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**Factors motivating and inhibiting young people to become entrepreneurs**

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**Factors motivating and inhibiting young people to become entrepreneurs**

**Doctoral dissertation**

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## Table of contents

1. INTRODUCTION .....	10
2. ENTREPRENEURIAL ACTIVITY .....	13
2.1. International outlook .....	13
2.2. History of Hungarian entrepreneurship .....	16
2.3. Business development policy proposals and research findings .....	17
3. MODELS USED TO STUDY THE FACTORS AFFECTING YOUNG PEOPLE TO BECOME ENTREPRENEURS.....	20
3.1. Theory of Planned Behavior - GUESSS .....	21
3.2. Model of entrepreneurial intention .....	25
3.3. Integrated models.....	25
3.4. Other models of becoming an entrepreneur .....	29
4. FACTORS AFFECTING BECOMING AN ENTREPRENEUR AND ENTREPRENEURIAL INTENTIONS .....	34
4.1. THE ROLE OF EDUCATION, IN PARTICULAR UNIVERSITIES, IN FACILITATING YOUNG PEOPLE BECOMING ENTREPRENEURS .....	34
4.1.1. Entrepreneurship education in the European Union .....	34
4.1.2. International outlook.....	35
4.1.3. Experiences and research results in Hungary.....	40
4.1.4. Methodological issues of entrepreneurship education .....	43
4.2. THE IMPACT OF PERSONAL CHARACTERISTICS ON YOUNG PEOPLE BECOMING ENTREPRENEURS .....	47
4.3. ENTREPRENEURIAL FAMILY BACKGROUND AS A FACTOR AFFECTING TO BECOME ENTREPRENEURS.....	54
4.4. IMPACT OF FUNDING ON YOUNG PEOPLE BECOMING ENTREPRENEURS ....	56
4.5. BARRIERS TO YOUNG PEOPLE BECOMING AN ENTREPRENEUR.....	60
5. DESCRIPTION OF THE OWN RESEARCH .....	65
5.1. BACKGROUND TO THE RESEARCH .....	65
5.2. RESEARCH QUESTION AND RESEARCH METHODOLOGY .....	73
5.3. PRESENTATION OF THE SAMPLE .....	76
5.4. RESEARCH RESULTS .....	83
5.4.1. Motivating factor to become an entrepreneur .....	83
5.4.2. Barriers to becoming an entrepreneur .....	91
5.4.3. Businesses of young men and women .....	100
5.4.4. Participation in entrepreneurial competitions and programs.....	104
5.4.5. Conclusions and suggestions based on the author's own experience .....	106

6. CONCLUSION.....	112
1. APPENDIX.....	115
2. REFERENCE LIST .....	152

## List of figures

Figure 1: Economic policy substituting the market (Source: Kállay [2002] p. 561) .....	19
Figure 2: Model of a market-building economic policy (Source: Kállay [2002] p. 562) .....	20
Figure 3: Original model of the theory of planned behavior (Source: Ajzen [1991] p. 192).....	22
Figure 4: Extended model of the theory of planned behavior (Source: Ajzen [2006a] Page 1 quoted by S. Gubik et al. [2018] page 77) .....	23
Figure 5: The concept of GUESSS 2011 (Source: S. Gubik - Farkas [2013] page 9 based on Sieger et al. [2011]).....	24
Figure 6: Model of entrepreneurial intention (Source: Schlaegel - Koenig [2014] p. 294) .....	25
Figure 7: Integrated model of entrepreneurial intention (Source: Schlaegel - Koenig [2014] p. 314) .....	26
Figure 8: Complex model of becoming an entrepreneur (Source: Szerb - Lukovszki [2013] page 32) .....	26
Figure 9: Factors influencing becoming an entrepreneur (Source: Bajmócy [2004] p. 232).....	28
Figure 10: Factors influencing entrepreneurial intentions in the case of small businesses (Source: Aloulou - Fayolle [2005] p. 32 quoted by Hofmeister-Tóth et al. [2015] p. 42).....	30
Figure 11: The role of inspiring role models in enhancing entrepreneurial intention (Source: Nowinski and Haddoud [2019] p. 186).....	31
Figure 12: Motivations of entrepreneurship (Source: Koltai - Szalka [2013] p. 73, (based on Cromie [1987]; Holmquist - Sundin [1990]; Birley [1989]; Morris et al. [2006]; Gatewood et al. [1995]; Hébert - Link [1982]; Barba-Sánchez - Atienza - Sahuquillo [2012]).....	32
Figure 13: Inspiration and learning in entrepreneurship education (Source: Nabi et al. [2018], p. 458) .....	38
Figure 14: Factors limiting to become an entrepreneur (Source: Koltai - Szalka [2013], p. 74, based on Greve - Salaf [2003]; Levent et al. [2003]; Kirkwood [2009]; Gorji - Rahimian [2011]; Niazkar - Arab-Moghaddam [2011]) .....	61
Figure 15: The four basic types of businesses (Source: Vecsenyi [2003] p. 54) .....	67
Figure 16: Growth paths (Source: Vecsenyi - Petheő [2017] page 355) .....	69
Figure 17: Sex distribution of the respondents in the sample (Source: created by the author)....	77
Figure 18: Distribution of respondents by education (N = 243), (Source: created by the author) .....	78
Figure 19: Evaluation of educational programs (N = 130), (Source: created by the author).....	79
Figure 20: County distribution of the respondents in the sample (Source: created by the author) .....	80
Figure 21: Traits that help to become an entrepreneur (N = 243), (Source: created by the author, using <a href="https://monkeylearn.com/">https://monkeylearn.com/</a> ).....	82
Figure 22: Mean and standard deviation of the factors influencing becoming an entrepreneur (Source: created by the author) .....	84
Figure 23: Mean and standard deviation of the factors hindering becoming an entrepreneur (Source: created by the author) .....	92
Figure 24: Distribution of the respondents' business according to profitability (N = 243) (Source: created by the author) .....	97
Figure 25: Traits that hinder to become an entrepreneur (N = 243), (Source: created by the author, using <a href="https://monkeylearn.com/">https://monkeylearn.com/</a> ) .....	99
Figure 26: Distribution of the form of operation of the business by women and men (N = 243) (Source: created by the author) .....	100
Figure 27: Number of co-owners by sex (N = 243) (Source: created by the author).....	102
Figure 28: Judgment of women's and men's business in terms of profitability (capita), (N = 243), (Source: created by the author) .....	103

Figure 29: Participation in the startup competition by type of settlement (N = 243) (Source: created by the author).....105

Figure 30: Participation in the program supporting the start-up and operation of businesses by type of settlement (N = 243), (Source: created by the author).....106



## List of tables

Table 1: Number of countries participating in the GUESSS research (Source: S. Gubik - Farkas [2013] page 6 supplemented based on <a href="http://www.guesssurvey.org/datacollections/">http://www.guesssurvey.org/datacollections/</a> ).....	21
Table 2: Hypotheses examined on the basis of the complex model of becoming an entrepreneur (Source: Szerb - Lukovszki [2013] pages 33-37, created by the author).....	28
Table 3: Factors motivating and inhibiting entrepreneurial intentions (Source: Scheiner et al. [2008] page 42) .....	33
Table 4: Advantages and disadvantages of entrepreneurship education methods (Source: Csapó [2007] based on Szomor [1997], p. 33) .....	44
Table 5: Types of entrepreneurship courses / programs (Source: Csapó [2008], Jamieson [1984], p. 45) .....	45
Table 6: Entrepreneurial profile characteristics (Source: Moraes et al. [2018] page 230) .....	47
Table 7: Entrepreneurial traits (Source: Lukovszki [2011] pp. 17-18).....	51
Table 8: "Soft source" and "Student spin-off" models (Source: Farkas [2010], p. 62).....	58
Table 9: Development of the theory of a business and the concept of an entrepreneur. (Source: created by the author based on Hisrich - Peters [1991]) .....	65
Table 10: Entrepreneur types according to Gerber (Source: Vecsenyi [2003] page 32) .....	66
Table 11: Methodology used in research examining young people becoming entrepreneurs. (Source: created by the author) .....	73
Table 12: Distribution of the sampled respondents by year of birth (Source: created by the author).....	78
Table 13: Respondents' 5-year career plans (N = 243), (Source: created by the author).....	81
Table 14: KMO and Bartlett's test results (Source: created by the author).....	85
Table 15: Communalities (Source: created by the author).....	86
Table 16: Explained variance (Source: created by the author) .....	86
Table 17: Component matrix (Source: created by the author).....	87
Table 18: Categorization of factors motivating to become an entrepreneur (Source: created by the author) .....	90
Table 19: KMO and Bartlett's test results (Source: created by the author).....	94
Table 20: Communalities (Source: created by the author).....	94
Table 21: Explained variance (Source: created by the author) .....	95
Table 22: Component matrix (Source: created by the author).....	96

## 1. INTRODUCTION

Historically, there have been social and economic periods in which a multitude of disciplined employees who execute instructions are primarily required for a country to succeed. Such was the case, for example, with the period of feudalism or socialism. During these periods, individuals with an entrepreneurial mindset and an internally driven and proactive attitude could easily find themselves confronting their leadership. In these times, entrepreneurs were treated as people with a kind of deviance. In comparison, there are periods in which the autonomy, flexibility and bottom-up innovation of the widest possible strata of society are necessary for the success of the country. We are currently living in a latter period, where, according to foresight analyzes, digitalisation, the creative destruction of artificial intelligence in the labor market, global competition, the peculiarities of Generation Z, new business models based on networking and project-based operation may require an increase in the proportion of both self-employed and entrepreneurs within Hungarian society.

Based on the analyzes of the economic processes that determine our era, there are more and more labor market forecasts predicting a significant deviation in the career paths of young people now attending school compared to what they are used to. Flexibility of employment, self-employment skills and entrepreneurial attitudes are expected to become increasingly important in the future. The currently rigidly separated labor and business regulations are likely to converge and more and more jobs will be outsourced to “freelancers” or “digital nomads” having an entrepreneurial status.

In addition, many of the jobs currently held by people - such as drivers, accountants - can be mechanized thanks to the results of rapidly evolving digitalisation and machine learning. At the same time, a number of new tasks that did not exist before are projected to emerge within the economy (such as the full-time Insta influencer or TikTok content producer, which have only been existing for a few years) and are expected to be performed within an entrepreneurial legal status on a large scale. All these factors listed so far are likely to lead to a further significant increase in the number of so-called ant enterprises, which will be presented later in the dissertation, namely at the expense of employment statuses.

In the upcoming EU development cycle, the Government of Hungary has set itself the goal of significantly transforming the Hungarian higher education system, during

which it intends to channel a support of HUF 1,000 billion into the system to be renewed. An important sub-area of this higher education renewal could be the development of a nationally uniform and high-level system of entrepreneurship education and training. Fortunately, the time for this has already come on the side of students, as gazelle companies with high growth potential - which will be presented later in the dissertation - or as they are called in everyday life today, startups are very attractive to today's Hungarian students.

Because of all this, in the future, the opportunity, or even the compulsion to start their own business will increasingly come to the mind of young people entering the labor market. The aim of my dissertation is to examine the factors influencing the entrepreneurial intentions of young people in connection with this trend. What are the factors that motivate and what are the factors that hinder young people from choosing an entrepreneurial lifestyle as a career? Numerous research has been looking for answers to similar questions, but they have typically looked at the question entirely among young people or specifically among university students, so there were only a negligible number of existing young entrepreneurs among the respondents. In the chapter of my dissertation based on own information gathering, I focused on young people with a running business, so my respondents did not disclose an opinion about an imagined possible entrepreneurial life situation, but provided information based on their own entrepreneurial experiences.

The choice of the topic of my dissertation was led by the fact that I myself grew up in an entrepreneurial family. Even before the change of regime, my parents worked in their own family business, first while retaining their full-time job and then exclusively by having cut the “safety rope”. The economic approach acquired at home has led me to the then Budapest University of Economics, where the optional subject by professor János Vecsenyi entitled Starting and running a small business has had a lifelong impact on me, and then, by having chosen the newly established major entitled Small Business, I have had the opportunity to learn a completely new, action-oriented approach to small business thanks to the courses of my later colleagues Péter Szirmai, Dániel Béza, Krisztián Csapó and Attila Petheő.

A significant part of my professional activity has been based on this approach ever since, during which, on the one hand, I have been teaching Corvinus students to start a business for 16 years, and, on the other hand, as a member of the Youth Business Stimulus

Association, as one of the leaders of the Spin-Off Club<sup>1</sup>, as the founder of the Újbuda Student Startup Competition<sup>2</sup> and its regular organizer, as well as the preparatory mentor of the Startup VIP program and the related Danube Cup<sup>3</sup>, I have tried to help many young people outside of the educational framework to overcome difficulties of starting a business, so the topic of my dissertation strongly overlaps with my everyday practice.

During the processing of the domestic and international literature on youth becoming entrepreneurs, I tried to explore the previous analyzes and research on the topic, to identify the examined research questions and the applied methods, summarizing the most important results relevant to the topic. My goal was to identify as broadly as possible the scientific work answering the following research question: "What are the motivating and inhibiting factors for young people to become entrepreneurs?".

In the second chapter, I give a broad presentation on the entrepreneurial intentions typical in Hungary in domestic and international perspectives. This chapter was not intended to provide a comprehensive and systematic overview of available international statistics and comparative studies. Rather, I tried to draw attention to interesting results and historical peculiarities from the point of view of the main topic of the dissertation.

In the third chapter of my work, I present the models most commonly used in research on young people becoming entrepreneurs. The fourth chapter of the dissertation discusses the most important results found in the domestic and international literature related to the factors influencing the entrepreneurial intentions of young people. I cover the role of education in stimulating young people to become entrepreneurs, with a focus on universities. I cover the role of personality, family entrepreneurial background, and funding. In a separate subsection, I analyze the barriers to young people becoming entrepreneurs.

The fifth chapter aims to present the research results, covering the background of the research, the applied methodology, the sample and the detailed presentation of the results.

The sixth, final chapter contains a summary of the dissertation, a presentation of the limitations and future research directions.

During the writing of the theoretical chapters of the dissertation I used the following methodology. In order to map the Hungarian literature, I performed a keyword

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<sup>1</sup>See <https://www.facebook.com/spinoffklub>

<sup>2</sup>See: <https://ujbuda.hu/ujbuda/ujbudai-hallgatoi-startup-palyazat-2019>

<sup>3</sup>See <https://www.facebook.com/DanubeCupPitchCompetition>

search (entrepreneur, enterprise, young entrepreneur) in the MTMT database, and I examined the relevant works item by item, examining the lists of the obtained results. I performed a search in the MATARKA database using a similar method. From 2010 onwards, I also reviewed the issues of the Economic Review, Budapest Management Review and Hungarian Science in detail. In order to identify the relevant international literature, I used the super search engine of the Central Library of the Corvinus University of Budapest. I also reviewed the list of publications following GUESSS (Global University Entrepreneurial Spirit Students' Survey), which has been of great importance for the topic and which has been regularly surveyed since 2003, and GEM (Global Entrepreneurship Monitor), which has been regularly surveyed since 1999, item by item. I conducted the literature search for publications in Hungarian and English.

## **2. ENTREPRENEURIAL ACTIVITY**

### **2.1. International outlook**

Measuring entrepreneurial activity is not an easy task, Szerb and Ács [2010] summarize and evaluate the metrics used to measure entrepreneurship. They emphasize the importance of data on self-employment collected by the OECD, Flash Eurobarometer surveys, data provided by EUROSTAT and the European Observatory and the World Bank. They emphasize the key role of the Global Entrepreneurship Monitor's (GEM) Total early-stage Entrepreneurial Activity (TEA), "showing the percentage of the country's working-age population aged 18-64 in the start-up phase or owning a company under 3.5 years of age" (Szerb – Ács [2010], p. 1239).

For years, the Doing Business survey of the World Bank has been collecting data across 11 areas of business regulation and helping national governments to make business-related administrative processes more efficient. In the survey's ranking of business simplicity, Hungary ranks 53rd out of 190 countries surveyed (World Bank Group [2019]).

Gazelles, that is, fast-growing companies, are receiving special attention in every economy in the world. In the Hungarian context, inter alia, Vecsenyi [1999], Csapó [2009], Nagy-Palócz [2010], Papanek [2010], Szerb et al. [2017] and Békés-Muraközy [2012] examined the domestic characteristics of fast-growing enterprises. The role of gazelles in employment is outstanding and, contrary to international experience, according to which gazelles are overrepresented in high-tech industries, companies in Hungary are very similarly likely to become gazelles in various industries and regions (Békés-Muraközy [2012]). The neutral effect of the geographical location on the gazelles was refuted by the subsequent research of Szerb et al. [2017], based on the results of which a significant part of the gazelles is located in Budapest and Pest county.

In order to develop entrepreneurship education and entrepreneurial activity and culture through education, the OECD [2009] has developed an evaluation methodology for the entrepreneurship education program in order to measure the performance of each program with objective tools.

In 2013, the European Commission developed an action plan “Reigniting the entrepreneurial spirit in Europe”, which identified increasing the number of European entrepreneurs as a challenge. The solution was outlined on the basis of three pillars. The first pillar is entrepreneurial education and training to support growth and business start-ups. The second pillar is to create an environment in which entrepreneurs can develop and grow. The third pillar is to set role models and to reach out to specific groups. Encouraging young people to become entrepreneurs appears in the third pillar. The program focuses especially on unemployed youth. Consulting, business advice and mentoring are important parts of business development support. The aim is to support unemployed young people to become self-employed and to support the sustainability of the businesses they start (European Commission [2013]).

6% of young Europeans aged 15-35, surveyed by the European Commission [2011], mainly to examine youth mobility, already have a business and 43% are planning an entrepreneurial career. Among the barriers, 14% indicated riskiness, 13% complication, 8% lack of funding sources, 7% lack of entrepreneurial skills, while 10% of respondents did not form an opinion or did not answer the question. In the survey, Hungary ranks penultimate ahead of Italy in the comparison of entrepreneurship between countries. Only 28% of Hungarian respondents would start a business, which is 15% points lower than the average (43%), while in Bulgaria, which has the highest entrepreneurial spirit, this figure is 74%. Hungarian young people are mainly deterred

from starting a business by the factor of riskiness, with 27% of Hungarian respondents assessing entrepreneurship being too risky, compared to the 14% value of the whole sample. Among the countries participating in the survey, the riskiness of entrepreneurship as a barrier to starting a business was the highest in Hungary. The survey also found that young people with higher education have a greater entrepreneurial spirit (European Commission [2011]). The low level of entrepreneurial intentions among young people in Europe was also confirmed by the Eurofound [2015] survey. In this research, self-employment was used as a proxy variable to measure entrepreneurial intentions. Based on the results obtained, the majority of young self-employed are men and, by nature, the self-employed are engaged in industries with low entry barriers (Eurofound [2015]).

Numerous surveys highlight that preference for entrepreneurial status is more prevalent in the United States than in EU member states. In Hungary, the preference for an employee status is particularly outstanding. Preferences are influenced by a number of economic, social, historical and cultural circumstances. The most common arguments in favor of becoming an entrepreneur are the possibility of independence, self-realization and higher disposable income (which has become more pronounced in the former socialist countries, especially in Hungary) (KSH [2006]).

Criticism of entrepreneurship promotion at all costs is underlined by Scott Shane [2009], who argues that “it is wrong to focus on increasing entrepreneurial activity at all costs instead of promoting high-quality, high-growth business start-ups” (Shane [2009], quoted by Szerb-Ács [2010] p. 1238).

Among the enterprise-related surveys, the Global Entrepreneurship Monitor, a regular data collection survey initiated in 1999 by London Business School and Babson College stands out, which consists of three main parts. The most significant element is the questionnaire survey based on at least 2000 surveys among adults aged 18-64 per country. The second element is the expert data collection involving at least 36 people per country, and the third element is the analysis of secondary sources (processing of data available from the UN, OECD, World Bank) (Szerb-Petheő [2014]).

The results of the 2001-2003 GEM survey showed that of the 40 countries surveyed, developed countries in Asia and the Central and Eastern European region have the lowest entrepreneurial intentions. Research has demonstrated a positive relationship between entrepreneurial activity, job creation and economic growth, and confirmed the dominance of men among entrepreneurs, especially among the most dynamically growing firms (Szerb et al. [2004]).

In their study, Komlósi et al. [2014] applied the Global Entrepreneurship and Development Index (GEDI) and the Regional Entrepreneurship and Development Index (REDI) developed using the Global Entrepreneurship Monitor database to the seven NUTS2 level regions of Hungary. They came to the conclusion that in the international context, our entrepreneurial activity can be considered medium, with indicating the main problems as follows:

- the weak ability of the population to recognize opportunities and start a business,
- low level of education of entrepreneurs,
- a poorly chosen competitive strategy and a low level of innovation activity.

Based on the experience that can be deduced from international surveys, the entrepreneurial activity that characterizes our country does not count as bad on a global scale, however, there are still many areas to be developed in order to reach the European level.

## 2.2. History of Hungarian entrepreneurship

After the change of regime, sociologists were at the forefront of the first domestic surveys of entrepreneurial intentions. The period when it has become possible to become an entrepreneur was characterized by them as follows: “This sudden expansion of the independent sector is reminiscent of the sudden opening of the valve of a pressurized cylinder. (Kuczi [1998] page 1)” Based on empirical studies, the entrepreneurial intentions increased in the years following the change of regime. In the period between the 1988 and 1990 surveys, it has been demonstrated as a difference between the factors influencing entrepreneurial intentions that, in addition to demographic factors, it was not only occupation and education that played a role, but rather social capital and job satisfaction (Lengyel - Tóth [1993]). The choice of being an entrepreneur or being an employee, the motivations to become an entrepreneur, especially in certain professions and social groups, aroused the interest of researchers very early on. Székelyi and Solymosi [1994] studied the factors influencing entrepreneurial, respectively employee mentality among engineers, while Frey [1995] studied the entrepreneurial intentions of those being unemployed.



Another research topic that emerged in the period after the change of regime was to study the factors influencing the success of entrepreneurs, during which the role of creativity was highlighted and examined by Rimler [1998], [1999].

Róbert [1999] analyzed the factors of becoming an entrepreneur in Hungary after the change of regime from a historical point of view. Based on his results, the effect of social origin decreases over time, the intergenerational reproduction of entrepreneurs also decreases, while the effect of education shows an increasing trend.

Sharle [2000], while examining the reasons behind the increase in the self-employment rate, highlighted that some of those who became self-employed have decided so due to expanded opportunities, while there are also groups of employees who find it increasingly difficult to find employment as unemployment grows, thus they become self-employed out of coercion. He could not separate the relative strength of the two effects, has shown, however, that the decrease in the number of jobs had a stronger effect on women becoming self-employed than on men.

### 2.3. Business development policy proposals and research findings

In his study evaluating Hungarian enterprises in an international comparison, Román [2007] highlights the important role of the Hungarian SME sector in employment, the significance of which he finds likely to be decisive for the future. He is concerned about the backwardness of domestic SMEs in terms of productivity, exports and innovation.

Hofmeister-Tóth et al. [2015] contributed to the methodology of the Hungarian examination of entrepreneurship and entrepreneurial intentions, by using a scale of Matsuno et al. [2002] measuring entrepreneurship widely used in international practice. They have concluded that the reliability of the scale in its domestic application falls outside the accepted range. This made them come to the conclusion that the validity of the scale is primarily influenced by the specific way of thinking and socio-cultural background of Hungarian entrepreneurs.

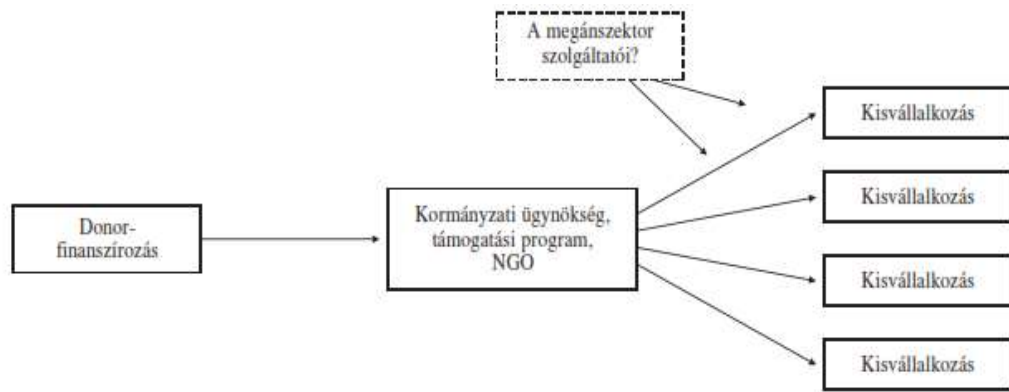
During his work, Szerb has significantly enriched the Hungarian business development literature. The business policy proposals he formulated are the following (Szerb [2010] pp. 182-186):

- Raising opportunity perception, primarily by improving the population's perception of opportunities.

- Improving market competition, resolving situations of economic dominance and encouraging entrepreneurs to find unique niche markets instead of entering other highly competitive industries.
- Improving venture capital funding, in particular by encouraging informal capital investment.
- Improving and encouraging the further training of employees.
- Improving both institutional and individual factors of product innovation.
- Increasing the proportion of companies with high growth potential.
- Improving the ratio of entrepreneurs being known and through this their social networks.
- Increasing the social acceptance and esteem of entrepreneurs.
- Increasing business start-up skills and abilities.
- Increasing the number of start-ups in the technology sector.
- Increasing the domestic application of young technologies.

The promotion of an entrepreneurial culture and the strengthening of entrepreneurial skills and knowledge were also part of the ERENET SME policy package formulated in 2010 (ERENET [2010]).

Szirmai [2008] writes in detail about the structural problems and ambivalence of the Hungarian entrepreneurial group. Based on the experience of Hungarian business development efforts, Kállay [2002] urged a paradigm shift in small business development. In his view, business development policy should not target groups but areas of intervention. He illustrated the old market substitution model as follows:

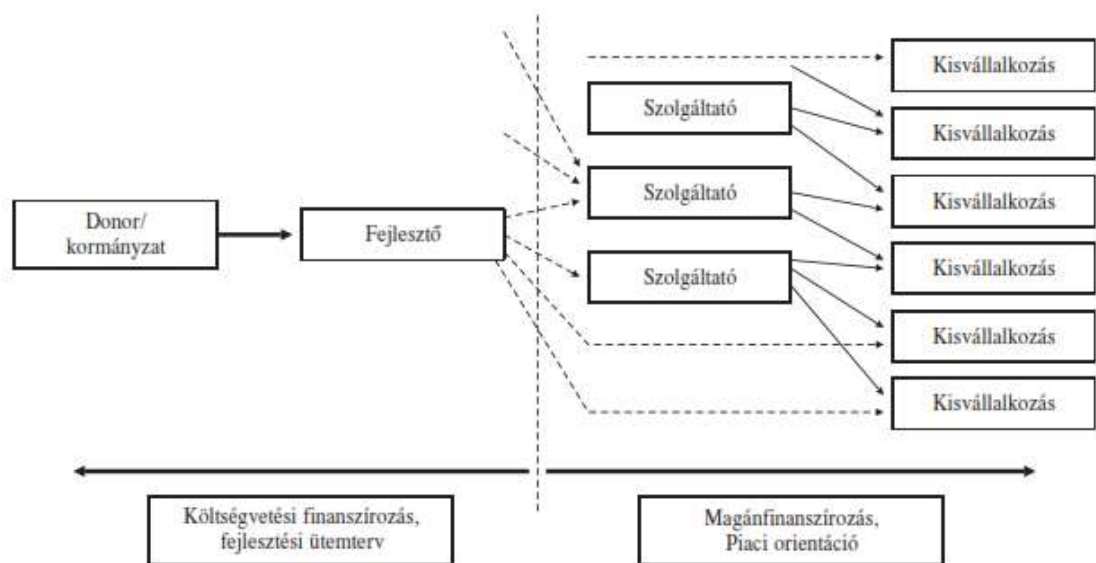


**Figure 1: Economic policy substituting the market (Source: Kállay [2002] p. 561)<sup>4</sup>**

The business development programs launched in the substitute logic of the market have several weak points: they are static, the services they provide do not develop, they only expand if the sources of financing are increased, the feedback power of the market does not work. Programs supported in this way may not leave any space for those operating on a market basis, their sustainability is highly dependent on funding and have no real economic development impact. In contrast, in the model supporting the development of the market, they seek to create the conditions for sustainable operation by focusing on the management of essential problems (Kállay [2002]).

The model can be illustrated as follows:

<sup>4</sup> Donor finanszírozás = Donor financing, A magánszektor szolgáltatói = Service providers of the private sector, Kormányzati ügynökség, támogatási program, NGO = Governmental agency, support program, NGO, Kisvállalkozás = Small business



**Figure 2: Model of a market-building economic policy (Source: Kállay [2002] p. 562)<sup>5</sup>**

Kállay's [2002] market development model had a significant effect on the approach of small and medium-sized business development proposals. An important question highlighted in Bajmócy's [2004] study examining the role of business incubation in business development is whether incubators use a market development or market substitution approach and how market substitution incubation initially widespread in less developed countries, including Hungary (transformation) can be transformed into a market development model clustered around knowledge centers (primarily university cities). As early as 2004, Bojnice drew attention to international trends, which are embodied in a shift towards technology incubation and university involvement and the increasing presence of corporate involvement.

