 months in					
in the area that you	the area that you live?					
live?						
,,	No	1,280 <sup>*</sup>	,418	,009	,26	2,30
Yes	Maybe	-1,822	1,138	,340	-4,60	,96
	Yes	-1,280 <sup>*</sup>	,418	<mark>,009</mark>	-2,30	-,26
No	Maybe	-3,103 <sup>*</sup>	1,144	<mark>,024</mark>	-5,90	-,31
	Yes	1,822	1,138	,340	-,96	4,60
Maybe	No	3,103*	1,144	,024	,31	5,90

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

#### Do you think people in your area consider it's a good career to be an entrepreneur?

The independent variable has three ranks, respectively the criterion of Kruskall-Wallis was used. A statistically significant difference in mean values with a high degree of reliability was found p=0,006:

Ranks
naiinə

	Do you think people in your		Mean Rank
	area consider it's a good		
	career to be an		
	entrepreneur?		
	Yes	60	47,26
My goal is to become an	No	22	30,05
entrepreneur	Maybe	4	61,13
	Total	86	

## Test Statistics<sup>a,b</sup>

	My goal is to become an		
	entrepreneur		
Chi-Square	10,080		
df	2		
Asymp. Sig.	,006		

a. Kruskal Wallis Test

b. Grouping Variable: Do you think people in your area consider it's a good career to be an entrepreneur?

## **Multiple Comparisons**

Dependent Variable: My goal is to become an entrepreneur

## Bonferroni

(I) Do you think	(J) Do you think	Mean	Std.	Sig.	95% Confide	ence Interval
people in your	people in your area	Difference	Error		Lower Bound	Upper Bound
area consider	consider it's a good	(I-J)				
it's a good	career to be an					
career to be an	entrepreneur?					
entrepreneur?	entrepreneur?					
V	No	1,339 <sup>*</sup>	,486	,022	,15	2,53
Yes	Maybe	-1,183	1,007	,729	-3,64	1,28
<b>.</b>	Yes	-1,339 <sup>*</sup>	,486	, <mark>022</mark>	-2,53	-,15
No	Maybe	-2,523	1,059	,059	-5,11	,07
l., .	Yes	1,183	1,007	,729	-1,28	3,64
Maybe	No	2,523	1,059	,059	-,07	5,11

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

## Form partnerships in order to achieve goals

The rho-Spearman method of correlation analysis showed a weak, statistically significant p = 0.019, a relationship between the investigated variables:

Corre	lations
Corre	ialions

			My goal is to become an entrepreneur	Form partnerships in order to achieve
				goals
	My goal is to become an entrepreneur	Correlation Coefficient	1,000	,233*
		Sig. (2-tailed)		<mark>,019</mark>
		N	104	100
Spearman's rho		Correlation Coefficient	,233 <sup>*</sup>	1,000
	Form partnerships in order	Sig. (2-tailed)	,019	
	to achieve goals	N	100	107

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

## I see oppurtunity where others see the risk of failure

When constructing the ordinal regression equation, it was statistically established that the independent variable affects the dependent one. The chi-square value exceeds the required 12.59159 for the obtained number of degrees of freedom 6:

**Model Fitting Information** 

Model	-2 Log	Chi-Square	df	Sig.
	Likelihood			
Intercept Only	120,907			
Final	105,560	<mark>15,347</mark>	6	, <mark>018</mark>

^	 1	 • -	ns

			My goal is to	l see
			become an	oppurtunity
			entrepreneur	where others
				see the risk of
				failure
	My goal is to become an entrepreneur	Correlation Coefficient	1,000	,343**
Spearman's rho		Sig. (2-tailed)		<mark>,001</mark>
		N	104	99
	I see oppurtunity where others see the risk of failure	Correlation Coefficient	,343**	1,000
		Sig. (2-tailed)	,001	
		N	99	101

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

## I'm easily recognized as a leader

The correlation analysis has shown a weak, statistically reliable, relationship between the variables:

## Correlations

			My goal is to become an	I'm easily recognized as a leader		
	-		entrepreneur	a leauei		
		Correlation Coefficient	1,000	,221*		
	My goal is to become an entrepreneur	Sig. (2-tailed)		<mark>,024</mark>		
		N	104	104		
Spearman's rho	I'm easily recognized as a	Correlation Coefficient	,221*	1,000		
		Sig. (2-tailed)	,024			
	leader N		104	107		

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

The significant value of p is less 0,05.