### **3. MODELS USED TO STUDY THE FACTORS AFFECTING YOUNG PEOPLE TO BECOME ENTREPRENEURS**

For those examining the factors influencing young people to become entrepreneurs, it has soon become clear that becoming an entrepreneur is not determined by a single factor, but

<sup>5</sup> Donor/kormányzat = Donor/Government, Fejlesztő = Developer, Szolgáltató = Service provider, Kisvállalkozás = Small business, Költségvetési finanszírozás, fejlesztési ütemterv = Budget financing, development schedule, Magán finanszírozás, piaci orientáció = Private funding, market orientation

by a blend of many complex, interacting and co-dependent factors. Szerb and Lukovszki [2013] point out that the research of the factors of becoming an entrepreneur is complicated by the fact that the surveys are typically based on self-report questionnaires with many distortions (e.g. boasting), which is further complicated by the heterogeneity of entrepreneurs and the large number of factors affecting to become an entrepreneur.

### 3.1. Theory of Planned Behavior - GUESSS

Among the studies examining the entrepreneurial attitudes of young people, the Global University Entrepreneurial Spirit Student's Survey (GUESSS) stands out due to its scale, importance and results obtained with its help. Research into the entrepreneurship of university and college students is coordinated by the St. Gallen University in Switzerland. Hungary has been participating in the survey since 2006. The first survey was conducted in 2003, when only two countries were participating in the program. The main virtue of the research is, even though national data can be interpreted and analyzed independently, that it also provides an opportunity for international comparison. The main goal of GUESSS is to identify individual motives and personal background characteristics that influence becoming an entrepreneur. The research also examines the role of cultural and institutional factors influencing the willingness to start a business (S. Gubik - Farkas [2013]). The importance of the topic is shown by the fact that more and more countries joined the survey. The following table summarizes the number of participating countries and completed questionnaires in each year.

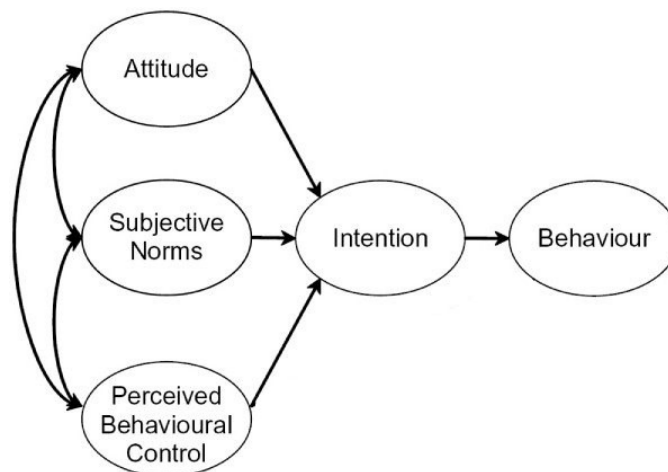
Year	Number of participating countries	Number of students completing the questionnaire, rounded
2003	2	...
2004	2	5,000
2006	14	37,000
2008	19	63,000
2011	26	93,000
2013/2014	34	109,000
2016	50	122,509
2018	54	208,000

**Table 1: Number of countries participating in the GUESSS research (Source: S. Gubik - Farkas [2013] page 6 supplemented based on <http://www.guesssurvey.org/datacollections/> )**

The GUESSS survey enjoys unbroken popularity, as evidenced by the dynamic increase in the number of participating countries and respondents. In addition to advancing the topic at the scientific level, the publications based on the database generated by the data collection also provide an opportunity to formulate useful business development policy recommendations.

The application of the theory of planned behavior has gained ground in the study of young people becoming entrepreneurs, thanks to the fact that the international Global University Entrepreneurial Spirit Students' Survey (GUESSS) relies on the theoretical framework of planned behavior by Ajzen [1991].

The theory of planned behavior is a useful conceptual framework for interpreting complex human social behaviors. The theory of planned behavior is an extension of the theory of reasoned action (Fishbein – Ajzen [1975]), which is justified by the limitations of the original model in relation to behaviors over which people have insufficient volitional control (Ajzen [1991]). The original model of the theory of planned behavior is illustrated by the following figure.



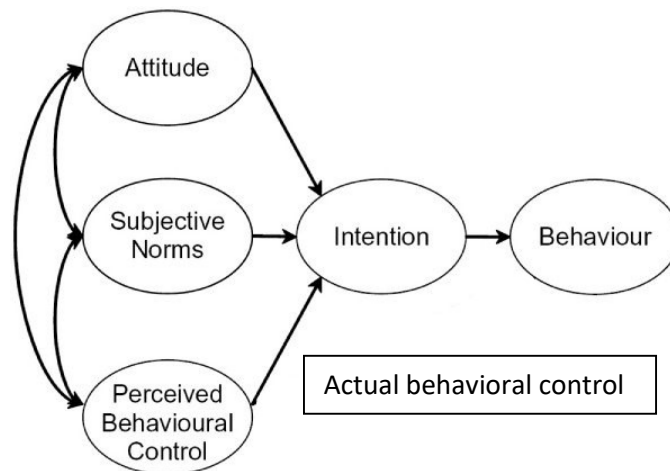
**Figure 3: Original model of the theory of planned behavior (Source: Ajzen [1991] p. 192)**

As in the theory of justified action, the central element in the theory of planned behavior is the intention of the individual to perform a given behavior. Intent is influenced by motivational factors influencing behavior, such as attitudes or subjective norms. That is, what input an individual is willing to invest in trying, what efforts he or she is able to make in order to realize a given action. As a general rule, the stronger the intention to implement a particular action, the higher the probability of its occurrence. However, the intention to act can only become actual action if it is under the control of the individual,

i.e., that individual can decide whether or not to perform it (Ajzen [1991]). In the model, intention and behaviour are separated. In the case of becoming an entrepreneur, for example, entrepreneurial intention is not a guarantee of becoming an entrepreneur. Although no real action is expected without serious intentions (S. Gubik - Farkas [2013]).

Perceived behavioral control is compatible with Bandura's [1977], [1882] concept of perceived self-efficacy, the essence of which is that individuals' behavior (action) is greatly influenced by their self-confidence in their ability to perform a given action.

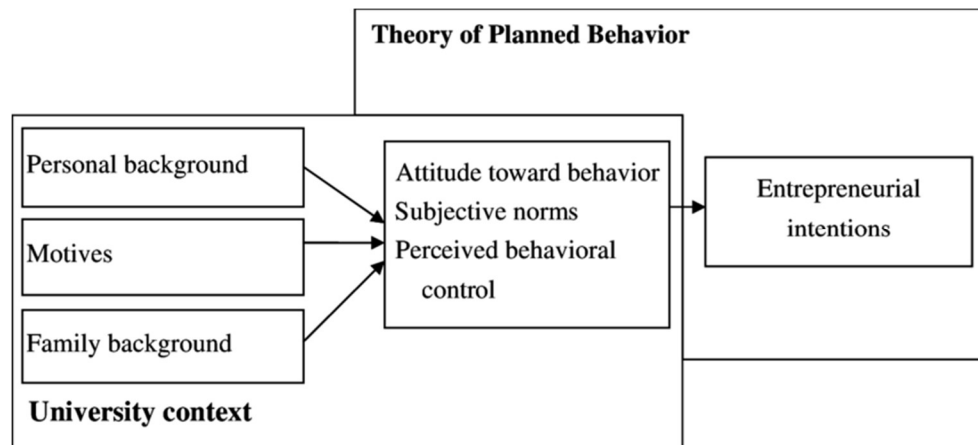
Ajzen has supplemented his model in 2006 with the actual behavioral control factor, emphasizing that actual action is also influenced by objective factors that are necessary to achieve a given intention (Ajzen [2006a], [2006b]). In the case of business start - ups, for example, the necessary financial resources and time (S. Gubik et al. [2018]). The extended model is illustrated by the following figure:



**Figure 4: Extended model of the theory of planned behavior (Source: Ajzen [2006a] Page 1 quoted by S. Gubik et al. [2018] page 77)**

The interpretation of Ajzen's [2006a p. 996] extended model in terms of entrepreneurial intentions is formulated by S. Gubik and Farkas [2013]. The relationship between attitudes to become an entrepreneur and entrepreneurial intentions is positive. A favorable business start-up attitude increases the intention to start a business. The supportive social environment and social norms stimulate the intention to start a business. Behavioral control affects intention and behaviour in two ways. It encourages entrepreneurship when the individual feels able to control events. The impact of self-efficacy is also positive, with individuals who believe to have the skills and knowledge needed to start a business being more likely to become entrepreneurs.

In the original (2011) concept of GUESSS, personal background, motives, and family background influence attitudes, subjective norms, and perceived behavioural control that determine business intent. The concept is illustrated by the following figure:



**Figure 5: The concept of GUESSS 2011 (Source: S. Gubik - Farkas [2013] page 9 based on Sieger et al. [2011])**

Using the theory of planned behavior, researchers from several countries participating in the GUESSS survey analyzed elements of entrepreneurial intentions and motivation (Soomro - Shah, [2015]; Eid et al. [2019]; Munir et al. [2019]; Solesvik et al. [2012]; Sun et al. [2017]; Shah - Soomro [2017]; Aloulou [2016])

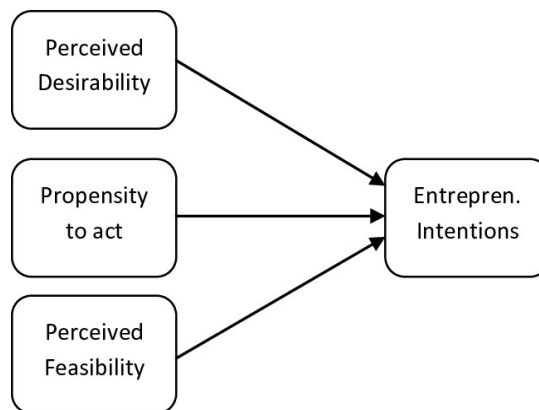
The most important experiences of GUESSS 2011 data collection are the following (S. Gubik - Farkas [2013]):

- university and college students think more in an employee's career after graduation,
- 5 years after graduation, becoming an entrepreneur is already a more attractive option,
- entrepreneurial experience gained in the family greatly influences ideas about entrepreneurship, young people with a family entrepreneurial background tend to become entrepreneurs,
- the majority of those making use of business start-up services continue their studies in the field of economy.



### 3.2. Model of entrepreneurial intention

In the research of entrepreneurial intentions, in addition to the theory of planned behavior, the majority of empirical surveys are built around models of entrepreneurial intention. In the model of entrepreneurial intention, entrepreneurial intention is determined by perceived desirability, propensity to act, and perceived feasibility. The model of entrepreneurial intention is illustrated in the following figure:



**Figure 6: Model of entrepreneurial intention (Source: Schlaegel - Koenig [2014] p. 294)**

### 3.3. Integrated models

In connection with the models measuring entrepreneurial intentions, the researchers of the topic have demanded the integration of different explanatory models, the result of which is an increase in explanatory power, consistency and theoretical clarity. Schlaegel and Koenig [2014] undertook to integrate the two most widely used models in entrepreneurial propensity research, the theory of planned behavior and the model of entrepreneurial intention. Their work was performed using 98 related studies and meta-analytic structural equations. The integrated model is illustrated in the following figure:

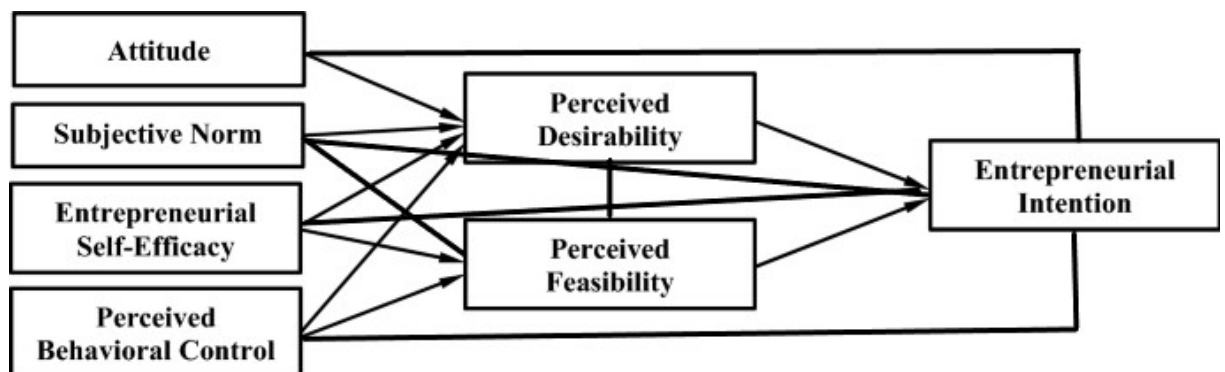


Figure 7: Integrated model of entrepreneurial intention (Source: Schlaegel - Koenig [2014] p. 314)

Szerb and Lukovszki [2013] developed a complex model for the analysis of the entrepreneurial attitudes of Hungarian university students and the factors influencing the attitudes, based on Bandura's [1986] social cognitive theory, the consideration of effects of Shapero [1975] on the individual to become an entrepreneur and Ajzen's [2006a] theory of planned behavior. The model is illustrated by the following figure:

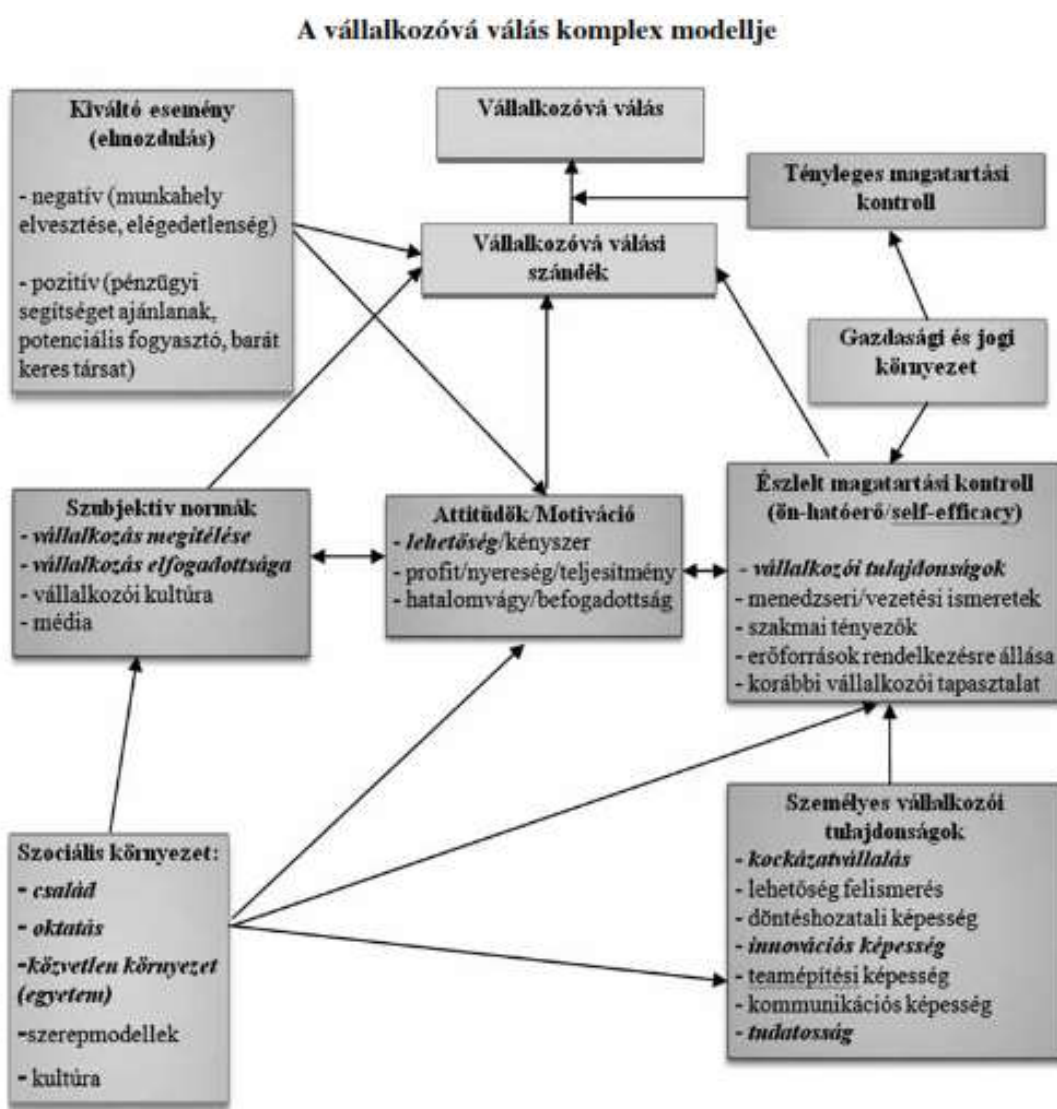


Figure 8: Complex model of becoming an entrepreneur (Source: Szerb - Lukovszki [2013] page 32)

[Translate: A vállalkozóvá válás komplex modellje = Complex model of becoming an entrepreneur, Kiváltó esemény = Triggering event (displacement, negatív (munkahely elvesztése, elégedetlenség) = negative (job loss, dissatisfaction), pozitív (pénzügyi segítséget ajánlanak, potenciális fogyasztó, barát keres társat) = positive (financial help is offered, a potential consumer or friend is looking for a partner), szubsjektív normák

= Subjective norms, vállalkozás megítélése = judgment of the business, vállalkozás elfogadottsága = acceptance of the business, vállalkozói kultúra = entrepreneurial culture, media = media, Szociális környezet = Social environment, család = family, oktatás = education, közvetlen környezet= immediate environment (university), szerepmodellek = role models, kultúra = culture, vállalkozóvá válás = Becoming an entrepreneur, vállalkozóvá válási szándék = Intention to become an entrepreneur, attitűdök/motivációk = Attitudes / Motivation, lehetőség/kényszer = opportunity / coercion, profit/nyereség/teljesítmény = profit / performance, hatalomvágy/befogadottság = desire for power / inclusion, tényleges magatartási kontroll = Actual behavioral control, gazdasági és jogi környezet = Economic and legal environment, észlelt magatartási kontroll = Perceived behavioral control (self-efficacy), vállalkozói tulajdonságok = entrepreneurial traits, menedzseri/vezetési ismeretek = management / leadership skills, szakmai tényezők = professional factors, erőforrások rendelkezésre állása = availability of resources, korábbi vállalkozói tapasztalat = previous entrepreneurial experience, személyes vállalkozói tulajdonságok =Personal entrepreneurial traits, kockázatvállalás = taking risks, lehetőség felismerés = opportunity recognition, döntéshozatali képesség = decision - making ability, innovációs képesség = ability to innovate, teamépítési képesség = team building ability, kommunikációs képesség = communication skills, tudatosság = awareness]

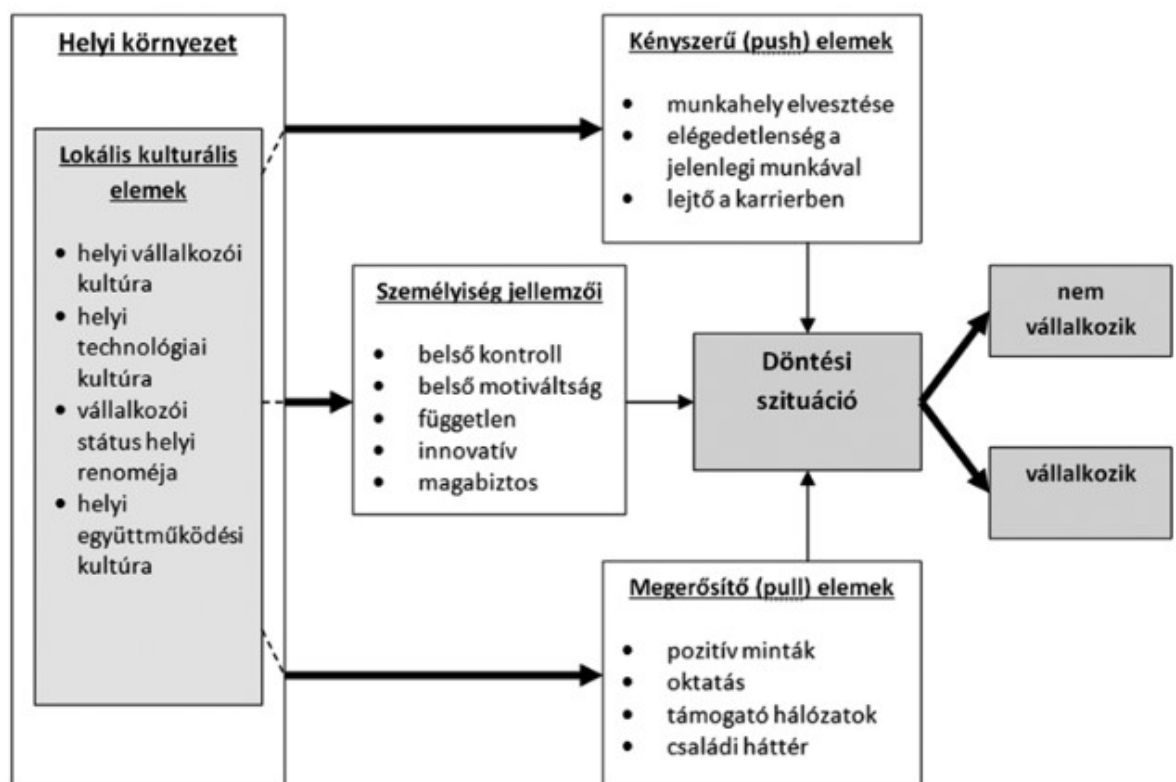
In the complex model of becoming an entrepreneur by Szerb - Lukovszki [2013] the entrepreneurial qualities, behavior, and external environment emphasized by Bandura [1986] all appear and interact with each other. Shapero [1975] emphasizes the importance of displacement, the triggering event in becoming an entrepreneur, which may be positive or negative, but definitely an essential condition for an individual to embark on the path to becoming an entrepreneur. Ajzen's [2006a] theory of planned behavior highlights the importance of the intention to become an entrepreneur, which depends on three factors, subjective norms, attitudes, and perceived behavioural control (Szerb - Lukovszki [2013]). page 32). The hypotheses tested on the basis of the complex model are presented in the following table:

Hypothesis	Result
Hypothesis 1: Awareness positively influences entrepreneurial intentions.	Not proven
Hypothesis 2: Innovation skills positively influence entrepreneurial intentions.	Proven
Hypothesis 3: The ability to cope with risk positively influences entrepreneurial intentions.	Not proven

Hypothesis 4: A positive university climate and university peers who positively perceive, rely to and think about entrepreneurship positively influence entrepreneurial intentions.	Not proven
Hypothesis 5: Participation in entrepreneurship positively influences entrepreneurial intentions.	Proven
Hypothesis 6: Participation in entrepreneurship courses has a significantly stronger influence on entrepreneurial intent among those with weaker entrepreneurial intent.	Proven
Hypothesis 7: Having an entrepreneur in the family positively influences entrepreneurial intention.	Proven
Hypothesis 8: Having an entrepreneur in the family has a significantly stronger influence on a more serious entrepreneurial intent, however, this effect is smaller in the group of those with weaker preferences.	Proven

**Table 2: Hypotheses examined on the basis of the complex model of becoming an entrepreneur**  
(Source: Szerb - Lukovszki [2013] pages 33-37, created by the author)

Bajmócy [2004] has developed a model describing the factors influencing becoming an entrepreneur based on Mueller - Thomas [2000] and Shane et al. [2003].



**Figure 9: Factors influencing becoming an entrepreneur** (Source: Bajmócy [2004] p. 232)

Translate:

**Local environment**

**Local cultural elements**

- local entrepreneurial culture
- local technological culture
- local reputation of entrepreneurial status
- local culture of cooperation

**Push items**

- job loss
- dissatisfaction with the current job
- slope in career

**Personality traits**

- internal control
- intrinsic motivation
- independent
- innovative
- confident

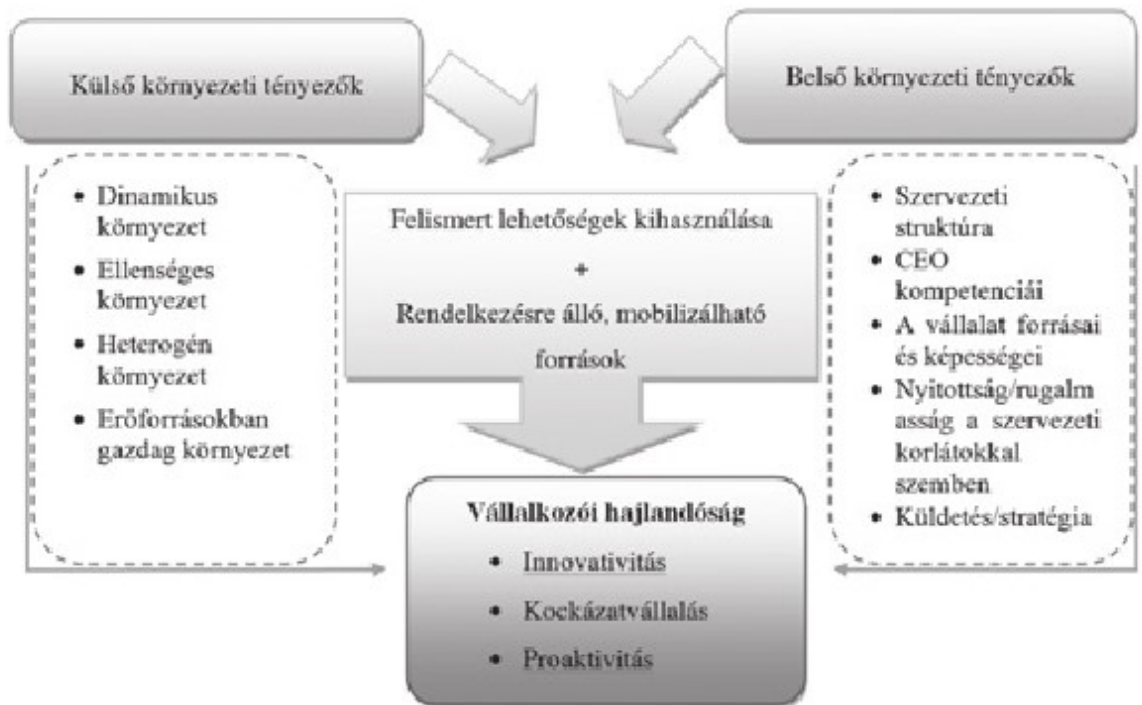
**Decision-making situation: not to start a business /to start a business**

**Reinforcing (pull) elements**

- positive samples
- education
- supporting networks
- family background

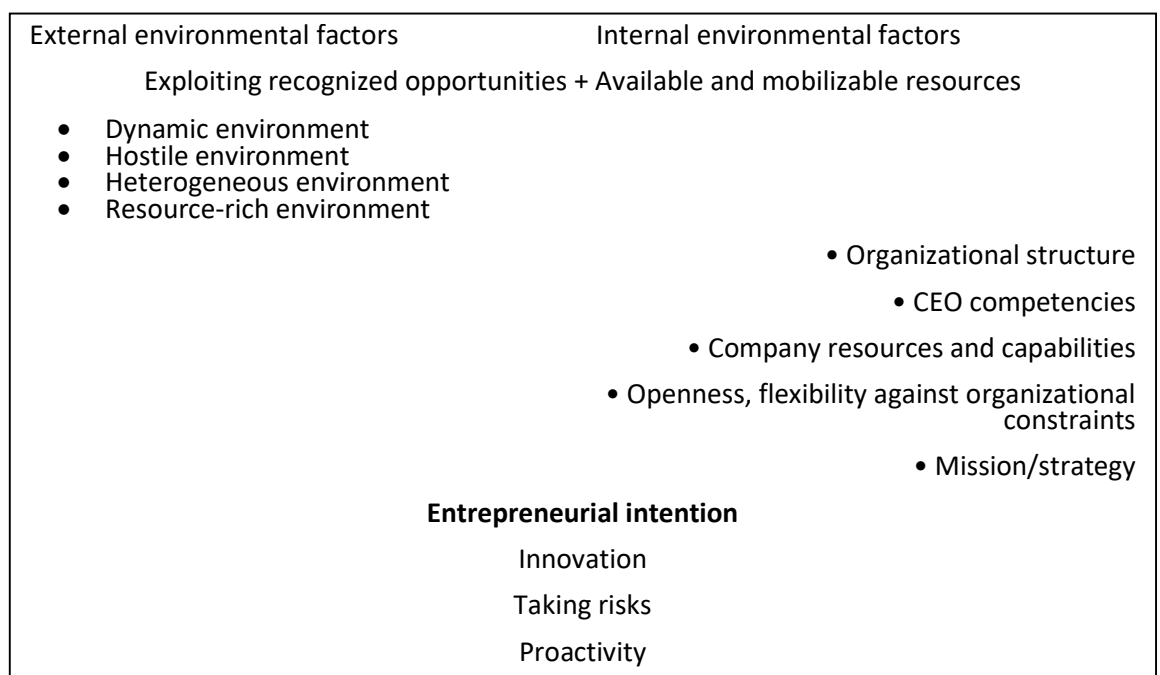
### 3.4. Other models of becoming an entrepreneur

Aloulou and Fayolle [2005] included factors influencing entrepreneurial intentions in a conceptual model for small entrepreneurs.



**Figure 10: Factors influencing entrepreneurial intentions in the case of small businesses (Source: Aloulou - Fayolle [2005] p. 32 quoted by Hofmeister-Tóth et al. [2015] p. 42)**

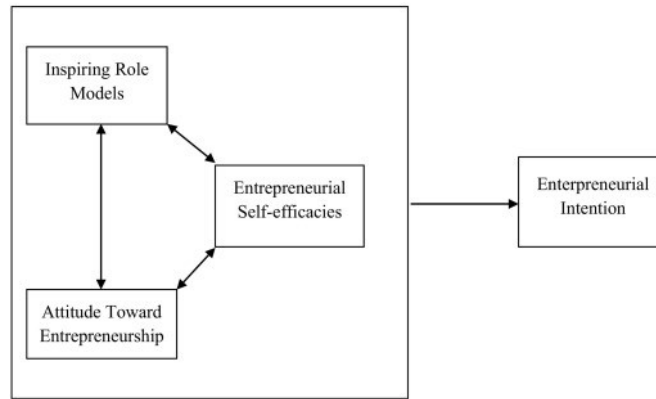
Translate:



In practical entrepreneurship education, we often come across the term inspiration, but its role in scientific work rarely appears, although Soutaris et al. [2007] highlight that, in

fact, inspiration is the element of entrepreneurship education that shows a positive relationship with entrepreneurial intentions.

Nowinski and Haddoud [2019] examined the role of inspiring role models in enhancing entrepreneurial intention propensity among university students. Their research model is illustrated by the following figure:



**Figure 11: The role of inspiring role models in enhancing entrepreneurial intention (Source: Nowinski and Haddoud [2019] p. 186)**

The model helps to understand the contribution of inspirational role models to enhancing entrepreneurial intentions, emphasizing that the factors influencing entrepreneurial intention form a complex mix that includes entrepreneurial attitudes, entrepreneurial self-efficacy, and inspiring role models. The effect of the elements is not displayed alone, but it is their interplay what stimulates entrepreneurial intentions.

In addition to complex models, work that systematizes the explored factors is also important for researching the willingness of young people to become entrepreneurs.

Based on the international literature, Koltai and Szalka [2013] divided the motivations of becoming an entrepreneur into economic and non-economic motivations. The classification is illustrated by the following figure:



**Figure 12: Motivations of entrepreneurship** (Source: Koltai - Szalka [2013] p. 73, (based on Cromie [1987]; Holmquist - Sundin [1990]; Birley [1989]; Morris et al. [2006]; Gatewood et al. [1995]; Hébert - Link [1982]; Barba-Sánchez - Atienza - Sahuquillo [2012]))

Translate:

<p><b>Economic</b></p> <ul style="list-style-type: none"> <li>• financial independence</li> <li>• contribution to the well-being of the community</li> <li>• exploiting a business opportunity</li> </ul> <p><b>Non-economic</b></p> <ul style="list-style-type: none"> <li>• reconciling work and family</li> <li>• family tradition</li> <li>• following a role model</li> <li>• social recognition</li> <li>• development</li> <li>• finding challenges</li> <li>• desire to prove</li> <li>• the desire for independence</li> <li>• to be my boss</li> </ul>
--

To substantiate their research, Scheiner et al. [2008] identified the factors that motivate and inhibit business start-ups in the following table:



Motivating factors for starting a business	Inhibiting factors for starting a business
Self-realization	Lack of business knowledge
Independence	Lack of a concrete business idea
Practical application of knowledge	Missing start-up capital
Greater decision autonomy	Insufficient practical experience
Favorable economic environment	General lack of interest
Implementing a business idea	Lack of founding partner / team
Gaining experience	Lack of a business network system
Taking responsibility	Lack of market knowledge
Higher prestige, social status	Lack of business transparency
Higher income	Disapproval of spouse, partner
Potential profit	High financial risk
Continuing a family business	Low income
Motivation from family, friends	Too much work, too little money
	Too much work, not enough free time
	Unfavorable business environment
	Attachment to one's own company
	Risk of bankruptcy
	Lack of social recognition

**Table 3: Factors motivating and inhibiting entrepreneurial intentions (Source: Scheiner et al. [2008] page 42)**

Holienka et al. [2017a] specifically examined the factors influencing the entrepreneurial intentions of students who already started a business during their university studies in the Visegrad countries (Czech Republic, Hungary, Poland, Slovakia). Data from the GUESSS survey in 2016 showed that sex (men's entrepreneurial intentions is higher), increasing age, approaching completion of studies (the less time left to graduate), the intensity of entrepreneurship education in business studies, and parental entrepreneurship background all have a positive effect on becoming an entrepreneur. Researchers believe that students who are already entrepreneurs during their studies are more likely to choose an entrepreneurial lifestyle in the long run.

## **4. FACTORS AFFECTING BECOMING AN ENTREPRENEUR AND ENTREPRENEURIAL INTENTIONS**

### **4.1. THE ROLE OF EDUCATION, IN PARTICULAR UNIVERSITIES, IN FACILITATING YOUNG PEOPLE BECOMING ENTREPRENEURS**

#### **4.1.1. Entrepreneurship education in the European Union**

The prominent role of entrepreneurship education in encouraging to become an entrepreneur has also been recognized in the European Union. International research sheds light on the role of higher education in entrepreneurship education, while researchers in the field both emphasize the importance of education in becoming an entrepreneur and describe good practices.

The importance of entrepreneurship education and encouraging to become an entrepreneur at the European Union level is mainly justified by job creation (especially the reduction of youth unemployment) and stimulating competitiveness and economic growth. The acquisition of entrepreneurial skills fits into the concept of lifelong learning. The need for entrepreneurship education is emerging at an increasingly young age. In addition to the courses and programs of higher education institutions aimed at acquiring entrepreneurial knowledge, the need for entrepreneurship education at primary and secondary education level is also increasingly emphasized (European Commission [2002]). Among other things, the European Commission's research programs on entrepreneurship education have explored and analyzed the emergence of entrepreneurial knowledge in the curricula of individual countries (European Commission [2004]). The European Commission's Expert Group on Education and Training for Entrepreneurship welcomes, on the one hand, the cultural change that emphasizes the need for entrepreneurship education and, on the other hand, lacks the existence of a coherent structure that would allow the integration of entrepreneurial knowledge into the education system. Their main findings are as follows (European Commission [2002] pp. 7-8):

- in almost all the countries studied, there is a sufficient degree of political commitment to entrepreneurship development education in the field of entrepreneurship education,
- there are no indicators and no data sets available to analyze the area,

- the evaluation of measures undertaken is mostly done on a limited basis or occasionally,
- initiatives aiming at promoting the development of an entrepreneurial spirit in pupils are still rare at the level of primary school, although a number of examples of good practice can be found in this area,
- this type of teaching is more frequent in secondary schools, very often depending on initiatives taken individually by the educational institutions,
- vocational training systems of secondary level in most countries are not sufficiently orientated towards self-employment and entrepreneurship,
- entrepreneurship training at university level is currently mostly directed at students following economics and business courses,
- schemes based on "learning by doing" – whereby students create and run mini-businesses – are a widely used practice in many countries for the development of entrepreneurial skills,
- the current provision of specific training for teachers on entrepreneurship is insufficient,
- the links between actors of educational institutions and business need to be strengthened,
- there is a lack of private funding for entrepreneurship programmes in Europe.

An expert material has been produced on the teaching of entrepreneurial knowledge in higher education, with a focus on non-business studies, as viable business ideas are likely to stem more from technical, scientific and creative studies. The report draws attention to the fact that there are currently too few university professors teaching entrepreneurship and that the methods typically used in practice do not use the approaches considered most effective on the basis of experience to date (European Commission [2008]).

#### 4.1.2. International outlook

The power of university-based businesses is well illustrated by Lüthje and Franke [2002], who showed that if the four thousand companies founded by U.S. MIT graduates and faculty formed an independent nation, it would be the twenty-fourth largest economy in the world. In order for successful companies to start from higher education institutions, systematic work is needed.

Due to the inadequacy of education and training at the international level to help entrepreneurship, the topic has received special focus in the 2008 GEM survey. It has been shown that entrepreneurship education, training and willingness to start a business are positively related, but the impact is different in countries with different levels of development (Bosam et al. [2008]). The data from the GUESSS surveys also highlight the positive impact of entrepreneurship education on becoming an entrepreneur, highlighting the difference between intention and real action and researching the factors influencing implementation, out of which sex (men tend to get to the actual start-up of a company) and education have also been empirically verified (Sølesvik [2013]; Jonesou-Salo [2015]; Varamaki et al. [2015]; Galvao et al. [2018]).

Joensuu et al. [2013] highlight that supporting young people to become entrepreneurs is not a simple task, but a complex process in which students recognize their entrepreneurial potential and find a business opportunity in which it can be realized.

The 2011 GUESSS survey also aimed to examine the intention to start social businesses. Data for South African university students were analyzed by Viviers et al. [2012], according to which 54.8% of the young people in the sample would start a social business, although only 9.4% of them had a specific environmental or social mission.

Morris et al. [2017] examined the impact of the university ecosystem on influencing students' propensity to become entrepreneurs. Based on their analysis, programs built into the entrepreneurial curriculum and extracurricular programs had a positive impact on becoming an entrepreneur, while financial support from the university had a negative impact. Entrepreneurial experience gained by students in the past has mitigated the incentive effect of intra- and extracurricular programs, as well as the adverse effects of financial support from the university.

Based on data from the 2011 GUESSS survey in Austria, Maresch et al. have examined the impact of entrepreneurship education among students studying in the field of business and economics and science and engineering. According to their results, while entrepreneurship education has a positive effect on the willingness of business students to start a business, the positive impact of entrepreneurship education on starting a business is less significant among students in science and technology. According to the researchers, one possible explanation for this may be the "Matthew effect" (Walberg - Tsai [1983]), the main message of which is that students who have previously acquired business knowledge are more likely to be able to absorb and process entrepreneurship knowledge. Passioni and Glavam [2018] have reached partly an opposite conclusion, after

having examined the impact of the chosen course in higher education on entrepreneurial intentions. For Brazilian students in management, engineering, and accounting, it was found that entrepreneurship education had a positive effect on the willingness of students in management and engineering to start a business.

Examining the startup activity of students, Bergmann et al. [2016] attempted to measure the impact of factors influencing entrepreneurial intentions at the individual, university and regional levels. Based on their study, they found that individual factors had the greatest explanatory power in the case of both freshly established and already active businesses. While start-ups were more affected by the university environment and the influence at the regional level was negligible, the opposite was true for already active student businesses.

Based on the 2016 GUESSS survey, Holienka et al. [2017b] classified university students into 4 basic types depending on their intention to start a business: doers, dreamers, procrastinators and abstainers. Based on the categorization, proposals were made for entrepreneurship education. Universities need to tailor their entrepreneurship education programs to their students' willingness to start a business. Students with an already existing start-up are interested in completely different topics than young people with only a strong entrepreneurial intention. And a different approach is also needed to make dreamers entrepreneurs and not abstainers. Interdisciplinarity is of paramount importance, as often students from science and technology fields have an idea of a product or service that can be sold on the market, who do not have any economic or entrepreneurial background, this is why it would be important to connect them with students with a higher entrepreneurial spirit. Universities promoting entrepreneurship spirit have a role to play in helping students develop their initial ideas and support them in creating long-term sustainable businesses.

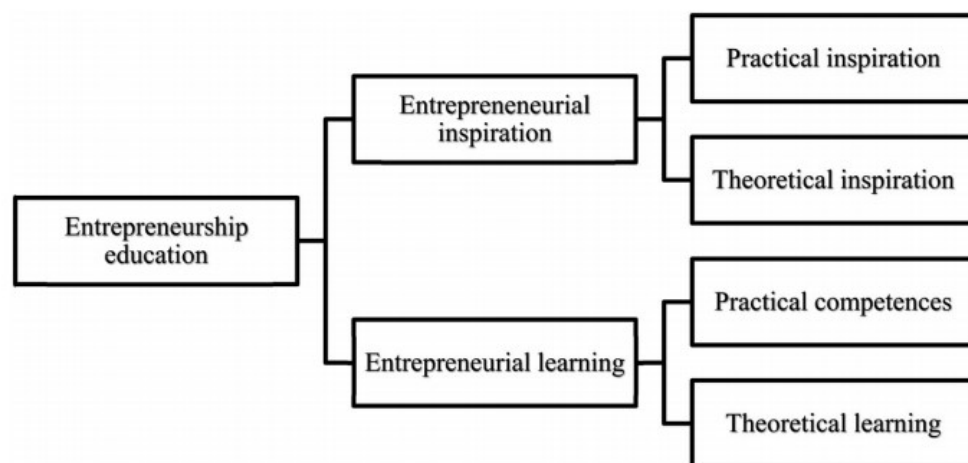
Canever et al. [2017] sought to answer the question of whether there are differences in the willingness of students of the two types of universities present in Brazil, public and private, to start a business. Their analyzes revealed that there were no significant differences in the entrepreneurial intentions of students at public and private universities.

A study by Gelaidan and Abdullateef [2017] among students in higher education in economics in Malaysia showed that the entrepreneurial intention of university students is most stimulated by relationship and education support.

Susanj et al. [2015] demonstrated by examining Croatian university students that young people in business-oriented training have a higher entrepreneurial propensity than those in non-business-oriented training.

Entrepreneurial intention research raises the question of whether the impact of personal characteristics or external environmental conditions is stronger. Sesen [2012], in his study involving Turkish students, concluded that the strongest factor influencing entrepreneurship is entrepreneurial self-efficacy, followed by networking and access to capital. Based on his results, the university environment does not have a significant impact.

Nabi et al [2018] examined the content and inspiration elements of entrepreneurship education using qualitative tools among university students. The model they use is illustrated by the following figure:



**Figure 13: Inspiration and learning in entrepreneurship education (Source: Nabi et al. [2018], p. 458)**

Longitudinal research based on a mixed methodology on the basis of the model revealed that students in entrepreneurship education programs had higher levels of entrepreneurial knowledge and inspiration than young people who did not receive entrepreneurial training. Experience from in-depth interviews has shown that entrepreneurship courses can have both positive and negative effects on students' entrepreneurial intentions. The reason for the decline in entrepreneurial intentions is that although students had a kind of entrepreneurial motivation when enrolling in the course, they gained knowledge about a much more real and practical part of being an entrepreneur during the learning process,

which negatively affected them. For this group of students, entrepreneurship education is part of a developmental process in which they face the complexity and challenges of being an entrepreneur. The element of entrepreneurial learning in entrepreneurship education can be divided into two parts: on the one hand, knowledge about the theoretical steps of starting a business, and, on the other hand, practical knowledge (to know how to implement). Entrepreneurial inspiration can also be broken down into theoretical elements linked to external sources, such as reports, readings and practical elements from specific people, the typical source of which is group-based, practice-oriented, experiential learning. According to the research, practical and theoretical inspiration is the one that has the greatest positive effect on entrepreneurial intent (Nabi et al. [2018]).

Hahn et al. [2020] have shown that the effectiveness of entrepreneurship education is influenced by whether the entrepreneurship course is optional or compulsory, and whether the students' family has an entrepreneurial background. Silva et al. have demonstrated [2021] that university entrepreneurship education has a stimulating effect on young people becoming entrepreneurs, but in addition, university atmosphere and entrepreneurial skills play an important role.

Dvorsky et al. [2019] compiled the entrepreneurial propensity index of university students with the participation of the Czech Republic, Slovakia and Poland. In their work, they found a difference in the entrepreneurial intentions of students from each country, which was highest in the Czech Republic (0.470), followed by Slovakia (0.424) and then Poland (0.412). The quality of university education was positively assessed in all three countries. The index summarizes findings on social environment, business support system, macroeconomic environment, quality of the business environment, access to financial resources, quality of education, personal characteristics, business benefits and entrepreneurial propensity.

In the study of the willingness of university students in the Visegrad countries to start a business, Nowinski et al. [2019] came to the interesting conclusion that entrepreneurship education had a direct effect on entrepreneurship only in Poland out of the four countries, the reason of which, according to the researchers, is that out of the four countries studied, entrepreneurship education is also provided at the secondary school level only in Poland.

#### 4.1.3. Experiences and research results in Hungary

In Hungary, the SEED Small Business Development Foundation assessed and evaluated the current situation of business education in 2008. The survey has covered public education, higher education and adult education. The final study of the research contains a number of important findings. Key comments on young people becoming entrepreneurs (SEED Foundation [2008], pp. 2-7):

- there is a low level of motivation to become an entrepreneur, but it is a positive result that young people are not prejudiced against entrepreneurial careers,
- the teaching of economic knowledge in public education needs to be developed: new education and training initiatives are isolated; the condition for the development of modern, attitude-forming education is curriculum development, textbook development, teacher training and in-service teacher training; the quantitative characteristics of the presence of modern solutions are modest,
- business-related courses in higher education are typically taken by students majoring in economics; in BA training, the topic of entrepreneurship is given a modest weight,
- the SME sector, especially micro-business owners, is less open to acquire knowledge.

In their survey on Hungarian data, S. Gubik and Farkas [2016] highlighted that the willingness of students in higher education to start a business is mostly influenced by family background, while the impact of entrepreneurship courses and trainings offered by higher education institutions does not appear in real entrepreneurial activity.

In connection with the evaluation of the Széchenyi István University Knowledge Entrepreneurship Development Program (SZE-Duo), Borsi-Dőry [2015] concluded, among other things, that entrepreneurship training should be more emphasized in higher education in order to young people's entrepreneurial intentions to be stimulated and actually implemented. The specialty of entrepreneurship education is that educators are able to teach entrepreneurship if they have entrepreneurial skills themselves. The personal - professional background of educators plays a key role in the education of entrepreneurs (Pardo [2013]). Referring to international studies, it is emphasized that the field of entrepreneurship has not yet occupied its place among the sciences, the professional recognition of entrepreneurship training remains below that of other fields of study. The



interdisciplinary nature of the topic also complicates the situation from the point of view of research (Borsi-Dőry [2015]).

S. Gubik and Farkas [2013] draw attention to the fact that it is important for participants in natural and social science training to know the steps of starting and developing a business, in connection with which the renewal of entrepreneurial services and making them available to non-economic participants is a key task.

Mentoring is playing an increasingly important role in supporting young entrepreneurs as a tailor-made support activity. Based on a questionnaire survey of Hungarian students, Zsigmond [2018] set up a six-factor model of the list of competencies, attributes and attitudes required for successful process management (Zsigmond [2018]). PwC's survey of Hungarian startups also revealed that the role of mentors can play a role in starting businesses [PwC, 2019].

Although it is worthwhile to start encouraging becoming an entrepreneur at the youngest possible age, relatively little empirical research examines the relationship of primary and secondary school children to entrepreneurship. Horváth et al. [2019] somewhat alleviated this gap by examining the possibility of integrating design communication into education with the involvement of primary school students. Based on their results, design communication, as an entrepreneurial attitude development methodology, cannot be used effectively in the case of 3rd grade children included in their study, but is already effective in the case of 6th and 8th grade children.

Diószeginé Zentay [2018] analyzes and urges the development of entrepreneurial skills among engineering students on the example of the University of Debrecen. Erdős [2018] processed and analyzed a comprehensive literature on the transformation of Hungarian higher education institutions into entrepreneurial universities. His results are wide-ranging, of which only an idea is closely related to spin-offs derived from domestic universities. The spin-offs of Hungarian universities bear little resemblance to the dynamically growing companies originating from American universities, so although there are Hungarian spin-offs existing, the success stories of the success stories and high-tech areas experienced in the USA are hardly expected to be realised in Hungary.

Examining the situation of entrepreneurial knowledge in Hungarian higher education, Czeglédi et al. [2016] concluded that interactive methods such as role-play, discussion of case studies and simulation are not applied with sufficient intensity in entrepreneurship education.

Varga et al. [2016] examined the assessment of entrepreneurial knowledge in higher education and concluded that the low entrepreneurial intentions of students is due to risk aversion, lack of self-confidence (the negative tone of the term “entrepreneur” plays a role in this) and lack of expertise.

Imreh-Tóth [2014], [2015] conducted research on the changing role of universities and the function of entrepreneurship education in motivating to become entrepreneurs. According to the analysis of Szerb - Lukovszki [2013] based on GUESSS data from 2011, the role of the university environment and fellow students supporting entrepreneurship is not of paramount importance in the development of entrepreneurial intentions. It has been shown that those who do not take it serious to become an entrepreneur, consider their university environment to be supportive of starting a business, while those whose real goal of becoming an entrepreneur are less satisfied with the university support provided.

Analyzing the dilemmas of engineering students becoming entrepreneurs, Kárpáti-Daróczi et al. [2019] concluded that students who innovate during their studies may find themselves at a crossroads, and either market their ideas as entrepreneurs or focus on obtaining their degree. It is considered important for the university to support becoming an entrepreneur, however, the “end product” is considered to be the graduate engineer and not the non-graduate entrepreneur. The relationship of trust between the students and the university is considered suitable to form the basis of the initial incubation counseling and mentoring processes.

With the involvement of European engineering students, Rippa et al. [2020] showed that entrepreneurship education alone does not influence engineering students to become entrepreneurs, it is the interaction of several other factors determining the decision. Szerb and Márkus [2006], based on the Collegiate Entrepreneurship 2006 (GUESSS first survey), an international study covering 14 countries, showed a positive relationship between taking entrepreneurship courses and becoming an entrepreneur in the Hungarian sample.

S. Gubik et al. [2018] cite Richert – Schiller [1994] and refer to the works of Lüthje – Franke [2002], Schrör [2006] and Autio [2005] that businesses of those with higher education levels are more growth-oriented and rather set up their companies in higher value-added sectors. They emphasize that stimulating the entrepreneurial spirit and activity of young people in higher education is therefore an important economic policy issue (S. Gubik et al. [2018]). In part, the impact of these research findings is that universities are increasingly expected to prepare their students not only for being an

employee but also for entrepreneurship (Szerb - Lukovszki [2013]). According to Imreh-Tóth [2015], the growing expectation of universities is to promote entrepreneurship, especially in dynamic, innovatively developing areas, which form excellent ground for the creation of startups with high growth potential.

#### 4.1.4. Methodological issues of entrepreneurship education

The Small Business Development Center of the Corvinus University of Budapest has always been at the forefront of adapting up-to-date, modern entrepreneurship education methods. Such is the case of entrepreneurship education through student companies, the practical implementation of which and the lessons to be learned have been reported by Csapó-Filep [2007], Csapó [2007], [2008], [2010], who presented the advantages and disadvantages of different entrepreneurship education methods from two perspectives, on the one hand, based on Szomor [1997] and on the other hand, based on Jamieson [1984].

Teacher lecture		Simulated business		Real business	
Advantage	Disadvantage	Advantage	Disadvantage	Advantage	Disadvantage
Easy planning and execution.	It classifies entrepreneurship training into the system of “standard subjects”.	It can be designed with sufficient flexibility.	By focusing on fairs, it becomes campaign-like.	Strong student motivation can be achieved.	Difficult to plan and control.
The lecturer dictates the subject, there is no deviation.	It is difficult to maintain the interest of students.	It can be made playful by using good methods.	It isn't realistic enough for students; they see it as artistic.	Some skills can be greatly developed.	There is a lot of responsibility on the part of the teacher.
It is well measurable, evaluable in the usual academia way.	It focuses almost exclusively on knowledge and not skills.	Suitable for developing a wide range of skills.	Performance is difficult to be measured within educational settings.	It can also meet real, e.g. educational needs.	Profit orientation can be at the expense of learning.
There is little extra cost.	It is difficult to find truly “competent professionals”.	Relatively cost effective.	Entrepreneurial responsibility is devalued by simulation.	Legally alive, neat.	It imposes an enormous additional burden on both students and teachers.
It fits well with the usual order of classes.	Students quickly forget the knowledge they have learned.	It's more manageable than a real business.	Rarely is the available 45-minute time frame sufficient.	It can be continued beyond the educational framework.	It is difficult to fit it into the Hungarian legal system.
It is well-known both to teachers and students.	You can't learn how to swim by only using a book.	It's like swimming with a lifebelt and cork vest.	Rather, the outcome depends on the attitude of the student.	Entrepreneurial responsibility is direct, sometimes also costly.	In many ways, it “sticks out” of the order of the educational system.

**Table 4: Advantages and disadvantages of entrepreneurship education methods (Source: Csapó [2007] based on Szomor [1997], p. 33)**

	"Education on entrepreneurship"	"Education for entrepreneurship"	"Education in entrepreneurship"
<b>The subject-matter of the training</b>	theoretical knowledge	theoretical and practical knowledge	practical knowledge
<b>Basic goal</b>	to make entrepreneurship attractive	helping to start a business	helping to run a business
<b>Target audience</b>	everybody	those interested in entrepreneurship	entrepreneurs
<b>Teaching methods</b>	theoretical courses	theoretical courses, simulated or real businesses	mentoring, coaching
<b>Typical subjects</b>	entrepreneurship basics, small business policy	business planning, business management	fundraising, protection of intellectual property

**Table 5: Types of entrepreneurship courses / programs (Source: Csapó [2008], Jamieson [1984], p. 45)**

Entrepreneurship education by setting up a real business is the most effective way to introduce entrepreneurship, despite its many risks and difficulties. The “Entrepreneurship-Friendly University - Students capable of entrepreneurship” program was announced at Corvinus KfK in the spring of 2003, within the framework of which students and groups of students could apply for funding from the private sector with a business plan (Figyelőnet also reported on the program (24.hu [2007])). In addition to the theoretical knowledge provided at the university, students also received financial support and Kfk assigned mentors to the winning teams, who sought to protect start-up entrepreneurs from making huge mistakes. During the evaluation of the program, three important advantages have come to the forefront (Csapó [2007] p. 40):

- the mentor dealt with a small group of students,
- the sessions were purposeful, aimed at solving real entrepreneurial problems,
- due to the spill-over effect of the project, the example of the participating students had a positive effect on their peers.

Csapó [2008] undertook to present modern international entrepreneurship education experiences and analyze the possibilities of domestic adaptation.

The essence of the Finnish Team Academy's teaching methodology is to prioritize learning over teaching in a real business environment, through self-regulation and the development of the responsibility of entrepreneurial teams. The methodology is used in many European countries. The essence of the methodology and its expansion in Hungary and Europe are reported by Gál et al. [2017].

In the research of Mihalkovné Szakács [2014], [2015], entrepreneurship education was examined from several perspectives. She has analyzed the relationship between the teaching of entrepreneurial knowledge and the development of entrepreneurial competencies, and examined the characteristics of a competent entrepreneurship educator.

The experiences of in-depth interviews with the specialists of universities with master's degrees in business development in Hungary revealed that universities prefer to start correspondence courses, try to bring novelties into the training, but their application is often inconsistent and unconscious. The leaders of the master's programs agree that at the time of the research, the 75% theoretical education rate prescribed in the regulations is very high, the training should be much more practical, which they also strive for in the course of the education. Increasing interdisciplinarity and the cooperation of as diverse teams as possible are considered important (Árváné Ványi et al. [2017]).

Imreh-Tóth [2015] examined the possibilities of adapting successful Western European and American entrepreneurship education good practices in a Hungarian environment, primarily in line with the specialties of the University of Szeged. Analyzing the practices followed at the leading universities in entrepreneurship education, he concluded that gaining international experience on a professional basis is important, special courses for high-tech companies potentially emerging at universities are important, but low-tech trainings should not be forgotten about either. The use of methodologies successfully applied elsewhere in the application of educational methods is to be welcomed, but the content must be adapted to the domestic socio-economic cultural environment. It is essential to involve practicing entrepreneurs into education, as well as to include case studies processing domestic entrepreneurial problem situations in the curriculum. The role of student self-active groups can also be important.

Both international and domestic research results prove the effect of training and education on stimulating entrepreneurship. At the same time, education of entrepreneurship knowledge alone will not lead to an increase in the number of start-ups launched by young people. The process is much more complex than this, during which

the development of entrepreneurial competencies, the variety and diversity of methodologies used in education, and the impact of the environment of the higher education institution cannot be neglected.

#### 4.2. THE IMPACT OF PERSONAL CHARACTERISTICS ON YOUNG PEOPLE BECOMING ENTREPRENEURS

The previous chapter has examined the role of education and universities in young people's willingness to start a business. The environment in which young people live their daily lives is important in awakening entrepreneurial mindsets and realizing the emerging business idea. But the role of external inspiring factors is not enough itself to become an entrepreneur, it is also influenced by internal endowments, qualities and personality traits. Judging whether the role of external or internal factors is the stronger one is an almost impossible task and probably the most powerful factors or combinations of factors are different for all young people.

Numerous surveys have been published in international literature, which analyze the role of personality traits and characteristics influencing young people's willingness to start a business. Based on the processing of the international literature, Moraes et al. [2018] identified the following attitude characteristics of the entrepreneurial profile:

Profile characteristics	Description
Self-efficacy	Ability to achieve intended goals.
Sociability	Using an individual's social network to support his or her professional activity.
Planning	Organize activities to be carried out in order to achieve the set goals
Management	Ability to influence others to achieve set goals.
Innovation	Application of new ideas, tools, methods.
Taking risks	Identifying and analyzing the variables that affect the effectiveness of a project and making decisions about the continuation of the project based on the results of this analysis.

**Table 6: Entrepreneurial profile characteristics (Source: Moraes et al. [2018] page 230)**

Examining the relationship between the psychological characteristics of Malaysian university students and their willingness to become entrepreneurs, Nadisp et al. [2017] came to the conclusion that innovation, self-confidence, risk-taking, the desire

to succeed, and tolerance for insecurity are personal qualities that lead young people to become entrepreneurs.

In research on young people becoming entrepreneurs, in examining individual abilities, Bazzi et al. [2019] examined the role of abstract thinking and demonstrated that high levels of abstraction show a positive relationship with entrepreneurial intentions. In their study involving Colombian management students, Henley et al. [2017] concluded that the presence of leadership skills has a positive effect on becoming an entrepreneur. They carried out their analytical work on the basis of planned behavior theory and social cognitive theory.

Nyock et al. [2014] focus on the role of will in becoming an entrepreneur. In becoming an entrepreneur, the role of personal internal qualities is emphasized much more than the influencing effect of the external environment. In their view, becoming an entrepreneur should be a career goal coupled with commitment and will. If the goal is chosen on the basis of individual will, the influence of personal factors on it is stronger than that of external environmental parameters.

Bergmann [2015] demonstrated a positive relationship between the belief in the success of their idea and their becoming entrepreneurs. He further highlighted that while relevant professional and tacit knowledge is of paramount importance for research-driven business ideas, general human capital, codified knowledge acquired at university, is the determining factor for non-research-driven business ideas.

The research by Shirokova et al. [2015] focused on bridging the gap between intent and action often experienced by young people as entrepreneurs. Entrepreneurial intent does not clearly mean that young people really commit themselves to an entrepreneurial career path. Intentional action has been shown to be reinforced by entrepreneurial background of the family, age, sex (men demonstrate higher entrepreneurial intentions), a business-supportive university environment, while the general avoidance of uncertainty inherent in the country of students has weakened it.

The effect of ADHD (Attention-deficit/hyperactivity disorder) on entrepreneurial career choice has emerged as a new direction in the study of motivations to become an entrepreneur. In examining the impact of different psychological symptoms on the start-up of businesses, the analysis of the influencing power of ADHD comes first. Based on the 2011 GUESSS survey, Verheul et al. [2015] concluded that students with ADHD-like behaviors were more likely to plan to become an entrepreneur and showed that those with



ADHD had a higher risk appetite. A positive relationship between ADHD and self-employment has also been demonstrated (Verheul et al. [2016]).

Due to its target group, the research conducted by Dinis et al. [2013] among Portuguese high school students fills a gap an existing gap in surveys examining entrepreneurial intentions. Research is typically targeted at university students, largely due to the growing popularity of the GUESSS international survey. It is worthwhile to start awakening entrepreneurial motivation and promoting the entrepreneurial way of life at a younger age. Young people who are confident and have a strong desire for success show stronger entrepreneurial intentions (Dinis et al [2013]).

Lukovszki [2011] summarized the traits that play a role in becoming a successful entrepreneur based on an extensive processing of the international literature.

<b>Trait</b>	<b>Author</b>
Business contingency	Chell et al. (1991)
Take advantage of a resource-independent opportunity	Chell et al. (1991)
Entrepreneurial spirit, boldness	Chell et al. (1991)
Ingenuity, creativity	McClelland (1967); Burch (1986); Gerdes (1988); Casson (1991); Chell et al. (1991), Hjelle - Ziegler (1992); Kreitner-Kinicki (1998); Nieman - Bennet (2002); Timmons - Spinelli (2003)
Restlessness, avoidance of boredom, search for variety	Chell et al. (1991)
Attractive, imaginative	Chell et al. (1991)
Proactivity	Chell et al. (1991)
Innovative capacity	Chell et al. (1991), Schumpeter (1950) Timmons (1999)
Full commitment	Bygrave (1997), Timmons (1999)
Purposefulness	Timmons (1999)
Persistence	Burch (1986) Naffziger - Hornsby - Kuratko (1994); Timmons (1999); Bowler (1995); Wickham (1998); Nieman - Bennet (2002); Timmons - Spinelli (2003); Driver - Wood -Segal - Herrington (2001)
Growth orientation	Timmons (1999)

Goal orientation and obsession towards opportunities	Timmons (1999)
Taking the initiative	Gerdes (1988); Goodman (1994); Maré (1996), Marx et al. (1998); Kreitner-Kinicki (1998); Timmons (1999)
Taking personal responsibility	Burch (1986); Siropolis (1990); Marx et al. (1998); Timmons (1999)
Awareness	Timmons (1999)
Look for and use feedback	Timmons (1999)
Internal control attitude	Burch (1986); Rotter (1966, 1990); Timmons (1999)
Tolerance of stress and uncertainty	Bowler (1995); Zimmerer - Scarborough (1998), Nieman - Bennet (2002); Timmons - Spinelli (2003)
Taking calculated risk	McClelland (1967); Schackle (1979); Burch (1986); Siropolis (1990); Casson (1991); Kuratko - Hodgetts (2004); Mariani (1994); Wickham (1998); Zimmerer - Scarborough (1998); Timmons (1999); Driver et al. (2001)
Low demand for power and status	Timmons (1999)
Integrity and reliability	Timmons (1999)
Determination	Bygrave (1997), Timmons (1999)
Patience	Timmons (1999)
Ability to deal with failure	Gerdes (1988); Burns - Dewhurst (1989); Kuratko - Hodgetts (2004); Goodman (1994); Timmons (1999)
Team building, motivation	Timmons (1999)
Business networking ability	Baumbach - Lawyer (1979); Lambris (1995); North (1995); Van Vuuren (1997), Timmons (1999)
Lots of energy, health and emotional stability	McClelland (1967); Burns - Dewhurst (1989); Casson (1991); Goodman (1994); Mariani (1994); Marx et al. (1998); Timmons - Spinelli (2003)
High intelligence	Timmons (1999)
Vision	Bygrave (1997), Timmons (1999)
Hard working ability	McClelland (1967); Burch (1986); Burns - Dewhurst (1989); Casson (1991); Goodman (1994); Mariani (1994); Bygrave (1997); Marx et al. (1998); Timmons - Spinelli (2003)

Commitment to quality	Burch (1986)
Reward-orientedness	Burch (1986)
Orientedness towards excellence	Burch (1986)
Optimism	Burch (1986)
Profit orientation	Burch (1986)
Executor - implements decisions	Bygrave (1997)
Self-sacrifice	Bygrave (1997)
Obsession	Bygrave (1997)
Attention to details	Bygrave (1997)
Autonomy, independence	Bygrave (1997)
Self-trust	Goodman (1994); Zimmerer - Scarborough (1998); Kreitner-Kinicki (1998); Driver et al. (2001); Nieman - Bennet (2002); Timmons - Spinelli (2003)
Flexibility towards changes	Timmons (1999)
Business, legal knowledge	Van Vuuren (1997); Marx et al. (1998); Zimmerer - Scarborough (1998)
Financial skills	Burch (1986); Burns - Dewhurst (1993)
Operational, technical skills; professional experience	Hatten (1997); Hellriegel - Jackson - Slocum (1999)
Good communication skills	Marx et al. (1998)

**Table 7: Entrepreneurial traits (Source: Lukovszki [2011] pp. 17-18)**

Csirté et al [2012] mapped the character of European entrepreneurs using the Schwartz value test based on the European Social Survey covering 29 European countries. According to the results of the study, the value system of the European entrepreneur differs from the value system of the rest of society. Independence and performance are important for the European entrepreneur, he or she is looking for exciting challenges instead of a safe life, is more hedonistic than the rest of society, is egocentric, attaches little value to equal opportunities and respect for opinions different from his or her own (Csirté et al. [2012] page 10).

In his study, Bogáth [2012] highlights that the entrepreneurial attitude motivates the individual to start, operate and develop a business. A kind of positive attitude towards being an entrepreneur, which is a prerequisite for entrepreneurial spirit and willingness, as such a factor plays an important role in business development.

Lukovszki [2011] studied the entrepreneurial qualities leading to success. Based on the 19 success factors examined in the 200-item sample with a questionnaire survey, he formed the following 6 factors using factor analysis (Lukovszki [2011] p. 25):

Factor 1: risk management and instinct,

Factor 2: team building skills,

Factor 3: recognition of opportunities,

Factor 4: communication and relationship building skills,

Factor 5: innovation capacity and risk-taking,

Factor 6: decision - making skills.

He has also created typical entrepreneurial groups in the database with the help of cluster analysis, but unfortunately age as a variable was not included in the cluster analysis, so the valuable results of the research unfortunately do not expand the knowledge about young people becoming entrepreneurs.

Imreh-Tóth et al. [2013] conducted a survey among the students of the University of Szeged on the motivations, activity and role of the students in starting a business. Comparing their results with the data of the GEM and GUESSS researches, they came to the conclusion that the early-stage entrepreneurial activity exceeds the value for the entire Hungarian population, but, at the same time, about half as many find entrepreneurial careers attractive as their foreign counterparts. According to the experience of in-depth interviews with students who have already become entrepreneurs, ensuring the ability to issue invoices was an important motivation for becoming an entrepreneur in the case of all respondents. In addition, the responses revealed that the studies of the respondents did not really contribute to becoming an entrepreneur or running a business. Respondents rated their business as successful, as a reason for which they have identified the quality and viability of the specific idea, hard work and quality professional activity.

S. Gubik and Farkas [2016] examined the changes in the start-up ideas of Hungarian students using longitudinal data from the GUESSS survey (comparing the results of four surveys). Based on the results of 2013, the most attractive career path for students is corporate employment - 62.6%, followed by the public sector with 13%. Immediately after completing their studies, becoming an entrepreneur is less attractive, which changes significantly in the respondents' plans in the five years following graduation, when the proportion of those planning their own business is already 35.4%, mainly at the expense of small and medium-sized business and public sector employment

(S. Gubik - Farkas [2016] page 49). The most important changes in entrepreneurial intentions revealed by the authors between the years are the following (S. Gubik - Farkas [2016] pp. 50-53):

- entrepreneurial intentions have skyrocketed in 2008, followed by a drastic decline in 2013, cited by researchers as the financial crisis and the opinion-forming impact of the community. They point out that the social status of entrepreneurs is fundamentally low, so the community and higher education, which provides few support for becoming an entrepreneur, provide a moderate incentive for students starting a business.
- In the five years following graduation, entrepreneurial intention increases in all fields of study, but mostly students in business / economics fields plan to become entrepreneurs, followed by students in science fields.
- There is no significant difference in the development of entrepreneurial spirit by sex in different periods, the willingness of men to entrepreneurship exceeds that of women in each examined group.
- The family entrepreneurial background was an important positive influencing factor of entrepreneurial intentions in all data collection and its role has strengthened over the years.
- Over the years, the realization of dreams has come first among the career motives of becoming an entrepreneur. Change can be observed in the case of two motivational factors: independence in decisions moved from 7th to 2nd place, and challenges at work changed from 3rd to 8th place.

Hofmeister et al. [2016] examined the personality types of Hungarian small and medium-sized business managers using the MBTI scale. In the course of their work, they came to the conclusion that the managers of the examined companies are extroverted, with their cognitive side being dominant over the emotional, they rely on their plans when making their decisions, intuition and spontaneity are characteristic of only a few.

Lányi [2017] examined the personality of Hungarian medical and biotechnology startup entrepreneurs and concluded that an open, entrepreneurial personality and extroversion are essential for starting and operating these businesses. A high level of emotional stability and reliability are essential personality traits to achieve market success.

#### 4.3. ENTREPRENEURIAL FAMILY BACKGROUND AS A FACTOR AFFECTING TO BECOME ENTREPRENEURS

It affects the motivation of young people to start a business, whether they are related to entrepreneurs who can serve for them as a positive (S. Gubik - Farkas [2013]), while in some cases as a negative role model (Criaco et al. [2017]). One might think it is clear to young people from an entrepreneurial family to take over the baton from their parents. However, the succession of family businesses is a much more complex process, the study of which is gaining more and more importance in Hungarian business research (Csákné Filep-Szirmai [2006]), (Csákné-Filep [2015]), (Wieszt [2015]), (Heidrich et al. [2018]). Although young people with an entrepreneurial background have a higher propensity to start a business, this is typically not due to the intention to take over a family business, but to efforts to start a new business.

While the motivation for starting a business has a relatively wide elaboration in the literature, we have little knowledge about the factors influencing the career choices of later generations of family businesses. Using the GUESSS survey, Zellweger et al. [2011] examined the career choices of students with a family entrepreneurial background between starting their own business, leadership in a family business, and employee status in a non-family business. Multinomial logistic regression was applied on the ground of the theory of planned behavior. Based on their results, those intending to start a self-employed business and those planning to take over a family business did not show a significant difference in terms of perceived behavioral control. The evaluation of entrepreneurial self-efficacy of the students included in the study determined the order of preference of their career choices. The high entrepreneurial self-efficacy assessment predicted starting a self-employed business and then taking over the family business as the next choice, followed by working as an employee. The results also highlight that students who attach more importance to innovation are more likely to start a self-employed business than to take over a family business.

Sieger and Minola [2016] made the impact of family entrepreneurship background on young people's intention to start a business undergo a more in-depth analysis of. They found that the availability of funding sources for starting a new business among students with a family entrepreneurial background has a negative effect on entrepreneurial intentions. This negative effect is strengthened by family cohesion and weakened by self-

efficacy, while the involvement of family member (s) as founders has no significant effect.

A similar finding to the results of Sieger and Minola [2016] was reached by Edelman et al. [2016]. They have come to the conclusion that social capital of their family has a positive effect on young people's business start-up activities, while family financial capital is negatively associated with it. Family cohesion reinforces the impact of family social capital.

An interesting result is that while the research of Sieger and Minola [2016] appears to amplify the negative impact of family cohesion on the start-up activity of financial resources provided by the family business, the model of Edelman et al. [2016] enhances the positive impact of family capital derived from family business.

In a study of the entrepreneurial propensity of students with a family entrepreneurial background in the field of tourism and hospitality, Campopiano et al. [2016] found a positive relationship between family attachment, social capital, and environmentally conscious functioning and propensity to start a business. Their results apply specifically to students with a family entrepreneurial background in tourism and hospitality.

The impact of family entrepreneurial background on young people becoming entrepreneurs was examined in more depth by Criaco et al. [2017] on the ground of social comparison theory. It was highlighted that the family entrepreneurial background does not clearly make the entrepreneurial career attractive to successors. Parental entrepreneurial performance is crucial, making the family entrepreneurial background a double-edged sword. A successful pattern has a positive effect on both the desirability and feasibility of being an entrepreneur, while the effect of parents' poor entrepreneurial performance triggers the opposite.

The impact of entrepreneurial relationships and family entrepreneurial background on the motivation of young people to start a business was also examined in a domestic context. Among the motivations for starting a business, the GEM survey showed that those are more likely to start a business, who are close acquaintances with people who have started a business in the last 2 years, consider the economic environment favorable and believe to have the skills to start a business. Furthermore, entrepreneurs are seen as socially recognized, being an entrepreneur is seen as a real career choice, where successful people are recognized (Ács et al. [2004]).

The analysis of the 2011 Hungarian data of the GUESSS survey revealed that family entrepreneurship experiences have the greatest impact on young people's entrepreneurial intentions. Young people from an entrepreneurial family are more likely to become entrepreneurs themselves. Becoming an entrepreneur does not mean taking over the family business, the majority of students do not have such a plan, which is presumably based on the size of businesses (mostly micro-businesses) and the scope of activities (trade, construction, agriculture) (S. Gubik - Farkas [2013], S. Gubik [2013], [2014]). The effect of family entrepreneurial background in S. Gubik's regression model is so strong that in the case of keeping other variables under control, if those with no entrepreneurial experience had a family entrepreneurial background, the chance of the “Not planning to start a business” category to fall into the “Planning to start a business” category would increase by 96.2% (S. Gubik [2013]). Also, based on the 2011 GUESSS survey, Reisinger [2013] highlighted that 25.56% of the parents of Hungarian students surveyed are self-employed or entrepreneurs. 3% think about taking over the business immediately after graduation, and 3.8% five years after the graduation. The biggest hindering factor of takeover is the family business as a barrier to long-term career building.

In their survey, Hajós et al. [2016] came to a slightly different result from the experience of GUESSS on the role of the family in becoming an entrepreneur. They have found the supportive role of the family to be much more determinant among young people with tertiary education than the influence of an entrepreneur in the family.

The research findings presented are typically snapshots of young people's business start-up preferences. However, being a family entrepreneur is a long-term decision, so the real picture on whether young people from an entrepreneurial family will build their own business in the long run, take over the family business or take a completely different career path can be obtained only through longitudinal surveys.

#### 4.4. IMPACT OF FUNDING ON YOUNG PEOPLE BECOMING ENTREPRENEURS

Money is needed to implement an entrepreneurial idea. On page 283, Vecsenyi-Petheő [2017] identifies the following sources of financing available for start-ups:

- founder financing,
- 3F (family, fools, friends),



- business angels,
- venture capital / private equity investment,
- bank loan,
- lease,
- supplier loan,
- franchising,
- crowdfunding,
- non-reimbursable aid,
- customer financing.

The book of Béza et al. [2013] contains practical advice and guidelines for financing small businesses that are already operating. We have little knowledge about funding preferences for young entrepreneurs, as related research is typically targeted at young start-ups and are not broken down by the age of the founder. Crowdfunding is a fashionable form of financing for startup companies and as such is presumably an attractive alternative for young entrepreneurs.

In parts of the world, where startups thrive, crowdfunding is a widespread form of community funding to help start new businesses. Although this relatively new type of financing, where a large number of individuals and organizations help start a business project by investing small amounts through an Internet platform, is fashionable in developed countries, the scale of crowdfunding is far from that of other forms of financing (Bethlendi-Végh [2014]). Bethlendi and Végh [2014] provide an exhaustive overview of the international literature on crowdfunding (presenting its types, regulatory practices) and analyze the most popular crowdfunding sites. Assessing the Hungarian situation, they outline the requirements for a capital portal supporting crowdfunding and emphasize the importance of investor confidence.

Kuti and Bedő [2016] examined the *raison d'être* of crowdfunding embedded in the university entrepreneurial ecosystem at the University of Pécs. Their research examined, on the one hand, the affinity of students participating in entrepreneurial incubation programs and students outside the program, and, on the other hand, the opinions of university leaders and decision-makers present in the ecosystem. 84% of students surveyed believe that a crowdfunding platform would work within the university entrepreneurial ecosystem, yet only 16% would appear as funders on such a platform, showing that a lack of education and relevant knowledge on the topic results in reduced

willingness to invest. The main lessons of the interviews with university leaders on the topic are:

- The main obstacles to embedding crowdfunding in the university entrepreneurial ecosystem are the unattractive nature of the entrepreneurial lifestyle, the low level of risk-taking and social trust, and the moderate degree of entrepreneurial culture.
- Regulation related to business start-ups, development and closure appears to be a challenge.
- The role and availability of technology and capital is favorable.

In researching the practice of crowdfunding created in a university-centered business ecosystem, Kuti and Bedő [2018] concluded that support is also needed through curricular and extracurricular educational settings to ensure its effectiveness. The creation of an infrastructure for crowdfunding alone is not enough, the creation of culture, support from education and the presentation of exemplary student patterns are essential for success.

In his study on the financing of student businesses, Farkas [2010] points out that the entrepreneurial activity of Hungarian students does not lag behind their foreign counterparts, but there is a strong lag in the provision of services by higher education institutions that support the development of entrepreneurial skills more effectively than traditional forms of education. It presents the business development programs of the Széchenyi István University of Győr and sets up the “Soft source” and “Student spin-off” models as possible forms of starting student businesses. The following table compares the two models:

"Soft source"	"Student spin-off" model
Sponsor or tender	Business angel
There is no real risk	Real and own risk
One may run out of money in a short time	More planned financing
Knowledge is incomplete, difficult to obtain	Knowledge is incomplete but easier to obtain
Relationship network is looser	Relationships

**Table 8: "Soft source" and "Student spin-off" models (Source: Farkas [2010], p. 62)**

Insufficient financial resources are often mentioned among hindering factors to starting a business. The role of business angels and venture capitalists in launching startups is to provide funding for promising ideas. The underdevelopment and insufficiency of the venture capital market may justify the role of the state in the field. In Hungary, the Jeremie program was the first to create a framework for this. The justification of the state's role in

the venture capital market and the presentation of the Jeremie program are summarized in the study of Lovas - Rába [2013].

Bauer and Endrész [2018] examined the domestic trends of corporate dynamics and aggregate growth with the help of three databases (annual reports of double-entry companies of the database of the National Tax and Customs Administration, the corporate register of the Central Statistical Office and loan data from the Central Credit Information System). Their analysis covers the entire range of Hungarian entrepreneurs. Their main findings for young start-ups are that their share of aggregate output is low, but that they make a significant contribution to aggregate growth. Behind their dynamism lies their young age rather than their small size.

The amount of financial resources available to young people also affects their industry preferences. Knatko et al. [2015] examined the industry preferences of start-ups by taking into account the human and financial capital available to university students. Their studies have shown that the higher the level of education of young people, the more likely they are to start a business in a knowledge-intensive field, while young people with abundant financial resources tend to invest in capital-intensive sectors, but the trend is overshadowed by country-specific motives.

Arrighetti et al. [2016] examined the impact of the financial-economic crisis on young people's propensity to become entrepreneurs. Overall, the crisis did not affect the entrepreneurial spirit, but significantly hampered the start-up of new businesses. An important result is that in the case of forced start-ups, the negative effect only negatively affected the perceived probability of starting a business, while in the case of businesses based on the exploitation of an opportunity, it also had a negative effect on entrepreneurial intentions and the probability of starting a business.

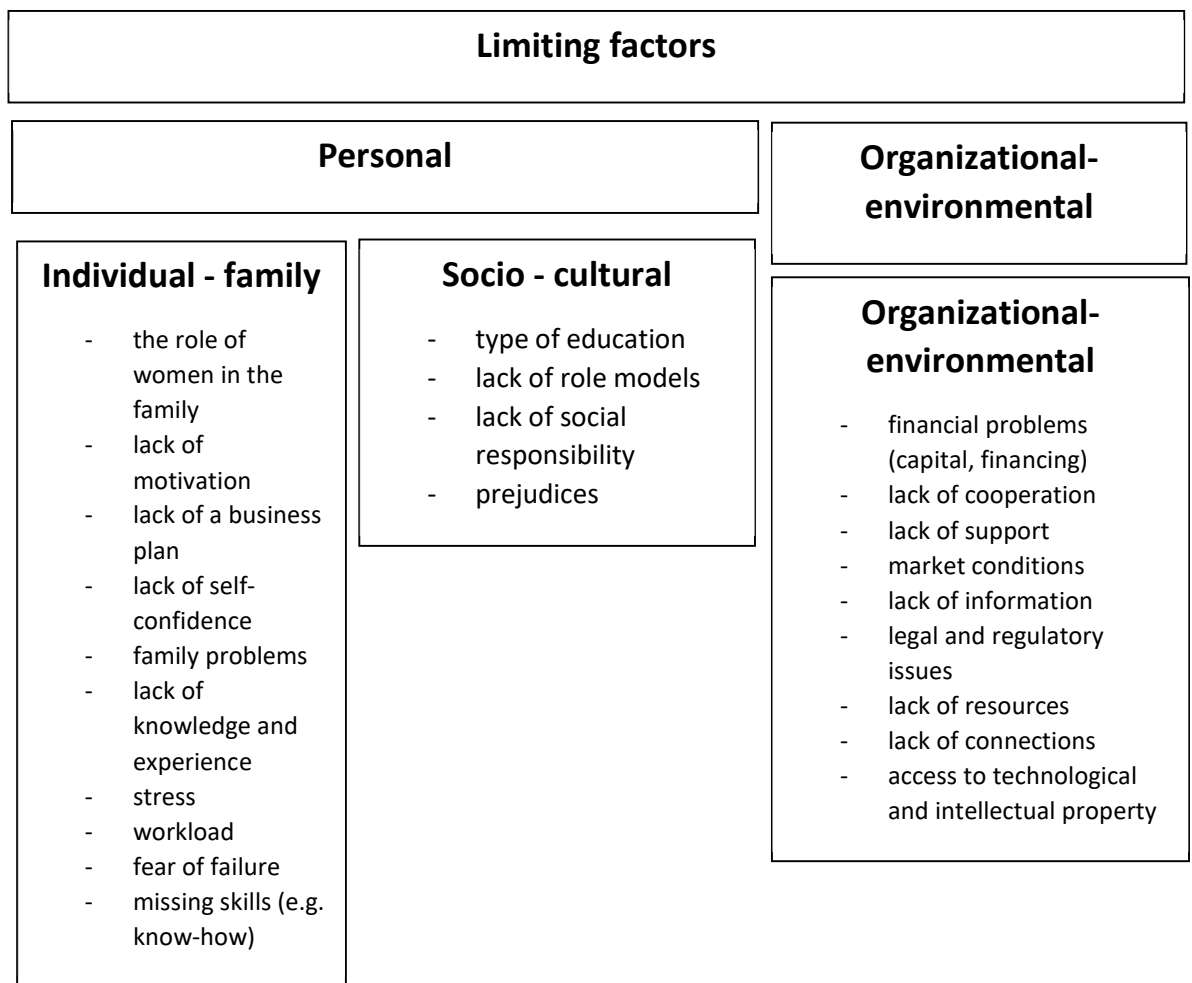
Béza et al. [2013] draw attention to the peculiarities of financing start-ups. They emphasize the importance of the pre-departure planning phase, which ideally precedes the establishment of the business. During the start-up, the costs of establishment and start-up must be taken into account (capital needed to provide fixed assets, amount of money needed to purchase current assets).

At the time of writing this dissertation, young people wishing to start a business in Hungary are in a favorable position, as many state-funded support programs also help start-ups financially. At the same time, the abundance of money typical of Hungarian startups also has negative effects. As shown by Kállay and Jáki [2019], in the 2007-2016 period of the Jeremie program, publicly supported venture capital funds had a crowding-

out effect on private investors, and deteriorating portfolio results suggest a softening of selection criteria.

#### 4.5. BARRIERS TO YOUNG PEOPLE BECOMING AN ENTREPRENEUR

A number of barriers to young people becoming entrepreneurs have been explored. Koltai and Szalka [2013] systematized the limiting factors of becoming an entrepreneur on the basis of the international literature. Factors were broken down into personal (including individual-family and socio-cultural) and organizational environmental groups. Individual-family limiting factors include the role of women in the family, lack of motivation, lack of a business plan, lack of self-confidence, family problems, lack of knowledge and experience, stress, workload, fear of failure and lack of skills. Among the effects of socio-cultural endowments are the type of education, the lack of role models, the lack of social responsibility and prejudices. The most common organizational-environmental barriers are financial problems, lack of cooperation, lack of support, market conditions, lack of information, legal and regulatory problems, lack of resources, and access to technological and intellectual property. Their results are illustrated in the following figure.



**Figure 14: Factors limiting to become an entrepreneur (Source: Koltai - Szalka [2013], p. 74, based on Greve - Salaf [2003]; Levent et al. [2003]; Kirkwood [2009]; Gorji - Rahimian [2011]; Niazkar - Arab-Moghaddam [2011])**

The Flash Eurobarometer survey highlighted that people of different sexes and social backgrounds become self-employed at a different likelihood. According to their survey, young, well-educated men with a family entrepreneurial background are most likely to become self-employed (European Commission [2009]).

A previous GEM survey of Hungary in 2004 yielded similar results to the Flash Eurobarometer survey. Men show a stronger entrepreneurial propensity, typically the male graduates belonging to the 25-34 age group, living in Budapest, in Southern Transdanubia and in Central Hungary showed the highest entrepreneurial propensity (Ács et al. [2004]).

One possible reason for women's lower entrepreneurial propensity was highlighted by Scheiner et al. [2008], who concluded from their survey in Germany that

women find barriers to becoming an entrepreneur much more problematic than men. Gimenez-Jimenez [2020] et al. also demonstrated a higher risk sensitivity of young female entrepreneurs.

Koltai and Szalka [2013] used data from the 2011 GUESSSS survey to examine the factors that help and inhibit female students from becoming entrepreneurs. Based on the processing of the international literature, they have distinguished economic factors (financial independence, contribution to the well-being of the community, exploitation of a business opportunity) and non-economic factors (reconciling work and family, family tradition, role modeling, social recognition, development, search for challenges, desire to prove, desire for independence, to be one's own boss).

Caro González et al. [2017] examined the impact of sex on entrepreneurial intentions among journalism students based on the theory of planned behavior. Their results are consistent with the correlation already revealed in previous research that men are more willing to become entrepreneurs than women. Journalism, as a profession that presupposes a basic entrepreneurial and self-employed propensity, does not modify the previously explored relation.

International research reveals that female entrepreneurs are more risk-averse, less persistent than their male counterparts, and the size of the businesses they start is smaller (Koltai - Szalka [2013]). The analyzes of Koltai and Szalka [2013] revealed that the motivation to become an entrepreneur among Hungarian female students is determined by four factors: innovation, independence and autonomy, self-esteem and family tradition. The biggest barrier to becoming an entrepreneur was considered to be the availability of financial resources and the least problem would be caused to them by too much workload when starting a business. The Flash Eurobarometer survey revealed the following barriers to becoming self-employed (European Commission [2009]):

- lack of financial resources to start a business,
- inadequate timing,
- inadequate timing due to unfavorable economic conditions (the Hungarian mentioning rate of 44% is the highest one),
- fear of failing,
- lack of regular income,
- loss of property,
- complex administrative processes,
- access to the necessary information is difficult.

Johann et al. [2008] classified the barriers to young people becoming entrepreneurs into the following three categories: internal environment, external environment, macroeconomic environment. The factors describing each category can be summarized in four factors: financial resources, economic conditions, individual risk-taking and individual commitment. The main result of their analyzes is that personal characteristics play the most decisive role in starting a business.

Koltai and Szalka [2013] identified two determinants among the factors most characteristic of hindering female students to start a business. The first shows the lack of appropriate personality traits: skills, knowledge, relationship capital. The second includes organizational-environmental factors such as the general unfavorable economic environment and financial-legal risks.

Based on the 2011 GUESSS survey, the lack of capital and the unfavorable economic environment in Hungary were identified as a barrier to young people becoming entrepreneurs, which is in line with international results (Petheő, [2013]). Buzás [2004] identified the following barriers to business start-ups among potential entrepreneurial researchers and already entrepreneurial researchers at the University of Szeged:

- fear of failure,
- placing the researcher's free lifestyle in front of business constraints,
- rejection of "forced developments" dictated by the business sphere,
- lack of management skills and business knowledge,
- lack of confidence in market valuation.

Compared to 2011, financing start-ups is likely to be less of a problem today due to the growing popularity of startups and the abundance of financing programs available.

Although the awakening of the startup culture (in which the Digital Welfare Program [2016] also plays a role) has significantly improved the perception of entrepreneurs in recent years, Szerb and Kocsis-Kisantal [2008] highlighted in the analysis of articles in two dailies in 2005, that in the media, the majority of news have shown a negative and an unfavorable presentation of an entrepreneur. According to a 2009 Flash Eurobarometer survey, entrepreneurs' perceptions of society at European level have improved, people believe they create value for society through the production of new products and services, and they also value their role in job creation. At the same time, there is a perception that entrepreneurs only strive to “line their own pockets” or “exploit

the work of others”, which opinion has increased markedly for Slovakia and Estonia between the 2007-2009 survey (European Commission [2009]). In encouraging young people to become entrepreneurs, it is important for them to come across attractive role models.

There are a number of factors that influence young people to become entrepreneurs. Most of the researchers examining the topic group the factors that appear as barriers and typically distinguish between internal (personal) and external factors, and identify their further breakdown and variations. Among the most important barriers identified in the literature is sex. Women have a lower entrepreneurial propensity, presumably influenced by their lower risk-taking attitudes and current or future family roles. The previous chapter of the dissertation examined in detail the qualities that are likely to motivate becoming an entrepreneur. In addition, the general business and economic environment has a prominent effect, the negative situation or purely negative perception of which is a serious impediment. The social perception of entrepreneurs is also a key factor in young people becoming entrepreneurs, it is important that the entrepreneurial lifestyle should be an attractive, socially accepted and recognized career model for them.



## 5. DESCRIPTION OF THE OWN RESEARCH

### 5.1. BACKGROUND TO THE RESEARCH

Prior to presenting the methodology of my research, the sample and the results of the analysis, I also consider it important to present my foundational work on conceptualization and the selection of the methodology.

I consider the conceptualization of the “entrepreneur” to be the most important step in the foundation of my research. Babbie [2003] “... calls the process of conceptualization in which we agree on the meaning of terms, and the result of which is called a concept.” (Babbie [2003], p. 139).

Hisrich and Peters [1991] reviewed the development of the concept of an entrepreneur (French word for relationship or mediator). Their results are listed in chronological order in the following table:

Date	Term
17th century	A person who bears the risk of profit (loss) under a fixed price contract with the state.
1725	Richard Cantillon - the person taking the risk is not the same as the person providing the capital.
1797	Beaudeau - a person who bears risk, plans, manages, organizes and owns assets.
1803	Jean Baptiste Say - has demarcated entrepreneurial profits from capital gains
1876	Francis Walker - has distinguished between those who provide money and share in its returns, and those who make a profit through their managerial skills.
1934	Joseph Schumpeter - the entrepreneur innovates and develops untested technologies.
1961	David McClelland - the entrepreneur is an energetic person, who undertakes moderate risks.
1964	Peter Drucker - the entrepreneur makes the most of the opportunities.
1975	Albert Shapero - the entrepreneur takes the initiative, organizes socio-economic mechanisms and takes the risk of failure.
1980	Karl Vesper - entrepreneurs are seen differently by economists, psychologists, businessmen and politicians.
1983	Gifford Pichot - the internal entrepreneur is an entrepreneur within an existing organization.
1985	Robert Hisrich - a business is the process of creating something new and valuable, in which the entrepreneur provides the necessary time and effort, assumes the expected financial, mental and social risk and receives the recognition of the material and personal satisfaction that results from the process.

**Table 9: Development of the theory of a business and the concept of an entrepreneur. (Source: created by the author based on Hisrich - Peters [1991])**

In his study, Madarász [2014] presents excerpts from the history of the concept, highlighting key elements of the entrepreneurial interpretation of each era.

Although the writings on the historical elaboration of the concept of a business / entrepreneur contain many interesting elements, in my research I consider the application of Vecsenyi's definition of an entrepreneur, which is much closer to me, used in education and fitting to the Hungarian way of thinking as justified. According to Vecsenyi's [2003] definition: "An entrepreneur is a person who recognizes a business opportunity and creates or transforms an organization, namely a business, to take advantage of it." (Vecsenyi [2003] p. 13.)

In addition to defining the concept of an entrepreneur, Vecsenyi distinguishes different types of entrepreneurs according to Gerber [1995]: the entrepreneur - entrepreneur, the manager - entrepreneur and the professional - entrepreneur. The traits of each type are summarized in the following table:

<b>Trait</b>	<b>Entrepreneur - entrepreneur</b>	<b>Manager - entrepreneur</b>	<b>Professional - entrepreneur</b>
Basic trait	Seer, dreamer	Practical	Tangible
Relationship to opportunities	He is the one who finds opportunities in chaos	He is the one who creates order and system from the idea	He is the one who does things
Relation to time	He lives in the future, never in the past, rarely in the present	He lives in the past	He is only interested in the present
Control	He wants to control people and events	He wants order around him	He wants to check the events
Continuation	He builds a house, and when he's done, he starts building a new one	He builds a house and lives in it for the rest of his life	He builds a house and constantly beautifies it
Basic nature	Dreaming	Being nervous	Regurgitating

**Table 10: Entrepreneur types according to Gerber (Source: Vecsenyi [2003] page 32)**

Based on entrepreneurial and change skills and business and operational experience, Vecsenyi [2003] distinguished four basic types of businesses: gazelles, ants, tigers, and dinosaurs. The basic types are illustrated in the following figure:

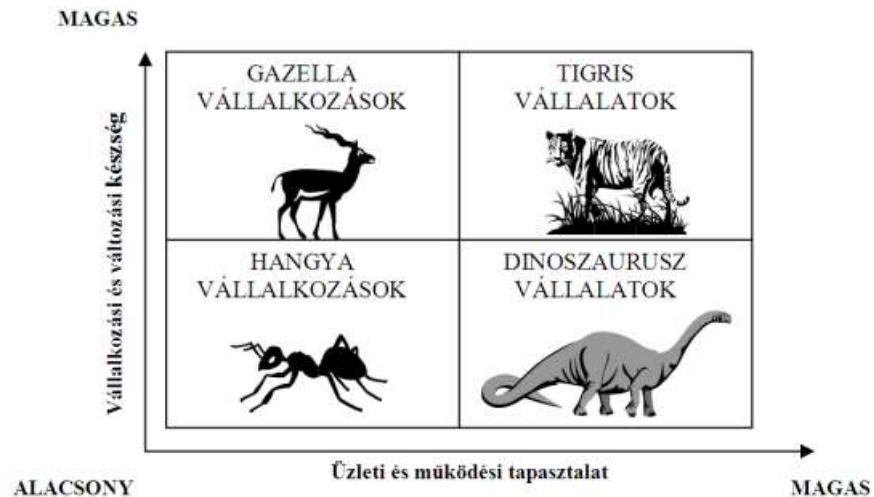


Figure 15: The four basic types of businesses (Source: Vecsenyi [2003] p. 54)

Translate:

HIGH
Gazelle businesses
Tiger businesses
Ant businesses
Dinosaur businesses
Entrepreneurial and change skills
LOW
Business and operational experience
HIGH

Gazelles are dynamically evolving businesses. They typically start small, but think big from the start. Their growth is double the industry growth, which makes them vulnerable. Tigers are large entrepreneurial corporations with a history of at least fifteen years that preserve their entrepreneurial organization and spirit. Dinosaurs are traditional large corporations whose development has stalled, characterized by declining growth rates and profitability. Their organization is rigid, hierarchical, and does not support innovation (Vecsenyi [2003]).

Ant businesses are characterized by little experience and a limited willingness to change. Their main strategy is usually to keep the company small and easy to operate. Vecsenyi [2003] classifies ants into four types based on their strategic orientation:

- ant maintaining the status quo (fights for survival, keeps pace with development and market needs),
- an antelope on a growth trajectory (trying to become a gazelle-type organization, the owners recognize the growth potential of the company),
- harvesting ant (the company is sold as a going concern),
- liquidating ant (sale of the company 's marketable assets).

My research will focus primarily on ant businesses, which are basically minimal in growth, usually established for a sustaining and non-selling purpose, and strive to generate enough income for the livelihoods of those involved in the business (Vecsenyi [2003]). Businesses that start as ants do not necessarily remain ants forever, over time they may even become outstanding unicorns based on their sales volume and growth potential.

Vecsenyi and Petheő [2017] call unicorn companies that are very rare in the world, capable of global innovation, grow exponentially, are global market leaders and have outstanding assets. Gazelles are companies that enter the market with innovative solutions and produce growth rates well above average. Bulldog companies develop their products and services to adapt to the market environment, and are characterized by prudent growth above the industry average. The ant business is playing for survival, rejecting any change. The following figure illustrates the representation of unicorns, gazelles, bulldogs and ants by time and sales volume.

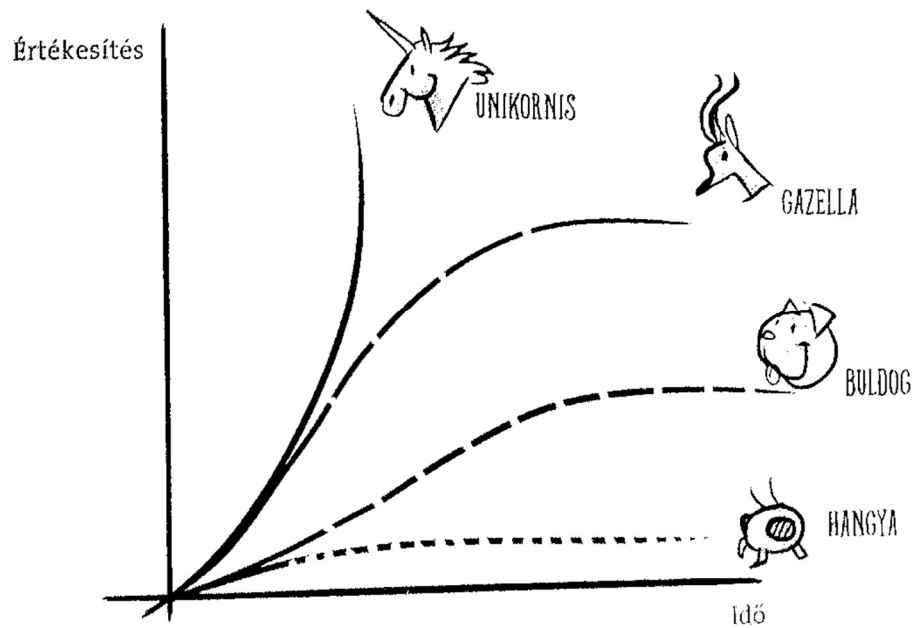


Figure 16: Growth paths (Source: Vecsenyi - Petheő [2017] page 355)

Translate:

Sales
Unicorn
Gazelle
Bulldog
Ant
Time

The research problem examined in both the domestic and international literature is the low rate of young people becoming entrepreneurs. In the course of my doctoral research, my aim is to examine among Hungarian young people who have already become entrepreneurs what were the motivating and hindering factors that influenced their decision in choosing an entrepreneurial career path.

The research question I examined: In the case of young people who have already become entrepreneurs, what motivating and inhibiting factors of becoming an entrepreneur can be identified?

In the literature review chapter of my dissertation, I have collected the factors that have a positive and negative effect on young people becoming entrepreneurs. GUESSS longitudinal research, which aims to examine the entrepreneurial intentions of students in

higher education, has a prominent role in the scientifically demanding mapping of the topic. Although the international weight and importance of the program is indisputable, the fact that it focuses exclusively on young people studying in higher education is a limiting factor in terms of its results, its focus does not extend to young people with a profession. However, according to the research of Berde and Scharle [2004] in Hungary, 87.35% of self-employed and sole proprietors and 74.66% of owners of joint ventures do not have a higher education degree. Furthermore, the GUESSS survey examines entrepreneurial intentions and, in addition to its data enabling to extract the proportion of young people who become entrepreneurs during their studies, its results relate to students' future ideas, the research does not provide an answer to the actual proportion of students in higher education who started a business immediately after graduation or within five years after graduation. Thus, the survey also does not provide an answer either to the question, as to whether based on the retrospective assessment of young people who have already become entrepreneurs, what were the factors that motivated and that hindered them from making their decision to become an entrepreneur.

In my doctoral research, my aim is to explore an area not covered by GUESSS, thus contributing new results to the already extensive amount of knowledge about young people becoming entrepreneurs.

I consider it important to strive to include in the sample young people with mixed (primary, vocational, tertiary) educational backgrounds.

Irrespective of education, I would like to assess the perception of young people who are already entrepreneurs in terms of the motivating and hindering factors of their becoming entrepreneurs.

In order to select the appropriate research approach, I collected 32 relevant domestic and international research on the topic and the methodologies used in their implementation. The results are given in the following table:

<b>No.</b>	<b>Date</b>	<b>Author</b>	<b>Periodical literature</b>	<b>Methodology</b>
1	2018	S. Gubik, A. - Farkas, Sz. — Kása, R.	Economic Review	Structural equations
2	2013	S. Gubik, A. - Farkas, Sz.	Budapest Management Review	Descriptive statistics
3	2013	S. Gubik	Budapest Management Review	Factor analysis, multinomial logistic regression
4	2013	Szerb, L. – Lukovszki, L.	Budapest Management Review	Multinomial logistic regression, cluster analysis
5	2013	Reisinger, A.	Budapest Management Review	Descriptive statistics
6	2013	Imreh-Tóth, M - Bajmócy, Z. - Imreh, Sz	Budapest Management Review	Descriptive statistics, based on a questionnaire survey and in-depth interviews
7	2013	Petheő, A.	Budapest Management Review	Descriptive statistics
8	2013	Koltai, J. - Szalka, É.	Budapest Management Review	Factor analysis, cluster analysis
9	2016	S. Gubik, A. - Farkas, Sz.	Budapest Management Review	Descriptive statistics, correlation calculation, binomial logistic regression
10	2016	Varga et al.	Civic Review	Focus group
11	2008	Szerb, L. - Kocsis-Kisantal, O.	Economic Review	Frequency statistics and content analysis
12	2004	Buzás, N.	Publications of the Faculty of Economics of SZTE	Interview
13	2008	Scheiner et al.	Journal of Asia Entrepreneurship and Sustainability	T-test, linear regression
14	2017	Morris et al.	European Journal of International Management	Hierarchical regression calculation
15	2015	Shrinkova et al.	European Management Journal	OLS regression model
16	2016b	S. Gubik, A. - Farkas, Sz.	Entrepreneurial Business and Economics Review	Correlation calculation

17	2016	Bergmann et al.	Small Business Economics	Multilevel binary logistic regression
18	2016	Sieger P., - Minola T.	Journal of Small Business Management	Logistic regression
19	2016	Edelman et al.	Journal of Business Venturing	Poisson regression
20	2017a	Holienka et al.	Central European Business Review	Logistic regression
21	2017	Ciraco et al.	Small Business Economics	Linear regression
22	2017	Henley et al.	International Journal of Entrepreneurial Behavior & Research	Structural equations
23	2017	Gelaidan, H. M - Abdullateef, AO	Journal of Small Business and Enterprise Development	Structural equations
24	2017	Nasip et al.	Education + Training	Least squares method
25	2015	Susanj et al.	Management: Journal of Contemporary Management Issues	Structural equations
26	2013	Dinis et al.	<a href="#">Psychological characteristics and entrepreneurial intentions among secondary students</a>	Structural equations
27	2012	Sesen, H.	Education + Training	Correlation calculation, regression calculation
28	2016	Arrighetti et al.	International Journal of Entrepreneurial Behavior & Research	Regression calculation
29	2014	Nyock et al.	Small Business Economics	Chi-square test
30	2018	Nabi et al.	Studies in Higher Education	In-depth interviews
31	2019	Nowinski, W. - Haddoud, MY	Journal of Business Research	Regression calculation
32	2019	Bazzy et al.	International Journal of Entrepreneurial Behavior & Research	Hierarchical regression



**Table 11: Methodology used in research examining young people becoming entrepreneurs. (Source: created by the author)**

An analysis of the research methodology reveals that the quantitative approach dominates in the study of the topic, only 4 of the 32 researches I examined used wholly or partly qualitative tools.

Qualitative, in-depth interview methods would even be suitable for examining my research question, but in order to rely on and compare with previous research results, I intend to use a quantitative approach in my doctoral research.

## 5.2. RESEARCH QUESTION AND RESEARCH METHODOLOGY

In the course of my research work, I aimed to examine the following research question: "In the case of young people who have already become entrepreneurs, what motivating and inhibiting factors of becoming an entrepreneur can be identified?"

In advance, I have formulated the following hypotheses:

- H1: The financial advantages of entrepreneurship have a stimulating effect on young people becoming entrepreneurs.
- H2: The family entrepreneurial background has a positive effect on young people becoming entrepreneurs.
- H3: The performance of the enterprise judged as insufficient has a hindering effect on the entrepreneurial motivation of young people participating or not participating in business start-up or startup competitions.
- H4: Businesses of young women and men have different characteristics.
- H5: Entrepreneurial competitions and programs are attended by businesses based in different types of settlements in the same proportion.

I considered it important to conduct the research with the involvement of young people who had already become entrepreneurs. As I mentioned earlier, the GUESSS survey, which looks back on a long history, provides valuable information on how young people become entrepreneurs, but entrepreneurship is not a prerequisite for being included in the sample. In my opinion, the opinions of young people who are planning to start a business and just play around with the idea of being an entrepreneur can be very different from those who have really become entrepreneurs.

The population I want to study are young Hungarians who have become entrepreneurs. I considered entrepreneurs to be young at the age of forty years old or below. Determining who is considered as young can be done according to a number of criteria. I believed that entrepreneurs under the age of 40 can still credibly recall the circumstances, motivations and fears of starting their own business. Furthermore, I considered that giving a lower age limit from this would have significantly shifted the sample toward Generation Z.

For reasons of cost savings and practicality, I conducted the survey online, which proved to be a convenient form of response for young people familiar with the digital world. My acquaintances and colleagues in touch with young entrepreneurs helped me to promote the completion of the questionnaire. In addition, I shared the questionnaire with Facebook groups of young entrepreneurs and encouraged them to complete it using a Facebook ad. In the invitation to complete the questionnaire, I encouraged entrepreneurs under the age of 40 to participate in the research. The query took place between April 26, 2021 and May 13, 2021. During the period open for completion, 264 responses were received.

In order to be as representative as possible, I tried to reach people of my target group with the questionnaire through as many channels as possible. On the one hand, I asked the leaders of the larger communities in the sector to send the questionnaire to the young entrepreneurs linked to them by email. Thus, the questionnaire was sent to the e-mail list of the Spin-Off Club, young people having started a business within the framework of GINOP-5.2.3-16 - Youth Entrepreneurship and GINOP-5.1.9 - Encouraging Jobseekers and Young People to Entrepreneurship, to members of the College of Young Entrepreneurs of the Hungarian Chamber of Commerce and Industry and mentored young people of the Design Terminal and Demola.

Furthermore, I made the questionnaire available on paid ads on Facebook (see the photo of the ads in the appendix) with the following targeting parameters:

- Location - lives here: Hungary
- Age: 16-40
- People who meet the following criteria: Interests: Small Business Owners, Self-employed or business owner, Behaviors: small business owner, Employers: entrepreneur, Position: Owner, business manager; Managing director, owner; Self-employed; Company Manager / Owner

With this targeting setting, the potential reach was 60,000 people, according to Facebook. (This number is an estimate of how many people will meet the target audience set for one's ad.) Of these 60,000 young entrepreneurs potentially available on Facebook, the ad reached 16,232 people through the Spin-Off Club page during the ad campaign, generating the opening of 88 questionnaires<sup>6</sup>, while the ad reached 18,936 people from the target audience through the Corvinus Startup Corner page, which generated the opening of 186 questionnaires. Unfortunately, there was no data provided by Facebook on the overlaps between the two groups from people in the target group, so I estimate that roughly one-third of the 60,000 young entrepreneurs available on Facebook met the call at least once and had the opportunity to complete the questionnaire.

The latest data of the CSO show the number of operating businesses in 2018, which is 776,779<sup>7</sup>. Unfortunately, no statistics are available on how many of these have owners under the age of 40. Available research data refer only to the generational classification of the owners of businesses founded in a given year: *“Generation X, born between 1965 and 1980, continuously maintains its leading role among Hungarian businesses, in fact carrying the company world on their shoulders for 20 years. (...) The results are somewhat surprising because they reveal that there is a painful lack of young business founders in the Hungarian economy. 54 percent of Hungarian companies were founded by the those belonging to Generation X, now aged 38-53 - emerging from the analysis that examined the age composition of founders in companies founded in 1997, 2007, and 2017 every 10 years. (...) The entrepreneurial spirit of Xers is already well visible on the 1997 data, even though the members of this generation were at most 32 years old at the time, yet 45 percent of the companies founded at that time were already registered by them. Their entrepreneurial spirit has been unbroken ever since, they have registered 52 percent of the companies founded in 2007 and 51 percent of those founded in 2017, says Richárd Pertics. Even though, in the meanwhile, an entirely new generation has grown up and entered entrepreneurial age, Generation Y, who account for the founding of 31 percent of the companies in 2017, far fewer than the Xs of their time.”*<sup>8</sup>

Based on these data, I can only make an approximate estimate for entrepreneurs under the age of 40, which can range from 150,000 to 250,000. Through the email and

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<sup>6</sup>The Facebook data only gives the number of clicks on the link to the questionnaire, but unfortunately there is no data on how many people actually filled in the questionnaire after that.

<sup>7</sup>Source: [https://www.ksh.hu/docs/eng/xstadat/xstadat\\_eves/i\\_gvd011.html](https://www.ksh.hu/docs/eng/xstadat/xstadat_eves/i_gvd011.html)

<sup>8</sup>Source: <https://forbes.hu/uzlet/hol-vagytok-y-generacios-vallalkozok/>

Facebook campaigns, I estimate that my questionnaire reached a total of roughly 20-25 thousand young entrepreneurs, so at least 10% of the entire population had the opportunity to complete it. The actual 243 responses from the target group represent a completion rate of roughly 1%.

Based on all this, the sample can represent the basic population well, only the voluntariness of the filling could bring bias into the data. Probably those who showed a higher willingness to fill were positive about their own entrepreneurial existence.

The questionnaire included mainly closed-ended, multiple-choice and scalable questions. In order to get to know the motivations and opinions of the young people more deeply, the survey also included some open questions. (The questionnaire is included in the appendix.)

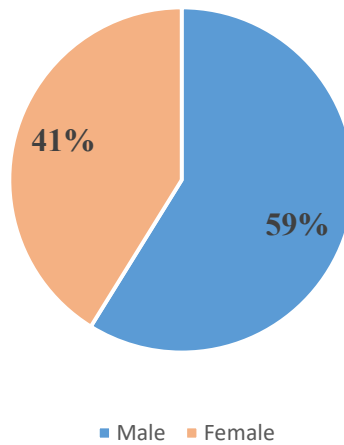
I have examined the quantitative database formed as a result of the data collection with the tools of univariate descriptive statistics, via principal component analysis and cross-tabulation analysis. I used SPSS and Excel to perform the analyzes.

### 5.3. PRESENTATION OF THE SAMPLE

My aim was to have the questionnaire examining the factors that motivate and inhibit young people from becoming entrepreneurs completed by young people owning a business. Demographically, the definition of youth shows a diverse picture. In order to achieve the goals of my research, I set the limit of young age at 40 years. With my work, I wanted to provide a comprehensive picture of the motivations of young people to start a business and I considered that if I gave a lower age limit than this, it would have significantly shifted the sample towards Generation Z.

In order to check the correctness of the age determination, I examined at what age the respondents started entrepreneurship. The mean value is 26.5 years, the median 27 years, and the mode 25 years. 34.1% of the entrepreneurs in the sample started their first business after the age of 29. Based on the age data on starting a business, I consider it justified to apply the age limit of 40 years, as the respondents belonging to this age group can still provide credible information about the circumstances of starting their business. Furthermore, applying a lower age limit would have unreasonably shifted the sample toward Generation Z and thus we would have lost valuable information about Generation Y's motivations to start a business.

I first refined the responses by age, removing respondents older than 40 years from the database for analysis. The number of available respondents thus decreased to 243. Further analyzes were performed on the basis of a database of entrepreneurs aged 40 and under that was narrowed in this way. In order to increase the reliability of the results from further analyzes, I consider it necessary to present the basic characteristics of the sample.



**Figure 17: Sex distribution of the respondents in the sample (Source: created by the author)**

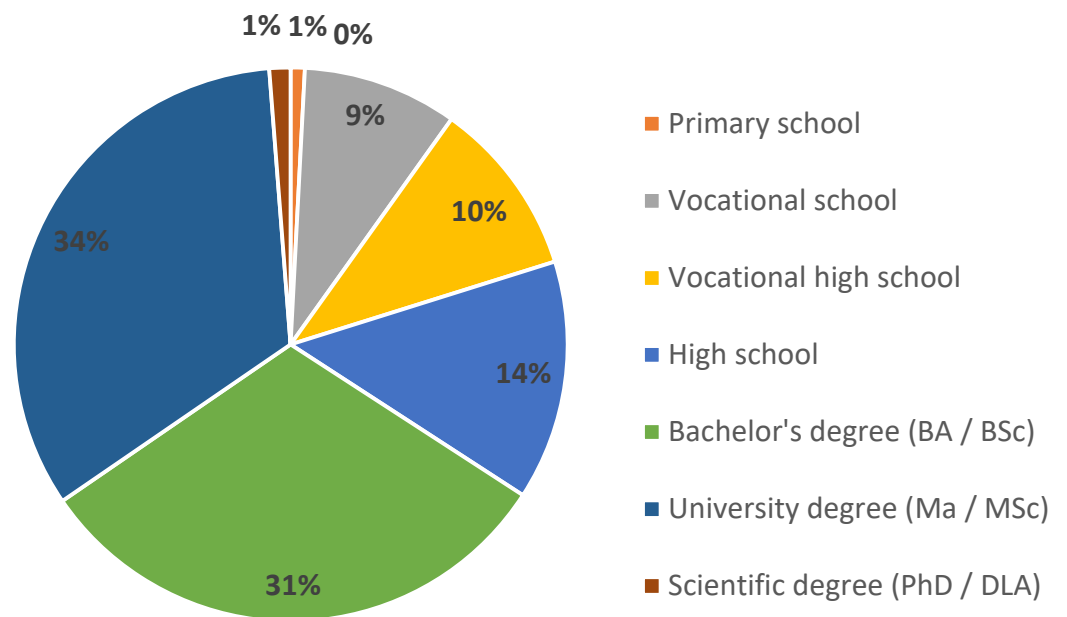
The proportion of women in the sample is 41%, while the proportion of male respondents is 59%. The sample also shows a sufficiently heterogeneous distribution according to age:

Birth year	Frequency	%
1981	12	4.9
1982	18	7.4
1983	12	4.9
1984	16	6.6
1985	17	7.0
1986	21	8.6
1987	25	10.3
1988	20	8.2
1989	17	7.0
1990	6	2.5
1991	10	4.1
1992	9	3.7
1993	10	4.1
1994	13	5.3
1995	12	4.9
1996	9	3.7
1997	4	1.6

1998	3	1.2
1999	5	2.1
2000	3	1.2
2001	1	0.4
<b>Total</b>	<b>243</b>	<b>100.0</b>

**Table 12: Distribution of the sampled respondents by year of birth (Source: created by the author)**

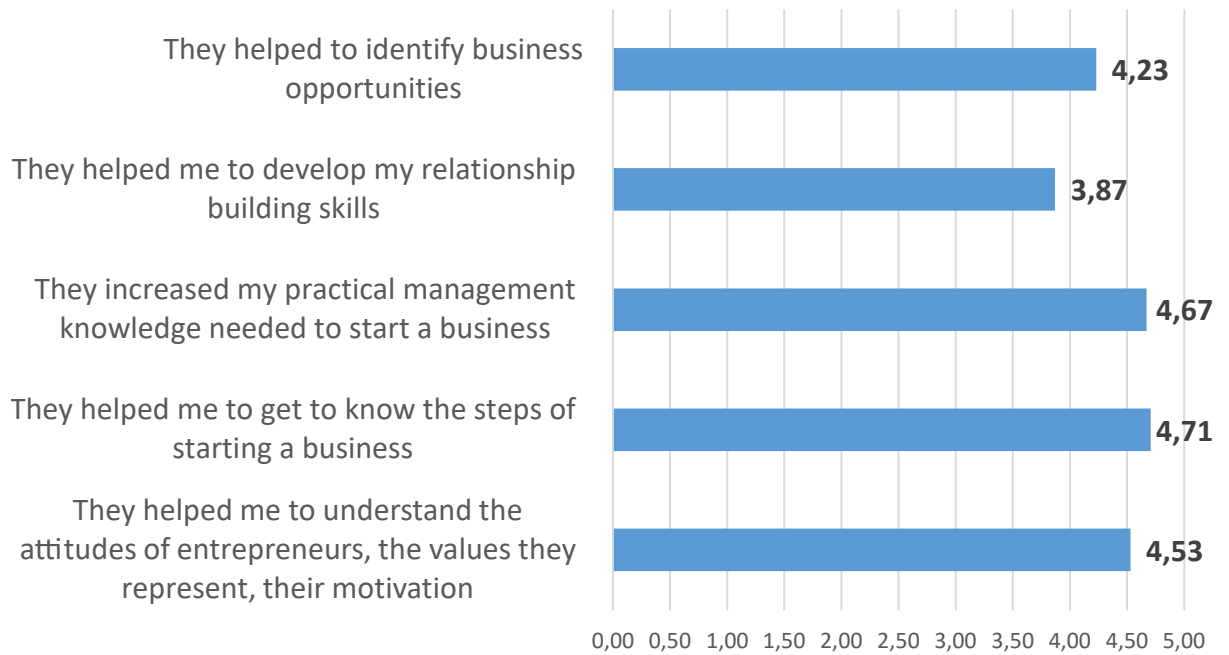
Among the respondents, a high proportion (65.8%) are those with higher education, but according to my preliminary plans, those with lower education were also included in the sample. The distribution by education is illustrated in the following figure.



**Figure 18: Distribution of respondents by education (N = 243), (Source: created by the author)**

A result related to the topic of education and studies is that 53.5% of the respondents participated in a course, program or training that teaches entrepreneurial knowledge.

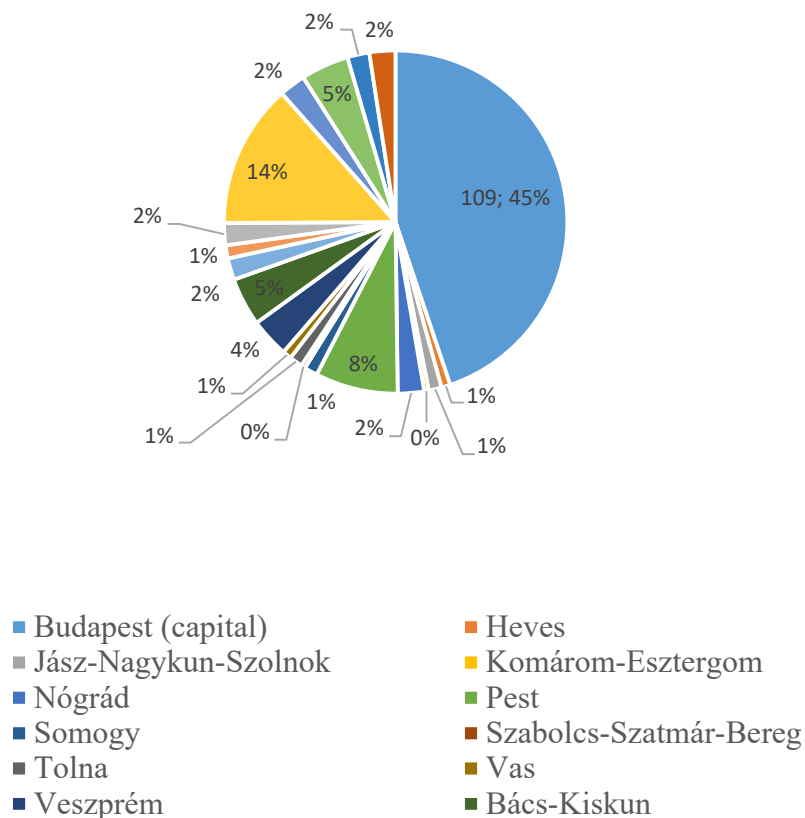
The following figure illustrates the average of the respondents' responses, that, according to their assessment, on a scale of 1 to 7, how the programs and courses helped them in terms of each factor.



**Figure 19: Evaluation of educational programs (N = 130), (Source: created by the author)**

I asked young people who filled in the questionnaire to assess on a scale of 1 to 7 (1 not at all, 7 very much), to what extent the courses, programs or trainings teaching entrepreneurship have helped them. The programs provided them the most support in explaining the steps to start a business. Respondents also favored the transfer of practical management knowledge needed to start a business via education and believed that the programs helped to understand the attitudes of entrepreneurs, the values they represent and their motivation. The trainings provided less help in identifying business opportunities and respondents rated their usefulness in developing their relationship building skills as mediocre.

My important requirement towards the sample was to show sufficient variability in terms of geographical distribution as well. The sample shows the following regional standard deviation:



**Figure 20: County distribution of the respondents in the sample (Source: created by the author)**

The businesses included in the sample employed an average of 5.77 people, and the median and mode of employment was both 1 person. The analyzes carried out on the basis of the sample provide useful information, especially on micro-businesses owned by young people.

The responding young people are committed to being an entrepreneur, with 87.2% imagining themselves still as an entrepreneur in five years. 64.6% plan to work on their current business, 20.6% are already planning a next business. The number of people who plan to run their family business or a bought, taken over business in the future is negligible.



<b>Description</b>	<b>Capita</b>	<b>%</b>
In my current business.	157	64.6
In my next business.	50	20.6
In my family's business.	1	0.4
In a business I bought / took over.	4	1.6
As an employee in a small business (company with 1-49 employees)	3	1.2
As an employee in a medium-sized business (company with 50-249 employees)	3	1.2
As an employee in a large company (company with more than 250 employees)	10	4.1
I will be a civil servant.	2	0.8
Other	13	5.3
<b>Total</b>	<b>243</b>	<b>100</b>

**Table 13: Respondents' 5-year career plans (N = 243), (Source: created by the author)**

The commitment of entrepreneurial young people to an entrepreneurial lifestyle can be distorted by my research due to the methodology of data collection, as the sample included young people who have a running business, and does not include those whose company has proven unsuccessful, went bankrupt or ceased to exist.

In the course of the research, I also looked for the answer to the question that according to young people who have become entrepreneurs, what are the three personality traits that helped them become an entrepreneur. The word cloud from the responses is illustrated in the following figure.



Translate:

The most frequently mentioned qualities are perseverance (86 mentions), diligence (22 mentions), creativity (20 mentions) and confidence (14 mentions) as the traits most conducive to becoming an entrepreneur at a young age. Young people's self-esteem shows little overlap with the results of Nadisp et al. [2017], who, when examining the relationship between the psychological traits of Malaysian university students and their willingness to become entrepreneurs, came to the conclusion that innovation, self-confidence, risk-taking, the desire to succeed, and tolerance for insecurity are personal qualities that lead young people to become entrepreneurs. Differences in results may be due to different methodologies used in the surveys, but also to cultural differences.

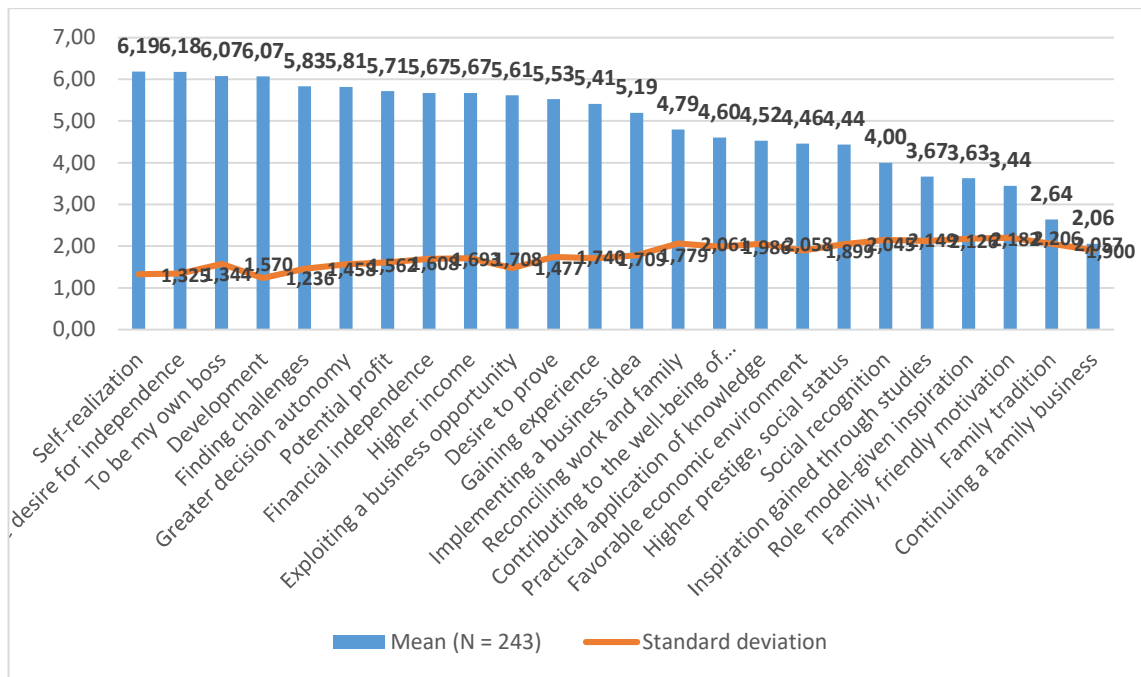
#### 5.4. RESEARCH RESULTS

In the course of my research work, my main goal was to identify and analyze in depth the factors that motivate and hinder young people to become entrepreneurs. What motivates young people to choose an entrepreneurial career and what factors deter them from starting a business.

In the analysis of the answers received to the questionnaire, the logical guideline was provided by the previously formulated hypotheses presented earlier. In addition to the examination of the individual hypotheses, the related curiosities and research results of interest were presented.

##### 5.4.1. Motivating factor to become an entrepreneur

In order to examine the motivation of young people to start a business and the stimulating factors, the factors identified during the research of the domestic and international literature were included in the questionnaire and the respondents were asked to rate on a scale of 1-7 how much the given component affected them. Figure 22 illustrates the mean and standard deviation values for the factors that motivate to become entrepreneurs.



**Figure 22: Mean and standard deviation of the factors influencing becoming an entrepreneur**  
(Source: created by the author)

Examining the totality of the respondents, it can be read from the figure that self-realization, the desire for independence, to be my own boss and development are very strong motivating factors among young people. Searching for challenges, greater decision autonomy, potential profits, financial independence, higher income, exploiting a business opportunity, desire to prove, gaining experience, and implementing a business idea also have a significant impact. Reconciling work and family, contributing to the well-being of the community, putting knowledge into practice, a favorable economic environment, higher prestige, social status and social recognition play a less important role. The lowest means are those for inspiration gained through studies, inspiration from role models, motivation from family or friends, family tradition, and continuing a family business. In addition to the means, the standard deviation of the answers is also shown in the figure. It can be observed that the standard deviation is lower in the case of factors with high means, which are considered equally important by the respondents. High standard deviations belong to factors of rather medium and low means, where there are significant differences between certain groups of respondents.

In order to take a deeper look at the factors that stimulate young people to become entrepreneurs, I resorted to the use of data reduction methods. My choice fell on principal component analysis, which “transforms a set of variables into a smaller number of new

variable sets than the original one by means of a linear transformation” (Székelyi - Barna [2005] p. 19).

My goal was to condense the many variables available to me into a manageable number of well-understandable principal components that can be used to shed light on the deeper relationships hidden in the sample. In the principal component analysis, I did not aim to include all the factors included in the questionnaire in the analysis, as, as the analysis of means and standard deviations showed, the questionnaire included a number of factors that significantly influenced the entrepreneurial intentions of the majority of respondents, and also such that were not generally of paramount importance. I sought to have the principal components compress information that could be used to uncover deeper reports behind the sample means.

In the principal component analysis, I included the following factors that help young people to become entrepreneurs: financial independence, family tradition, development, search for challenges, desire to prove, higher income, potential profit, continuation of a family business, motivation from family or friends, exploiting a business opportunity.

The results of the KMO and Bartlett's test are illustrated in the following table:

<b>KMO and Bartlett's Test</b>			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		of	0.722
Bartlett's Test of Sphericity	Approx.	842.067	
	Chi-Square		
	df	45	
	Sig.	0.000	

**Table 14: KMO and Bartlett's test results (Source: created by the author)**

Based on the value of 0.722, the variables are sufficiently suitable for principal component analysis (Sajtos - Mitev [2007]). (The correlation matrix associated with the analysis is included in the Appendix.)

The communalities developed as follows:

<b>Communalities</b>		
	Initial	Extraction
Financial independence	1.000	0.606

Family tradition	1.000	0.742
Development	1.000	0.711
Finding challenges	1.000	0.811
Desire to prove	1.000	0.598
Higher income	1.000	0.788
Potential profit	1.000	0.729
Continuing a family business	1.000	0.741
Motivation from family, friends	1.000	0.538
Exploiting a business opportunity	1.000	0.459
Extraction Method: Principal Component Analysis.		

**Table 15: Communalities (Source: created by the author)**

The main components that outline during the analysis and the magnitude of the variance they explain are illustrated in the following table:

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative %
1	3.272	32.72	32.72	3.272	32.72	32.72
2	1.874	18.74	51.46	1.874	18.74	51.46
3	1.578	15.776	67.236	1.578	15.776	67.236
4	0.714	7.142	74.378			
5	0.632	6.319	80.697			
6	0.559	5.592	86.289			
7	0.48	4.8	91.089			
8	0.361	3.607	94.695			
9	0.307	3.069	97.764			
10	0.224	2.236	100			
Extraction Method: Principal Component Analysis.						

**Table 16: Explained variance (Source: created by the author)**

The resulting three main components explain 67.236% of the variance, which can be considered a good proportion.

The component matrix was formed as follows:

<b>Component Matrix<sup>a</sup></b>			
	Component		
	Financial advantages	Family values	Intrinsic motivation
Financial independence	0.590	-0.199	-0.467
Family tradition	0.402	0.762	0.012
Development	0.613	-0.196	0.545
Finding challenges	0.651	-0.109	0.612
Desire to prove	0.615	-0.018	0.468
Higher income	0.687	-0.185	-0.530
Potential profit	0.730	-0.218	-0.386
Continuing a family business	0.313	0.782	-0.176
Motivation from family, friends	0.234	0.694	0.030
Exploiting a business opportunity	0.651	-0.165	-0.086
Extraction Method: Principal Component Analysis.			
a. 3 components extracted.			

**Table 17: Component matrix (Source: created by the author)**

The first of the three principal components explains 32.72% of the total variance and contains information from each variable. It reflects most strongly (taking into account the other two main components) financial independence, higher income, potential profits and exploiting a business opportunities. The main component was entitled financial advantages, referring to its content, according to which it contains mainly business motivations arising from financial advantages. The second main component was entitled family values, in the formation of which family tradition, the continuation of family business, motivation from family and friends were included as factors stimulating business start-ups. The third principal component reflects development, the search for challenges, and the desire to prove, so I named the principal component intrinsic motivation.

In connection with the examination of the factors that stimulate young people to become entrepreneurs, it was possible to test two pre-formulated hypotheses.

***H1: The financial advantages of entrepreneurship have a stimulating effect on young people becoming entrepreneurs - accepted***

Merely from the average of the respondents' evaluations, it emerged that potential profits, financial independence, higher income and the exploitation of a business opportunity was very stimulating for the majority in starting a business. The principal component analysis confirmed the finding, with the first principal component, entitled “financial advantages,” is carrying exactly these variables most strongly. The obtained result is in line with the previous model of Koltai and Szalka [2013], in which the researchers divided the motivations to become an entrepreneur into economic and non-economic motivations based on the international literature, thus highlighting the role of economically achievable advantages in becoming an entrepreneur.

***H2: The family entrepreneurial background has a positive effect on young people becoming entrepreneurs - accepted***

Based on a survey of respondents' averages, family entrepreneurial background and family-related traditions have a moderate effect on young people becoming entrepreneurs. Even the higher standard deviations associated with the variables suggest that the sample is not homogeneous in this respect, these variables are less important for some respondents, while they are particularly important for other respondents. The second main component of the principal component analysis including the variables: family tradition, continuation of the family business, motivation from family and friends was entitled “family values”, which draws attention to the role of the family entrepreneurial background in becoming an entrepreneur.

Examining the means of the main component scores of “family values” in the light of whether the respondent's parents are entrepreneurs or not, there is a significant difference to be noticed. For young people from an entrepreneurial family, family values are a significant stimulus, while for young people without a family entrepreneurial background, family values are a higher stimulus. ( $F = 21,174$ ,  $\text{sig.} = 0.000$ , the related tables are included in the appendix.)

The results are in line with the results of S. Gubik and Farkas [2013] and Szerb and Lukovszki [2013], who showed that entrepreneurial experience gained in the family greatly influences ideas about entrepreneurship, young people with a family entrepreneurial background rather tend to become entrepreneurs.



During the research, I also asked the respondents in the form of an open-ended question in the questionnaire, to state what motivated them to start a business. In order to examine the reliability of the principal component analysis, I classified the given responses into categories corresponding to each principal component and examined whether additional patterns could be revealed in the remaining responses.

One respondent was able to provide more than one motivating factor, so I was able to collect 303 responses. I categorized the answers. In the first step, I tried to assign the statement to one of the stimulus factors identified during the principal component analysis, and I tried to create my own categories for the remaining ones.

There were 113 mentions related to the financial advantages of entrepreneurship and higher disposable income, which were also identified during the principal component analysis. It is common for young people to be motivated to 'become independent', to earn a 'higher income' than that can be earned in the world of employment.

*"I wanted an independent life during university, I saw more perspectives in it for material ascension."*

The idea that the salary available as an employee was not felt to be commensurate with the work invested has been mentioned several times.

*"Low employee salary, job expectations were out of balance with the salary (lots of work against a low salary)."*

I identified intrinsic motivation in 74 cases, where they typically refer to a challenge, the implementation of an idea and self-realization.

*"Officially, I started a business at the age of 26. I started organizing events at the age of 15, obviously via moonlighting. My motivation was the desire to create. If something concerned my environment, I wanted to be involved in it. Therefore, since when I was a teenager, everyone was partying so I wanted to organize parties. Since then, the apps have appeared and I have long wanted to bring my own digital service to market. "*

*"To create something really big..."*

*"Long-term inactiveness. I saw that others had plans, but they did not dare to start their realization (due to various excuses), and I wanted to stand out, not just be one among the complainants. To prove to myself and my environment that I am capable of it. My business also has a social perspective, so it also motivated me to be able to create a better future via it. "*

Respondents referred to family values in 35 cases, among which, in addition to the inspiring effect of the role model from the family and the continuation of the family business, also the need to reconcile work and family life has appeared.

*"My father's success."*

*"Generational change, development of a family company into a group of companies, creation of new business lines."*

*"As a mother of three, it was no longer a challenge to go back to business administration, commute to my previous workplace, which means twice 20 km a day. Our family is engaged in winemaking, I have supplemented this with food and hospitality. I like to work with people, to give them good feelings. "*

*"I was looking for a flexible and creative job that could be reconciled with parenting and could be built on in the long run."*

I tried to group the statements that could not be assigned to the factors identified during the 78 principal components analysis, according to several aspects. During the grouping, it was difficult that the answers often referred to several interrelated factors along the concepts of independence, autonomy and freedom.

*"I wanted to be my own boss, to earn for myself, to live a free life."*

*"To build my own life and not one of someone else. To do every day what I love and to work with people I want to be with. "*

*"I wanted to escape from the narrow and rigid framework of employee work, I wanted a greater degree of freedom in terms of my schedule, the location of my work, and I wanted to achieve a more inspiring and efficient work organization."*

*"Bad experiences of being an employee in previous jobs."*

Respondents often listed together, in one sentence, factors referred to freedom, autonomy, and independence that together drove them toward entrepreneurship.

The following table summarizes the list of motivating factors and the number of mentions:

<b>Motivating factor</b>	<b>Is it included in the main component?</b>	<b>Number of mentions</b>
Financial advantages	yes	116
Intrinsic motivation	yes	74
Independence, autonomy, freedom	no	78
Family values	yes	35
<b>Total</b>		<b>303</b>

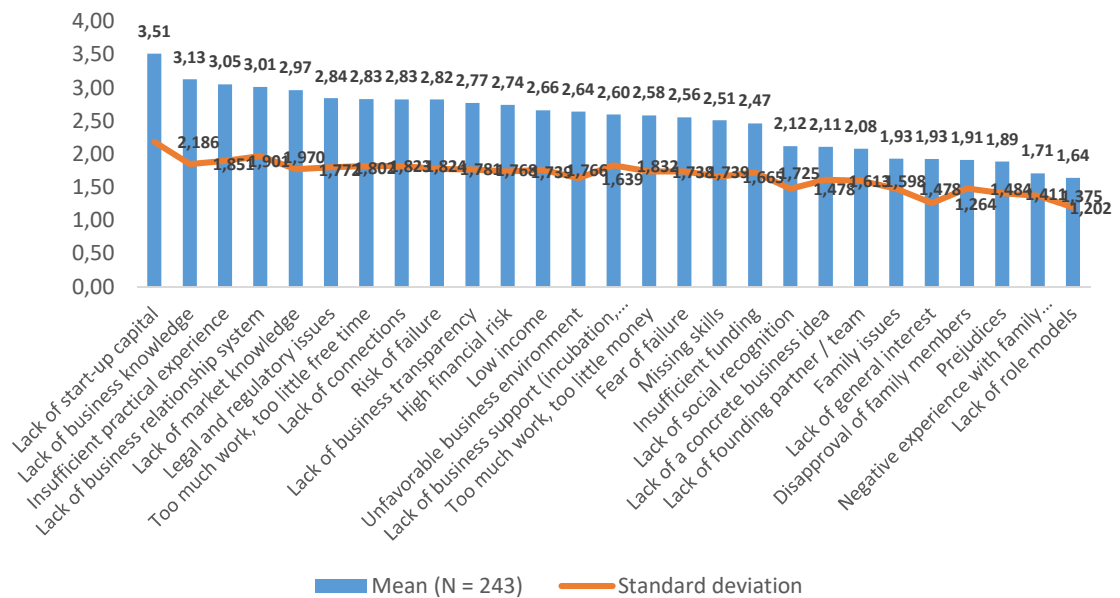
**Table 18: Categorization of factors motivating to become an entrepreneur (Source: created by the author)**

It can be seen from the table that the answers to the open-ended questions are in line with the factors identified in the principal component analysis. In the principal component analysis, the motivating factors independence, autonomy and freedom are not included, in the case of which we can conclude from the number of mentions that they have an impact on starting a business in general. It is important to note that during the scale evaluation, it were precisely these factors that appeared with a high mean score and low standard deviation, i.e., they were generally of great importance to the respondents. In my opinion, these factors do not usually appear as an independent motivation, but as an additional benefit from being an entrepreneur, which, when encountered with other stimulating factors, further strengthens the entrepreneurial intentions of young people. The examination of open questions opens a new direction of research; it would be worthwhile to examine with qualitative, in-depth interviews whether the factors of independence, autonomy and freedom that are not explored in the main component, but emerging for open questions, are, according to my assumption, a kind of additional benefit for young people to start a business, or have an independent motivating force.

While examining the factors that motivate young people to become entrepreneurs, it can be concluded that the role of financial benefits available via the entrepreneurship is important in young people becoming entrepreneurs, and in the case of young people with a family entrepreneurial background, the stimulating effect of the family example can be clearly demonstrated. Internal motivation and the values associated with entrepreneurship, such as independence, autonomy and freedom, are also important.

#### 5.4.2. Barriers to becoming an entrepreneur

Similar to the examination of the factors motivating young people to become entrepreneurs, I performed the analysis of the hindering factors. The mean and standard deviation values for the factors that hinder someone to become an entrepreneur are illustrated in Figure 23.



**Figure 23: Mean and standard deviation of the factors hindering becoming an entrepreneur**  
(Source: created by the author)

The mean of the totals given to the evaluation of the factors hindering the start-up of young people is 2.51, which shows that none of the factors proved to be as highly hindering during the evaluation on a scale of 1 to 7. Missing start-up capital has the highest mean as a hindering factor. In addition, the lack of business knowledge, insufficient practical experience and the lack of a business relationship system impose a major burden. As moderate hindering factors, with an average of less than 3 but more than 2, I could identify the following: lack of market knowledge, legal and regulatory issues, too much work, too little free time, lack of connections, risk of failure, lack of business transparency, high financial risk, low income, unfavorable business environment, lack of business support (incubation, counseling, mentoring), too much work for too little money, fear of failure, lack of skills, insufficient funding, lack of social recognition, lack of concrete business idea and lack of co-founder/team.

Interestingly, the lack of starting capital has been identified as the most significant hindering factor, but the financing of subsequent operations has only a moderately low impact. The lowest factors with an average below 2 are family issues, general lack of interest, disapproval of family members, prejudice, negative experience with family business and lack of role models.

The results of my survey are in line with the research targeted on youth and initiated by the European Commission [2011], where risk, complexity, lack of funding

sources and lack of entrepreneurial skills emerged as hindering factors. It is important to highlight, however, that the referenced survey was aimed at young people in general, not just young entrepreneurs.

58% of respondents said there are people who set an example in their entrepreneurial careers. The role model of the majority of the respondents comes from their family members, friends and co-workers. International role models of respondents who have named specific individuals: *Jimmy Iovine, Steve Jobs, Dr. Dre (Andre Young), Elon Musk, Richard Branson, Phil Knight, Sheryl Sandberg, Bryan Tracy, Donald Trump, Nick McKeown, Scott Shenker, Simeon Sinek, Wil Schroter, Ryan Rutan, Tim Ferriss, Carlo Catone, Charlie Wilson, Jordan Belfort, Wayne Huizenga, Ashton Kutcher, Gary Vaynerchuk, Henry Ford.*

The following persons were mentioned as Hungarian role models: *Kristóf Gál, Tibor Kulcsár, Ervin Szabó, Péter L. Molnár, Ádám Görög, Levente Balogh, György Gattyán, Dr. László Babai, Nikolett Forray, Gábor Wolf, Kristóf Gál, ByeAlex, Zolt Domán, Ádám Szendrei, Bertold Varga, Zolt Kalocsai, Norbert Cseh, Dániel Jellinek, Levente Balogh, László Török, Balázs Sebestyén, Károly Gerendai, Károly Kojla, Bojla Rudolf Semsei, Richárd Náray, Bence Barlay, Zoltán Kelényi, József Szakál, György Jaksity, Levente Biros, Péter Szabó, Emil Tonk, Gábor Prónay, Béla Markovich, Szabolcs Helfrich, Sándor Scheer.*

Similar to the study of stimulating factors, I reduced the available information by principal component analysis in the case of hindering factors as well. In this case, too, I did not aim to include all the factors included in the questionnaire in the analysis. I sought to have the principal components compress information that could be used to uncover deeper reports behind the sample means.

In the principal component analysis, I included the following hindering factors to young people becoming entrepreneurs: lack of business relationships, low income, too much work, too little money, too much work, too little free time, lack of business support (incubation, counseling, mentoring), family problems, lack of role models, prejudices, lack of relationships. The results of the KMO and Bartlett's test are illustrated in the following table:

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.799

Bartlett's Test of Sphericity	Approx. Chi-Square	1022.406
	df	36
	Sig.	0.000

**Table 19: KMO and Bartlett's test results (Source: created by the author)**

Based on the value of 0.799, the variables are sufficiently suitable for principal component analysis (Sajtos - Mitev [2007]). (The correlation matrix associated with the analysis is included in the Appendix.) The communalities developed as follows:

Communalities		
	Initial	Extraction
Lack of a business network system	1.000	0.823
Low income	1.000	0.682
Too much work, too little money	1.000	0.831
Too much work, not enough free time	1.000	0.758
Lack of business support (incubation, counseling, mentoring)	1.000	0.618
Family issues	1.000	0.687
Lack of role models	1.000	0.751
Prejudices	1.000	0.675
Lack of connections	1.000	0.849
Extraction Method: Principal Component Analysis.		

**Table 20: Communalities (Source: created by the author)**

The main components that outline during the analysis and the magnitude of the variance they explain are illustrated in the following table:

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative %
1	4.177	46.413	46.413	4.177	46.413	46.413
2	1.423	15.812	62.225	1.423	15.812	62.225
3	1.074	11.931	74.156	1.074	11.931	74.156
4	0.567	6.301	80.457			
5	0.481	5.348	85.805			
6	0.472	5.249	91.054			
7	0.388	4.310	95.364			
8	0.235	2.615	97.979			
9	0.182	2.021	100.000			
Extraction Method: Principal Component Analysis.						

**Table 21: Explained variance (Source: created by the author)**

The resulting three main components explain a very high proportion of the variance, 74.156%. The component matrix is shown in the following table:

Component Matrix <sup>a</sup>			
	Component		
	Lack of connections	Hindering factors related to the success of a business	Hindering factors related to external conditions
Lack of a business network system	0.685	-0.557	-0.209
Low income	0.730	0.271	-0.277
Too much work, too little money	0.729	0.453	-0.306
Too much work, not enough free time	0.647	0.504	-0.292
Lack of business support (incubation, counseling, mentoring)	0.690	-0.343	-0.158
Family issues	0.604	0.365	0.435
Lack of role models	0.680	-0.064	0.533
Prejudices	0.643	-0.009	0.511
Lack of connections	0.714	-0.570	-0.123

Extraction Method: Principal Component Analysis.
a. 3 components extracted.

**Table 22: Component matrix (Source: created by the author)**

The first principal component explains 46.41% of the variance, each of it carries the variable involved in the analysis strongly. The main component was called “lack of connections” because out of the hindering factors, the lack of a business relationship system, the lack of business support (incubation, counseling, mentoring) and the lack of connections appear in it the strongest. The second main component compresses “Hindering factors related to the success of a business” such as low income, too much work, too little money and too much work, too little free time. These types of hindering factors suggest it is not worth starting a business because the work and time invested does not pay off. The variables can be linked to the business, which does not have any perspectives or is not viable enough to produce the level of performance expected by young people. The third main component, which encompasses “Hindering factors related to external conditions” independent of entrepreneurial youth, such as family problems, lack of role models and prejudices. Variables are characterized by the fact that they appear as external endowments, which the respondents have no or only limited possibilities to change.

In recent years and today, young people have been inspired to start a business through a number of business start-up and startup competitions. In the course of my work, I examined whether there is a difference between young people participating in business start-up and startup competitions in terms of the assessment of hindering factors. In hypothesis H3, I assumed that the inhibitory effect of insufficient performance is independent of participation in a startup competition.

***H3: The performance of the business judged as insufficient has a hindering effect on the entrepreneurial motivation of young people participating or not participating in business start-up or startup competitions. - Rejected***

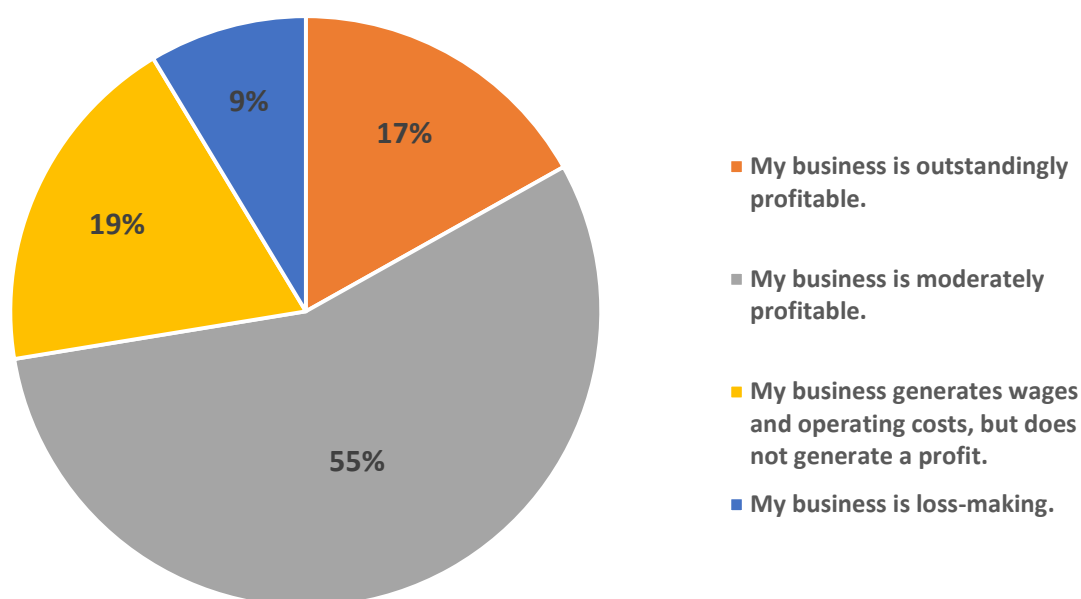
To test the hypothesis, I compared the main component score means of the hindering factors related to business success among young people participating in business start-up, startup competitions and those non-participating. The difference was found to be significant ( $F= 3.899$ ,  $Sig.= 0.049$ , the relevant tables are included in the appendix).



For young people who participated in business start-up, startup competitions, inadequate business performance appears to be a stronger hindering factor than for young people who did not participate in such a program, so I rejected hypothesis H3. One possible explanation for the result is that young people with high-paying skills in the labor market are the ones who decide to participate at business start-up, startup competitions, so their goal is to build a business that is significantly more profitable than their income reachable on the labor market, which option, if not met, is seen as a hindering factor to their entrepreneurial motivation.

In the questionnaire, I asked respondents to rate the profitability of their business, apart from the limitations due to the coronavirus epidemic. (Results may be distorted by the fact that those who are able to run their business successfully are more likely to complete the questionnaire.)

The distribution of the responses received is illustrated in the following figure:



**Figure 24: Distribution of the respondents' business according to profitability (N = 243) (Source: created by the author)**

The figure shows that more than half of the respondents have a moderately profitable business. For 19%, the business is capable to make up for wages and operating costs but

makes no profit. 17% consider their business to be exceptionally profitable and the proportion of loss-making businesses is 9%.

An interesting result related to the main component of relationships is that those respondents whose business is moderately profitable, capable to generate wages and operating costs but makes no profit or whose business is loss-making are those, according to whom the lack of relationships is seen more as a barrier to becoming an entrepreneur ( $F = 2,989$ ,  $Sig = 0.032$ , the related tables are given in the Appendix).

Using the main components developed during the analysis work, I did not find a significant difference between the factors motivating and hindering business start-ups in the case of sex.

Respondents were asked during the completion of the questionnaire to list the traits that were a barrier for them in becoming an entrepreneur. The word cloud from the responses is illustrated in the following figure.



Figure 25: Traits that hinder to become an entrepreneur (N = 243), (Source: created by the author, using <https://monkeylearn.com/>)

Translate:

laziness  
 uncertainty  
 lack of experience  
 lack of knowledge  
 lack of material  
 lack of confidence  
 practical experience of knowledge  
 I get tired of things soon  
 non-transparent services  
 inappropriate people  
 lack of acquired knowledge  
 lack of financial assistance  
 favorable career prospects  
 my young age  
 things I don't like  
 deficiencies in economic knowledge  
 tendency to overdo it  
 lack of business knowledge  
 I let myself be dissuaded  
 I can't fire anyone  
 I get annoyed by the idiots  
 fluctuations in intrinsic motivation  
 lack of legal knowledge  
 administrative systems  
 that I cannot succeed  
 clinging to certain things  
 to focus on a problem in a holistic way  
 inappropriate timing  
 adherence to security  
 it is more difficult to perform alone  
 leniency towards partners  
 human attitude

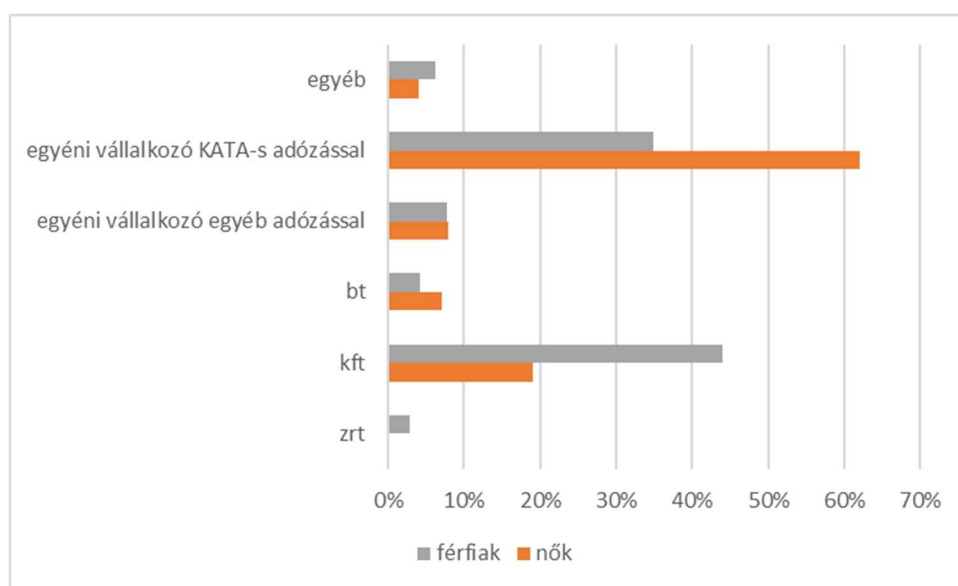
The most frequently mentioned hindering traits are laziness (16 mentions), uncertainty (15 mentions), lack of experience, knowledge (23 mentions in total).

#### 5.4.3. Businesses of young men and women

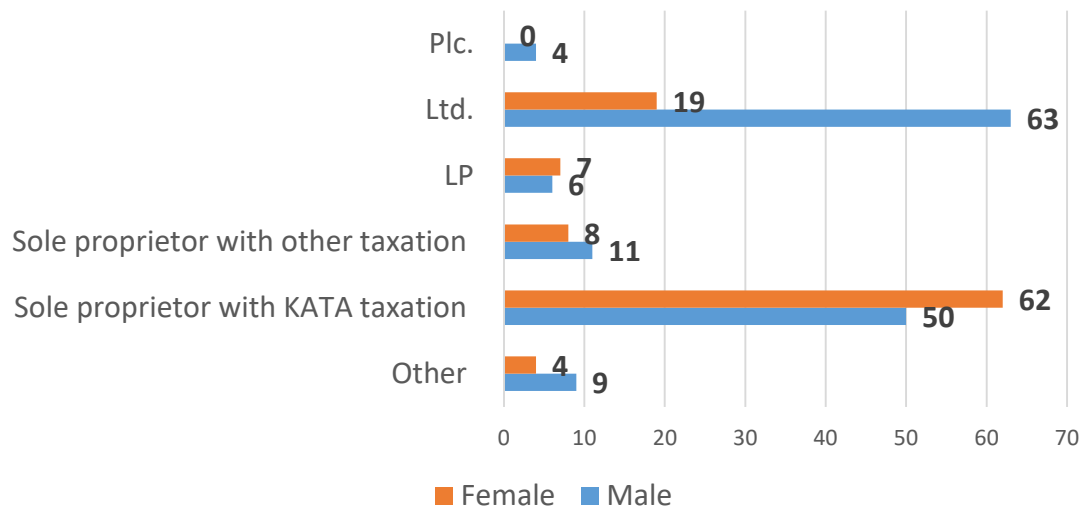
For the young entrepreneurs included in the sample, I assumed that the businesses of young women and men are different.

***H4: Businesses of young women and men have different characteristics. - Accepted***

The differences between the businesses of the young women and men in the sample were examined by cross-tabulation analysis. I found differences between the form of operation, ownership, co-owners and perceived effectiveness.



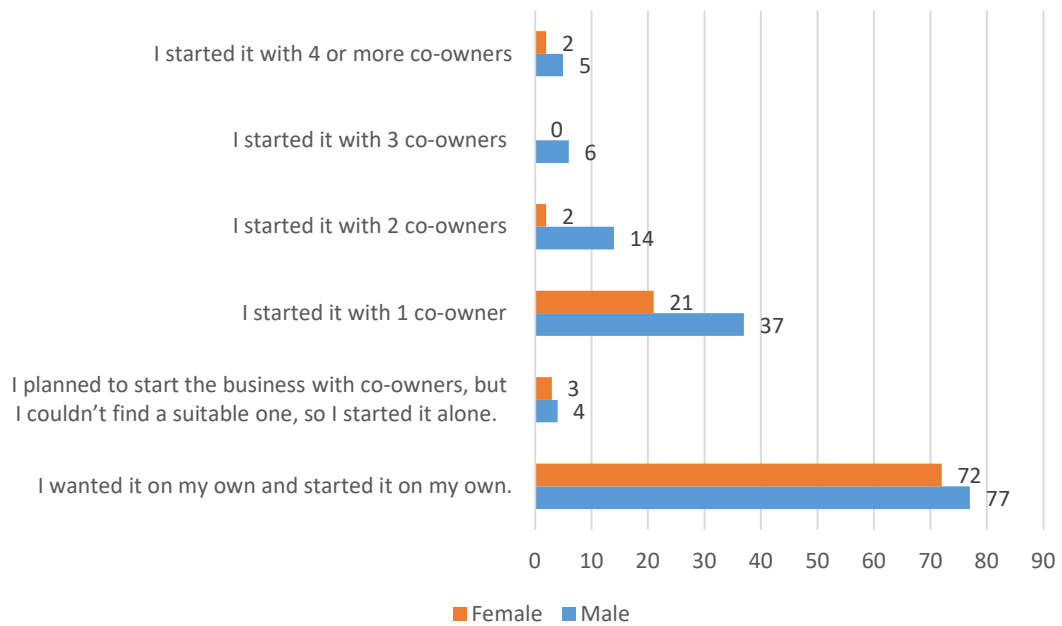
**Figure 26: Distribution of the form of operation of the business by women and men (N = 243)**  
(Source: created by the author)



It can be seen from the figure that the most popular forms of operation among young entrepreneurs are the sole proprietorship and the limited liability company. Cross-tabulation analysis ( $\chi^2 = 24.528$ ;  $df = 2$ ,  $p = 0.000$ ) showed a weak ( $\Phi = 0.318$ ,  $Sig. = 0.000$ ) significant difference between women and men in terms of form of function. Women are more likely to be self-employed with the taxation form KATA and are less likely to set up a limited liability company than men. (The relevant SPSS tables are included in the Appendix.)

Women's preference for the sole proprietorship is also reflected in the ownership structure, mainly due to the chosen form of operation, women are more likely to own 100% of their business, men are more likely to have less than 50% ownership ( $\chi^2 = 16.577$ ;  $df = 4$ ,  $p = 0.002$ ; the relevant SPSS tables are included in the Appendix).

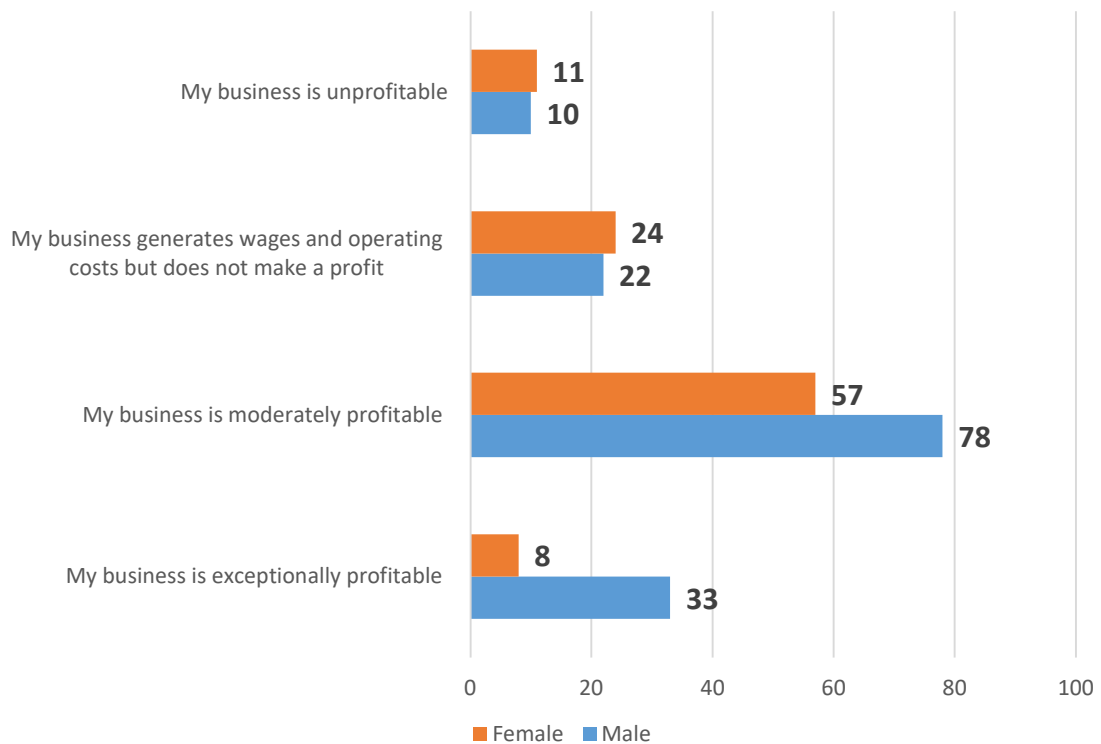
Examining how many co-owners young entrepreneurs have started their businesses with provides information on ownership preferences, the sex distribution of which is illustrated in the following figure.



**Figure 27: Number of co-owners by sex (N = 243) (Source: created by the author)**

It can be seen from the figure that, regardless of sex, the majority started a business alone or with the involvement of a co-owner. For both sexes, the number of respondents who planned to start a business with a co-owner but did not find a suitable partner is low. The difference between women and men is that women are more likely to want to start a business on their own and have implemented their plans accordingly, while men are more likely to launch a business with co-owners. Cross-tabulation analysis ( $\chi^2 = 13.834$ ;  $df = 5$ ,  $p = 0.017$ ) shows a weak significant relationship in terms of sex and co-owner preference ( $\Phi = 0.239$ ,  $Sig. = 0.017$ ). (The relevant SPSS tables are included in the Appendix.)

As outlined earlier, I also asked respondents how profitable they consider their business if they ignored the effects of the epidemic. Of the young entrepreneurs in the sample, 72% believe their business is outstandingly or moderately profitable. There is a difference in the profitability of women's and men's businesses.



**Figure 28: Judgment of women's and men's business in terms of profitability (capita), (N = 243), (Source: created by the author)**

Based on the results of the cross-sectional analysis ( $\chi^2 = 11.393$ ;  $df = 3$ ,  $p = 0.010$ ), it is more common for women to consider their business to be unprofitable or break-even, meaning that it generates wages and operating costs but does not generate a profit. The relationship can be considered weak ( $\Phi = 0.217$ ,  $Sig. = 0.010$ ). Firms founded by young men are characterized by high and moderate profitability. (The relevant SPSS tables are included in the Appendix.)

The result is in line with previous analyzes by Koltai and Szalka [2013], according to which female entrepreneurs are more risk-averse, less persistent than their male counterparts, and the size of the businesses they start is smaller.

I accepted hypothesis H4, according to which the businesses of young women and men have different characteristics, as during the analysis, I found a significant difference between the businesses of the sexes along a number of factors. Women are more likely to be self-employed with the taxation form KATA and are less likely to have set up a limited liability company than men. Women's preference for sole proprietorship is also reflected in ownership, with women being more likely to own 100% of their businesses, while men

being more likely to own even less than 50%. Another difference between women and men is that women are more likely to have an intention to start a business on their own and have implemented their plans accordingly, while men are more likely to have launched a business with co-owners. Women are more likely to see their business as unprofitable or break-even, meaning that it generates wages and operating costs but does not generate profit, while business founded by young men are characterized by high and moderate profitability.

#### 5.4.4. Participation in entrepreneurial competitions and programs

Due to the flexibility of young people and to the many programs (also) available online, I assumed that regardless of where the young people started a business, there is no significant difference in whether they participated in a startup competition or any business start-up or operation support program. I formulated my fifth hypothesis in connection with this.

***H5: Entrepreneurial competitions and programs are attended by businesses based in different types of settlements in the same proportion. - Rejected***

16% of the respondents in the sample participated in a startup competition and 28.4 % in a program supporting business start-ups and operations.

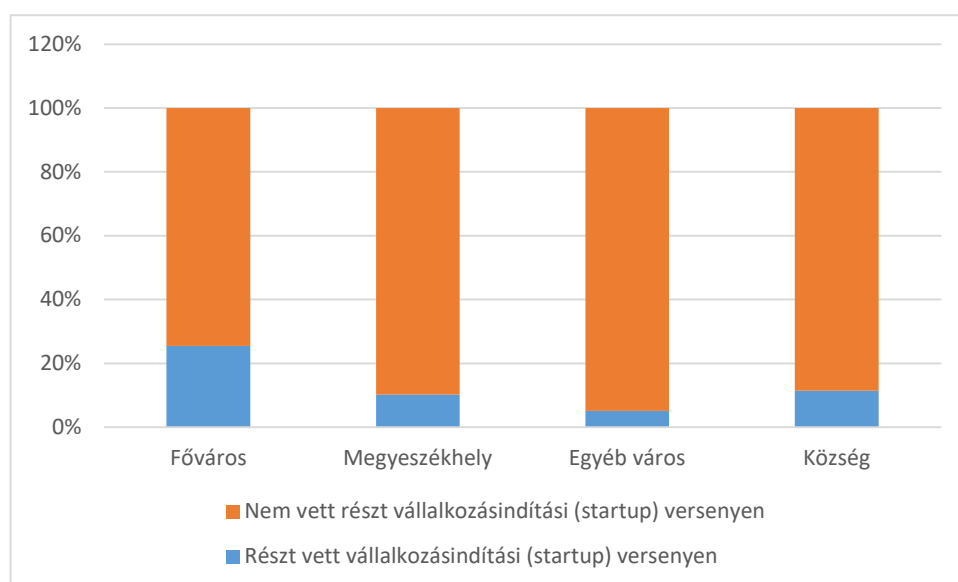
The business start-up competitions mentioned by the respondents are the following, when starting our first business: yes!, 2019-1.2.1-EGYETEMI-ÖKO-2019-00003 - From knowledge to business - Utilization of knowledge assets at the University of Miskolc tender, EIT Agrifood 2020 - AgriHoop, Győri hackathon, Hackathon in a box Lenovo Motivator Grand Prix, EIT-Climate Kick, Danube Cup, Kaposvár Agricultural Startup Idea Competition, Újbuda Student Startup Competition, Wolves Summit, Startup Network Unicorn Battles CEE, Women Startup Europe, CEE Lift Off, CEE Startup Competition, Startup Spring, Pioneers, Bankathon - Frankfurt, HowToWeb - Bucharest, BNP Paribas Hackathon - Berlin, Novathon powered by Intesa.

Most of the programs supporting the start-up and operation of businesses mentioned the “Becoming a Young Entrepreneur” program (30 mentions). In addition, they used subsidies to help the unemployed and jobseekers become entrepreneurs. Mention was made of programs of Demola, Startup Campus, The StartUp Nation V4 Startups Bootcamp, Desing Terminal, Google Accelerator, Inno Energy, DT-Botcamp,



K&H Incubator Program, GSEA, Startup Spotlight, UP Bootcamp, Calasanctius Training Program (MICE), EIT Digital Doctoral School of Innovation & Entrepreneurship, HSUP, IFEMPOWER, OFA and the SEED Foundation.

With regard to participation in the business start-up competition, there is a significant difference between the type of settlement of the business's registered office and participation.



**Figure 29: Participation in the startup competition by type of settlement (N = 243) (Source: created by the author)**

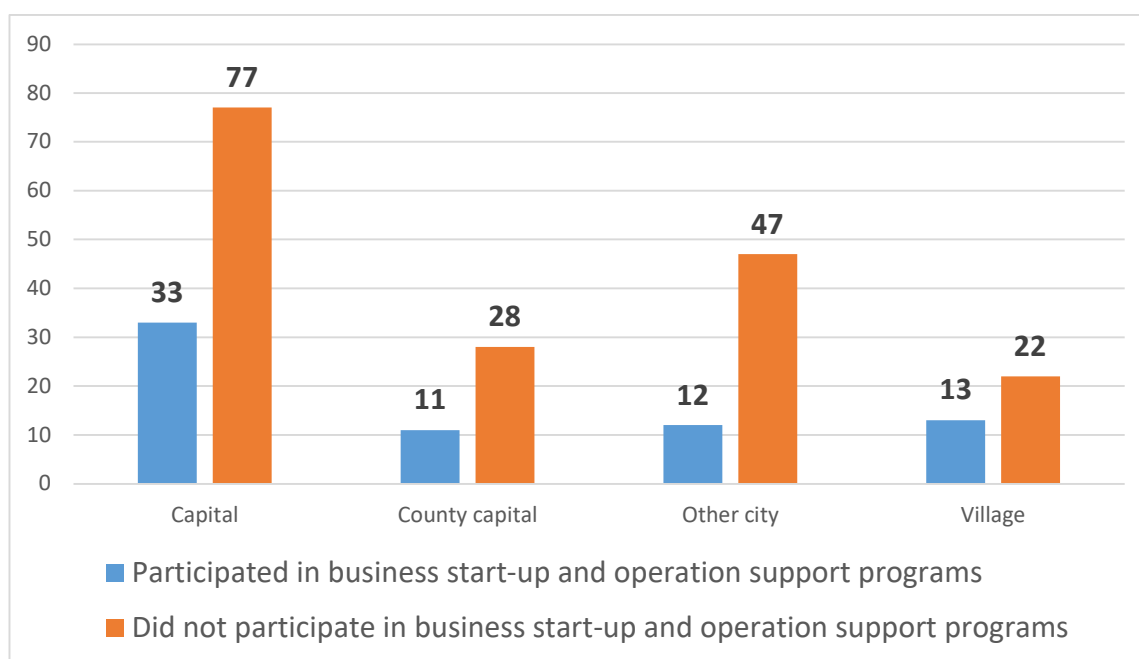
Translate:

Capital
County capital
Other city
Village
Did not participate in a startup competition
Participated in a startup competition

Based on the cross-tabulation analysis ( $\chi^2 = 14.012$ ;  $df = 3$ ,  $p = 0.003$ ), the type of settlement and the participation in the startup competition show a weak, significant ( $\Phi = 0.240$ ,  $Sig. = 0.003$ ) relationship. The dominance of the capital is emerging, the owners of businesses based in Budapest are more likely to have participated in startup

competitions than young people founding their business in county capitals, other cities and villages. (The relevant SPSS tables are included in the Appendix.)

In the case of the programs supporting the start-up and operation of businesses, there is no influencing effect of the type of settlement on participation. Crosstabulation analysis showed no significant difference ( $\chi^2 = 3.341$ ;  $df = 3$ ,  $p = 0.342$ ). (The relevant SPSS tables are included in the Appendix.)



**Figure 30: Participation in the program supporting the start-up and operation of businesses by type of settlement (N = 243), (Source: created by the author)**

Hypothesis H5, according to which there is no difference between the seat of young businesses and participation in entrepreneurial competitions and programs, was rejected. Although participation in start-up and operation support programs is not affected by the type of settlement, the dominance of the capital can be detected. The founders of Budapest-based businesses were more likely to take part in startup competitions than young people setting up companies in county capitals, other cities and villages.

#### 5.4.5. Conclusions and suggestions based on the author's own experience

Based on the literature processed in the dissertation, my own research results, 16 years of experience in university entrepreneurship education and non-university youth business development, I can formulate the following conclusions and suggestions for youth business development professionals and decision makers.

In order to maintain and increase the economic competitiveness of the country, it is an important task of the state to develop and disseminate the entrepreneurial attitude and the entrepreneurial culture. To this end, it is worth using a wide range of tools, among which, at the same time, the school education system has a key role to play. It is worthwhile to playfully present the different characteristics of the employment and entrepreneurial world in kindergarten pedagogical programs, and it is worthwhile to introduce these topics in primary schools as well, as it is an important goal that the widest possible strata of society have realistic information about entrepreneurs. Acquiring basic entrepreneurial knowledge, getting to know the world of entrepreneurs is also socially useful if the young person finally chooses an employee's career, as he or she will almost certainly still get in touch with entrepreneurs, for example as an administrator in a public administration or as an SME employee with the owner. And nowadays, people who come into contact with entrepreneurs but do not know the world of entrepreneurs are often characterized by resentment, envy and negative attitudes. Reducing this is an important social goal.

Compulsory pre-school, primary and possibly secondary school presentation of the employment and entrepreneurial carrier paths would in addition have an important, but little-discussed role. Namely, the confrontation of naive young people with the difficulties of an entrepreneurial carrier, who are unfit for entrepreneurship due to their skills. Thus, in addition to its stimulating role to be discussed, the education system should also undertake a deterrent role, helping to guide young people potentially fit and unfit for entrepreneurship on a separate career path in time! This is especially important because of Generation Z's attitude to seek new paths from time to time, as it can impose a socially significant loss if many young people, otherwise unfit to start their own businesses, are stumbling from one job to another, including periods of unemployment, clinging to their future belief in starting their own business, and thus cannot settle permanently as an employee. They can be helped in having successful careers if they are confronted early enough and strongly enough that it is not a realistic goal for them to start and run their own business successfully. The elaboration of the details of this early confrontation system is a highly responsible task that is currently unresolved.

Partly related to this suitability issue is the often-used, but in my view erroneous approach of supporting unemployed youth to become entrepreneurs in the first place. In my opinion, this is a wrong idea, because being an entrepreneur requires not less, but rather more competencies, more aptitude than finding employment. Because of this, young people who are truly long-term unemployed have little chance of starting a successful business. As I experienced as a recruiting professional in the Hungarian program supporting young people to become entrepreneurs, young people who have been working in the field for years had convincing, well-developed business ideas with realistic customer acquisition plans and good business relations, who, in order to be admitted to the program, proved to be temporarily unemployed on paper while actually moonlighting<sup>9</sup>. Meanwhile, the real unemployed young people arriving for the selection interview came up with completely unrealistic, unsubstantiated business ideas and apparently had no meaningful answer, for example to the question of how their future business would acquire customers. Many of them, as previously written, have unfortunately fallen into the category of being unsuitable for entrepreneurship in their personality, but at the same time dreaming of their own business.

The reform of these fraud incentive programs<sup>10</sup> would, in my suggestion, be realized in such a way that youth business development policy shall openly commit itself to supporting young people who are the most successful, and not young people in need, so that they can start their own business. And if these successful young people become entrepreneurs, on the one hand, their employment vacancy will have a kind of absorption effect for unemployed young people, and on the other hand, businesses started by successful young people will create new workplaces as a whole, generating another absorption effect for the unemployed.

For young people who are found as potentially suitable for entrepreneurship in the early stages of training, it would be important to be aware of the different entrepreneurial career paths, as there are very big differences between young people in terms of what types of businesses they can start and run successfully. There are introverted ones being immersed in their narrow profession, who can typically be highly respected self-employed 'kata' entrepreneurs who focus primarily on their own professional work and

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<sup>9</sup>The admission interviews were relaxed enough for the applicants themselves to recount.

<sup>10</sup>It encourages fraud by the fact that young people who are most likely to start a successful business from the program can only enter the program by proving a fictitious unemployment relationship.

seek outside help in business acquisition, administration, and coordination with the work of others. At the other extreme are the “empire builders” who can realize themselves in founding and running complex, fast-growing businesses.

So every potentially entrepreneurial young person should be assisted in choosing a business of a size, complexity and growth that fits well with their own person, in an industry that inspires and motivates the person from within. Therefore, it is important to be aware that it is not true that someone is not incapable to be an entrepreneur in general, but if having the basic skills, the same person can soar in some businesses, vegetate in other businesses, and certainly fail in again some other businesses.

It would also be important to be aware of life situations where an entrepreneurial career can typically begin. This can be either during or immediately after school training, but it is much more common to start your own business after 5-7 years of employment. For women, a reason can be having a child that breaks an employment career and makes someone looking for additional entrepreneurial activity that can be carried out from home, and for men, starting a business in their 40s and 50s may also be typical at the time of their maximum performance. But even besides being a life-long full-time employee, a supplementary or even hobby “part-time” business is imaginable. Today’s young people are, of course, still a long way off, but the expected transformation of the pension system predicts the prominence of reduced flexible working in old age, which could easily take the form of entrepreneurial rather than atypical employment.

During the secondary and higher education courses that provide a profession, I would recommend making the fully practical “ant business” start-up and operation knowledge available to all students as an optional course. In addition to “ant” courses in higher education, “gazelle” courses should also be made available to all students. This would require the provision of a significant number of entrepreneurship educators with practical knowledge nationwide, whose training and coordination is a significant task. The centralization of the public education system has laid the foundations for launching this new training profile. The chamber of commerce system can play a significant role in the recruitment, pedagogical training and allocation of (guest) trainers with practical entrepreneurial knowledge from local entrepreneurs.

In addition to simple entrepreneurship education, which can be carried out by teachers who do not have their own entrepreneurial experience, specialized courses, which include

significant practical knowledge are worthwhile to be organized only within the framework of optional courses. The optional nature of education can help to find young people with a real intention to start a business, and it is worthwhile to have the capacity of more highly trained educators with practical knowledge be focused on them.

In addition to the complex entrepreneurship education outlined above to be built in the education system, it is equally important to create an environment that inspires young people to start a business. A study covering all elements of this environmental impact is still pending. Fortunately, it can be said that spontaneous processes are currently moving in this direction on their own. While in the 1990s, entrepreneurship has typically appeared in the evening news related to crime (with entrepreneurs being blown up, arrested, etc.), persons as József Stadler, János Fenyő, József Prisztás, Ferenc Morvai were appearing before the public at that time as entrepreneurs, just to give some examples. In comparison, today young people can hear a lot about startups targeting international markets, which are typically looking for innovative, business-successful solutions in order to solve socially important goals. And the “startupper” who run these companies are often as popular as popstars among young people like Elon Musk or the late Steve Jobs.

In this renewable and inspiring environment, NGOs such as one of the first, the Spin-Off Club, also have a big role to play. While in the early 2000s, young people who were interested, had to search extensively for a thematic event, today there is a competing oversupply of entrepreneurship, business club performances, meetups, hackathons, pitches, behind which there are many non-governmental organization working on the subject. And the business and government actors of this startup ecosystem (we haven't even known this term 10-15 years ago) have also developed a lot in the recent period, so now a significant amount of venture capital, incubators, accelerators and coworking offices are already available. This true at least for Budapest, so it is a task to create a local “spinoff” from this bustle of the capital, at least in the big university cities.

An additional personal suggestion for university renewal is that there should be a very simple way for former students to return to complete practical and / or gazelle start-up courses, as previously discussed. Once as a student, a given young person may not have felt the urge to start their own business, but as mentioned in their career paths, after 5-7 years of employment, the idea may arise in many of them. How great it would be to walk into business start-up classes with a simple registration and some affordable

reimbursement requirements, with now having the motivation to complete the practice-oriented tasks. A simple diploma could also be issued for the completion of the course (s), which could be an advantage for business start-up bank loans, venture capital and state support. According to my suggestion, this kind of simple return to the alma mater would be allowed until the age of 40 years. And in a similar way, a student who had graduated there and did not earn a higher degree could restart education in his former high school.

Finally, in addition to the informative part of the education system, the inspiring nature of the social environment towards entrepreneurship and the practice-oriented ant and gazelle start-up courses of the education system, I propose to make one element as widely available as possible, which already works well on a smaller scale in some parts of the country. This is an out-of-school mentoring service of the education system, under which a young person who is actually starting a business could use a mentoring service from his or her school (be it a secondary school or a higher education institution) for a period of time free of charge and then against a fee, more and more closer to the market price. This type of mentoring service would also cover former students returning to the entrepreneurship course before the age of 40.

## 6. CONCLUSION

During the writing of my dissertation, my main goal was to examine what factors influence young people's intentions to become entrepreneurs. Based on the experience gained during the processing of the relevant publications, the focus of my research was the target group that received little attention in the domestic and international literature: I examined the factors influencing the business start-up of young people with or without higher education creating an ant business.

In reviewing the literature, I found that measuring entrepreneurial activity and researching young people becoming entrepreneurs is not an easy task, as it raises a number of sampling and research methodology issues. The indexes and regular surveys created by professionals and organizations researching the topic provide valuable information, but they are also subject to a number of criticisms, despite which their contribution to research on entrepreneurial activity is indisputable.

Emphasizing the important role of businesses and supporting young people to become entrepreneurs is one of the European Union's priorities, which, in addition to support programs, also has a positive effect on keeping the topic on the agenda. We know from the survey initiated by the European Commission [2011] that in Hungary the proportion of those who are deterred from becoming an entrepreneur because of their assessment of entrepreneurship as risky is outstanding.

Based on the results of Hungarian business history and international comparative studies, it can be said that although many efforts have been made in recent decades to increase domestic entrepreneurial activity, there is still much to be done and developed.

Young people becoming entrepreneurs has been examined by several researches both domestically and internationally. In my dissertation, I collected the models used as a basis of the research and the resulting ones, of which the theory of planned behavior, which can be linked to the name of Ajzen [1991], [2006a], which provides the background for the GUESSS survey, stands out in its impact and significance. In my dissertation, a separate chapter deals with the role of education in becoming an entrepreneur.

The role and importance of universities are emphasized in the literature. In my opinion, however, the expectations towards universities to encourage entrepreneurship are very high, which higher education institutions in the traditional structure are unable



to meet, so initiatives such as the Spin-Off Club run by the staff of the Corvinus University Small Business Development Center can play a key role.

In my dissertation, I have exhaustively analyzed the impact of personality on becoming an entrepreneur: despite the support of the external environment, if the targeted young people do not have the willingness to take risks, the desire for success, openness and knowledge necessary for entrepreneurship.

In a separate chapter, I examined which factors hinder young people from becoming entrepreneurs, which include both personal and organizational-environmental factors. The impact of sex is very strong, with men rather becoming entrepreneurs than women. Lack of financial resources is also a strong hindering factor, as are the unfavorable economic environment, lack of relational capital and fear of failure. My research, which I conducted among young people who have already become entrepreneurs, has yielded a number of interesting results.

Examining the factors that motivate young people to become entrepreneurs, it can be concluded that the role of financial advantages available via the entrepreneurship is important in young people becoming entrepreneurs, and in the case of young people with a family entrepreneurial background, the stimulating effect of the family example can be clearly demonstrated. Internal motivation and the values associated with entrepreneurship, such as independence, autonomy and freedom, are also important.

For young people who participated in business start-up, startup competitions, inadequate business performance appears to be a stronger hindering factor than for young people who did not participate in such a program. One possible explanation for this is that for young people who decide to participate at business start-up, startup competitions, it is important to build a successful and profitable business, which option, if not met, is seen as a hindering factor to their entrepreneurial motivation.

In the course of the analysis, I found a significant difference between the businesses of young men and women along a number of factors. Women are more likely to be self-employed with the taxation form KATA and are less likely to have set up a limited liability company than men. Women's preference for sole proprietorship is also reflected in ownership, with women being more likely to own 100% of their businesses, while men being more likely to own even less than 50%. Another difference between women and men is that women are more likely to have an intention to start a business on their own and have implemented their plans accordingly, while men are more likely to have launched a business with co-owners. Women are more likely to see their business

as unprofitable or break-even, meaning that it generates wages and operating costs but does not generate profit, while business founded by young men are characterized by high and moderate profitability.

An important result regarding the registered office of young people is that although participation in start-up and operation support programs is not affected by the type of settlement, the dominance of the capital can be detected in terms of start-up and startup competitions. The founders of Budapest-based businesses were more likely to take part in startup competitions than young people setting up companies in county capitals, other cities and villages.

The results of my research, although they can serve as useful guidelines for experts in the field, business developers, actors in the entrepreneurial ecosystem, their validity and reliability are influenced by a number of limiting factors. The sample is presumably distorted towards successful entrepreneurs and the results reflect much more the views of young people who have been able to become successful entrepreneurs.

My work highlights that a number of interesting and useful information about the motivations of young people to start a business and the factors that hinder them is still unexplored. From a scientific point of view, I consider it a perspective research direction to examine whether the revealed independence, autonomy and freedom factors have a very strong, complementary advantage for young people to start a business, or have an independent motivating force. In my opinion, qualitative, in-depth interview methodological tools would be the most suitable for the study. Presumably, comparative studies of young men's and women's businesses and targeted analyzes of their comparisons by geographical location would also provide a number of valuable findings.

In my doctoral research, I have tried to add to the scientific discourse on the motivating and hindering factors influencing young people's willingness to start a business, all in a practical way so that my results can be used by both business development ecosystem actors and policy makers.

## 1. APPENDIX

### Details of the distribution of the questionnaire on Facebook

**Corvinus Startup Corner**  
Közzétette: Kerékgyártó Gábor · május 5. · 🌐

40 év alatti vállalkozók figyelem!

Ha Te 40 év alatti vállalkozó vagy, akkor a mellékelt linken elérhető online kérdőív kitöltésével nagyon nagy segítséget tudsz nyújtani [Kerékgyártó Gábor](#) oktatónk doktori disszertációjának elkészültéhez a Corvinus Egyetemen! 😊

A kitöltés kb. 15 percet vesz igénybe, sajnos menet közben visszalépési lehetőség nincs, és csak a végig kitöltött kérdőíveket tudjuk érdemben feldolgozni.

Köszönjük, ha segítesz! ❤️

APP.COOLTOOL.COM  
**app.cooltool.com**

19 607  
elért ember

2602  
aktivitás

Ismételt kiemelés

Kiemelve: május 5.  
Kerékgyártó Gábor hirdetése

Befejeződött

Elért emberek száma	18,9 E	bejegyzésaktivitás	243
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Eredmények megtekintése

**Spin-Off Klub**  
Közzétette: Kerékgyártó Gábor · Május 5. · 🌐

40 év alatti vállalkozók figyelem!

Ha Te 40 év alatti vállalkozó vagy, akkor a mellékelt linken elérhető online kérdőív kitöltésével nagyon nagy segítséget tudsz nyújtani [Kerékgyártó Gábor](#) klubvezetőnk doktori disszertációjának elkészültéhez a Corvinus Egyetemen! 😊

A kitöltés kb. 15 percet vesz igénybe, sajnos menet közben visszalépési lehetőség nincs, és csak a végig kitöltött kérdőíveket tudjuk érdemben feldolgozni.

Köszönjük, ha segítesz! ❤️

APP.COOLTOOL.COM  
**app.cooltool.com**

16 953  
elért ember

1322  
aktivitás

Ismételt kiemelés

Kiemelve: május 5.  
Kerékgyártó Gábor hirdetése

Befejeződött

Elért emberek száma	16,2 E	bejegyzésaktivitás	119
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Eredmények megtekintése

Translate:

Spin-off Klub

Published by Gábor Kerékgyártó

May 5

To the attention of all  
entrepreneurs under 40!

If you are an entrepreneur under  
the age of 40, you can help a lot  
in the doctoral dissertation of our  
club leader Gábor Kerékgyártó at  
Corvinus University by filling in  
the online questionnaire available  
at the attached link!

The completion takes approx. It  
takes 15 minutes, unfortunately  
there is no possibility to step back  
and we can only process the  
questionnaires completed up to  
the last step.

Thanks for helping!

.....

19,607 persons reached

2,602 number of activities

Number of people reached: 18,9  
th

Post activity: 243

Corvinus Startup Corner

Published by Gábor Kerékgyártó

May 5

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and we can only process the  
questionnaires completed up to  
the last step.

Thanks for helping!

.....

19,607 persons reached

2,602 number of activities

Number of people reached: 18,9  
th

Post activity: 243

Célközönség szerkesztése

Helyek

További földrajzi helyek megadása

Hungary

Hungary + 25 km

Részletes célzás

Részletes célzás

Szerepeljenek benne a következők legalább egyikének n

Tallózás

Érdeklődési kör

Small Business Owners

Egyéni vállalkozó

business owner

Magatartások

kisvállalkozás tulajdonosa

Demográfiai adatok

vállalkozó

Tulajdonos, üzletvezető

Speciális célzási funkciók használatához nyisd meg a Hirdetéskezelőt.

Specifikus

Általános

Potenciális elérés: 60 000 ember

A célközönséged meg van határozva.

Translate:

Target audience settings:

Location: Hungary+25 km

Detailed targeting:

Interests:

Small Business Owners

Self-employed

Business owner

Behaviour:

Owner of a small business

Demographical data:

Entrepreneur, owner/CEO

Potential reach: 60,000

The target audience has been set.

117

## **Questionnaire**

### **Factors motivating and inhibiting young people to become entrepreneurs**

**1. Please enter your sex:**

1. Male
2. Female

**2. Please enter your year of birth:**

**3. What type of settlement do you live in?**

1. Capital city
2. County capital
3. Other city
4. Municipality

**4. Please indicate in which county you live:**

1. Budapest (capital)
2. Bács-Kiskun
3. Baranya
4. Békés
5. Borsod-Abaúj-Zemplén
6. Csongrád
7. Fejér
8. Győr-Moson-Sopron
9. Hajdú-Bihar
10. Heves
11. Jász-Nagykun-Szolnok
12. Komárom-Esztergom
13. Nógrád
14. Pest
15. Somogy
16. Szabolcs-Szatmár-Bereg
17. Tolna
18. Vas
19. Veszprém
20. Zala

**5. What is your highest level of education?**

1. Elementary school
2. Vocational school
3. Vocational high school
4. High school
5. Bachelor's degree (BA / BSc)

6. Master's degree (MA / MSc)
7. Scientific degree (PhD / DLA)

**6. Which statement is true for you?**

1. I didn't apply to university.
2. I dropped out of higher education.
3. I complete my higher education studies at BA / BSc level.
4. I have already obtained my degree at BA / BSc level and have not studied further.
5. I complete my higher education studies at MA / MSc level.
6. I have already obtained my degree at MA / MSc level.

**7. In what field are you currently studying or already qualified?**

1. Arts / human sciences (e.g.: cultural studies, history, linguistics, foreign languages, philosophy, religion)
2. Business / management major
3. Computer Science & IT
4. Economics
5. Engineering
6. Healthcare (doctor, nurse, physiotherapist, dietitian, etc.)
7. Law
8. Mathematics
9. Natural science
10. Art sciences (e.g.: art, design, acting, music)
11. Social sciences (e.g.: psychology, politics, education)
12. Other

**8. Please list what qualifications you have obtained. Cover the formal qualifications, such as the OKJ certificate, diploma, certificate, language exam and skills acquired in non-formal education that you have acquired in various courses.**

**9. Are your parents entrepreneurs? (Either as a partnership owner or as a sole proprietor.)**

1. Neither of them
2. Yes, my father.
3. Yes, my mother.
4. Yes, both of my parents.

**10. At what age did you start a business?**

**11. What motivated you to start a business? (You can list more than one answer!)**

**12. Please indicate on a scale from 1 to 7 how much you agree with the following statements! (1 - strongly disagree with it, 7 - strongly agree with it)**

1. Becoming an entrepreneur has brought me more advantages than disadvantages.
2. Being an entrepreneur is a great satisfaction for me.
3. My entrepreneurial lifestyle is supported by my close family.
4. My entrepreneurial lifestyle is supported by my friends.
5. My entrepreneurial lifestyle is supported by my fellow students / coworkers.
6. Starting and running a business is easy for me.
7. I consider myself a successful entrepreneur.
8. I will continue to envision my life as an entrepreneur.
9. I believe my current business is capable of dynamic future growth.
10. I strive to exploit the maximum growth potential of my business.
11. I believe my current business will be capable of generating the income needed to cover life in the future and I do not plan to further significantly increase the company.
12. My business is in a difficult position, I may terminate it.

**13. Are there people who serve as role models in your entrepreneurial career?**

1. No
2. Yes

If so, who are they? Do you know them personally? In what are they a role model to you? (You can list more than one answer.)



**14. Please rate on a scale from 1 to 7 how motivational the following have been for you to become an entrepreneur! (1- had no effect at all, 7- had a very motivating effect)**

1. Financial independence
2. Contributing to the well-being of the community
3. Exploiting a business opportunity
4. Reconciling work and family
5. Family tradition
6. Inspiration gained through a role model
7. Inspiration gained through studies
8. Social recognition
9. Development
10. Finding challenges
11. Desire to prove
12. Desire for independence
13. To be my own boss
14. Self-realization
15. Practical application of knowledge
16. Greater decision autonomy
17. Favorable economic environment
18. Implementing a business idea
19. Gaining experience
20. Higher prestige, social status
21. Higher income
22. Potential profit
23. Continuing a family business
24. Motivation from family, friends

**15. Please rate on a scale from 1 to 7 how hindering the following have been for you to become an entrepreneur! (1- had no hindering effect at all, 7- had a very hindering effect)**

1. Lack of business knowledge
2. Lack of concrete business idea
3. Missing start-up capital
4. Insufficient practical experience
5. General lack of interest
6. Lack of a founding partner / team
7. Lack of a business network system
8. Lack of market knowledge
9. Lack of business transparency
10. Disapproval of family members
11. High financial risk
12. Low income
13. Too much work, too little money
14. Too much work, not enough free time
15. Unfavorable business environment
16. Risk of failure

17. Lack of social recognition
18. Negative experience with family business
19. Insufficient funding
20. Lack of business support (incubation, counseling, mentoring)
21. Fear of failure
22. Missing skills
23. Family issues
24. Lack of role models
25. Prejudices
26. Legal and regulatory issues
27. Lack of connections

**16. In your opinion, which are your 3 traits that helped you become an entrepreneur?**

**17. In your opinion, which are your 3 traits that hindered you from becoming an entrepreneur?**

**18. Have you participated in any startup competitions?**

1. No
2. Yes  
, namely (if there are several competitions, please list them):

**19. Have you participated in any business start-up and operation support programs? (Youth Entrepreneurship Support Program, Demola Mentoring, Design Terminal Accelerator Program, etc.)**

1. No
2. Yes  
, namely (if you have more than one program, please list them):

**20. Have you ever participated in an entrepreneurship course, program, training?**

1. Yes
2. No

**21. If you have participated in a course, program, training that teaches entrepreneurship, please rate on a scale from 1 to 7 (1 - not at all, 7 - very much) to what extent the courses, programs, trainings for the transfer of entrepreneurial knowledge...**

1. helped to understand the attitude of entrepreneurs, the values they represent, their motivation.
2. helped you learn the steps to start a business.
3. increased your practical management knowledge needed to start a business.

4. helped you to develop relationship building skills.
5. helped you to identify business opportunities.

**22. In what form of operation do you carry out your entrepreneurial activity?**

1. Self-employed with KATA taxation
2. Self - employed, with other taxation
3. Primary agricultural producer
4. LP
5. Ltd.
6. General partnership
7. Private limited company
8. Public limited company
9. Other:

**23. What is the industry classification of your business?**

1. Agriculture, forestry and fishing
2. Mining and quarrying
3. Processing industry
4. Electricity, gas, steam and air conditioning
5. Water supply; sewerage, waste management and remediation activities
6. Construction industry
7. Wholesale and retail trade; repair of motor vehicles and motorcycles
8. Transportation and storage
9. Accommodation and hospitality
10. Information and communication
11. Real estate affairs
12. Professional, scientific and technical activities
13. Administrative and support service activities
14. Training
15. Human health and social work activities
16. Arts, entertainment, leisure
17. Other services

**24. What share of ownership do you have in your business?**

1. 0%
2. 1-49%
3. 50%
4. 51-99%
5. 100%

**25. Did you start your business on your own or with co-owners?**

1. I have intended to and started it on my own.

2. I planned to start the business with co-owners, but I couldn't find a suitable person, so I started it alone.
3. I started it with 1 co-owner
4. I started it with 2 co-owners
5. I started it with 3 co-owners
6. I started it with 4 or more co-owners

**26. How many people does your business employ?**

**27. What was the sales revenue of your company in 2019 in HUF million?**

**28. What was the sales revenue of your company in 2020 in HUF million?**

**29. Which statement best describes the success of your business, apart from epidemic restrictions?**

1. My business is outstandingly profitable.
2. My business is moderately profitable.
3. My business generates wages and operating costs, but does not generate profit.
4. My business is loss-making.

**30. Where do you think you will work in 5 years?**

1. In my current business.
2. In my next business.
3. In my family's business.
4. In a business I bought / took over.
5. As an employee in a small business (company with 1-49 employees)
6. As an employee in a medium-sized business (company with 50-249 employees)
7. As an employee in a large company (company with more than 250 employees)
8. I will be a civil servant.
9. Other

**31. Has there been any organization, club, community, book, media, blog, etc. in your life that had a significant impact on you to become an entrepreneur? If so, please indicate its name and in a few words how it has influenced you! (You can list more than one answer!)**

**32. Have you ever had an organization, club, community, book, media, blog, etc. from which you gained useful entrepreneurial knowledge? If so, please indicate its name and in a few words what you learned from it! (You can list more than one answer!)**

**Correlation matrix of principal component analysis of factors stimulating young people to become entrepreneurs:**

Correlation Matrix <sup>a</sup>											
		Please rate on a scale from 1 to 7 that... - Material independence...	Please rate on a scale from 1 to 7 that... - Family traditions...	Please rate on a scale from 1 to 7 that... - Development...	Please rate on a scale from 1 to 7 that... - Challenges...	Please rate on a scale from 1 to 7 that... - Desire to prove...	Please rate on a scale from 1 to 7 that... - Higher income...	Please rate on a scale from 1 to 7 that... - Potential...	Please rate on a scale from 1 to 7 that... - Continuation of a family business...	Please rate on a scale from 1 to 7 that... - Motivation from family...	Please rate on a scale from 1 to 7 that... - Exploiting a business opportunity...
Correlation	Please rate on a scale from 1 to 7 that... - Material independence...	1.000	0.076	0.159	0.143	0.181	0.575	0.458	0.091	0.023	0.377
	Please rate on a scale from 1 to 7 that... - Family traditions...	0.076	1.000	0.099	0.188	0.204	0.135	0.104	0.632	0.433	0.141
	Please rate on a scale from 1 to 7 that... - Development...	0.159	0.099	1.000	0.655	0.457	0.199	0.255	-0.026	0.049	0.345
	Please rate on a scale from 1 to 7 that... - Challenges...	0.143	0.188	0.655	1.000	0.586	0.146	0.275	0.014	0.091	0.355

Please rate on a scale from 1 to 7 that... - Desire to prove...	0.181	0.204	0.457	0.586	1.000	0.212	0.275	0.120	0.087	0.218
Please rate on a scale from 1 to 7 that... - Higher income. ..	0.575	0.135	0.199	0.146	0.212	1.000	0.728	0.142	0.023	0.366
Please rate on a scale from 1 to 7 that... - Potential...	0.458	0.104	0.255	0.275	0.275	0.728	1.000	0.123	0,029	0.456
Please rate on a scale from 1 to 7 that... - Continuation of a family business...	0.091	0.632	-0.026	0.014	0.120	0.142	0.123	1.000	0.411	0.082
Please rate on a scale from 1 to 7 that... - Motivation from family..	0.023	0.433	0.049	0.091	0.087	0.023	0,029	0.411	1.000	0.053
Please rate on a scale from 1 to 7 that under... - Exploiting a business opportunity...	0.377	0.141	0.345	0.355	0.218	0.366	0.456	0.082	0.053	1.000

Sig. (1-tailed)	Please rate on a scale from 1 to 7 that... - Material independence ...		0.119	0.007	0.013	0.002	0.000	0.000	0.079	0.362	0.000
	Please rate on a scale from 1 to 7 that... - Family traditions...	0.119		0.061	0.002	0.001	0.018	0.052	0.000	0.000	0.014
	Please rate on a scale from 1 to 7 that... - Development...	0.007	0.061		0.000	0.000	0.001	0.000	0.341	0.223	0.000
	Please rate on a scale from 1 to 7 that... - Challenges...	0.013	0.002	0.000		0.000	0.011	0.000	0.414	0.079	0.000
	Please rate on a scale from 1 to 7 that... - Desire to prove...	0.002	0.001	0.000	0.000		0.000	0.000	0.031	0.087	0.000
	Please rate on a scale from 1 to 7 that... - Higher income. ..	0.000	0.018	0.001	0.011	0.000		0.000	0.013	0.360	0.000
	Please rate on a scale from 1 to 7 that... - Potential...	0.000	0.052	0.000	0.000	0.000	0.000		0.028	0.325	0.000

	Please rate on a scale from 1 to 7 that... - Continuation of a family business...	0.079	0.000	0.341	0.414	0.031	0.013	0.028		0.000	0.102
	Please rate on a scale from 1 to 7 that... - Motivation from family..	0.362	0.000	0.223	0.079	0.087	0.360	0.325	0.000		0.205
	Please rate on a scale from 1 to 7 that under... - Exploiting a business opportunity...	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.102	0.205	
a. Determinant = .029											



**Main component scores of family entrepreneurship background and factors stimulating young people to become entrepreneurs**

Report				
Are your parents entrepreneurs? (Either as a partnership owner or as a sole proprietor.)		Financial advantages	Family values	Intrinsic motivation
Neither of them	Mean	-0.1016890	-0.3814233	-0.0352877
	N	136	136	136
	Std. Deviation	1.02014991	0.81963077	1.05421628
Yes, my father.	Mean	0.1629018	0.4860440	-0.1443882
	N	56	56	56
	Std. Deviation	0.94690323	0.97399294	0.94571894
Yes, my mother.	Mean	-0.2998153	-0.0425677	0.3687441
	N	15	15	15
	Std. Deviation	1.14604563	1.02473086	1.09288835
Yes, both of my parents.	Mean	0.2556786	0.7026004	0.2042696
	N	36	36	36
	Std. Deviation	0.88169148	0.98383843	0.77778845
Total	Mean	0.0000000	0.0000000	0.0000000
	N	243	243	243
	Std. Deviation	1.00000000	1.00000000	1.00000000

ANOVA Table <sup>a</sup>							
			Sum of Squares	df	Mean Square	F	Sig.
Financial Benefits * Are your parents entrepreneurs? (Either as a partnership owner or as a sole proprietor.)	Between Groups	(Combined)	6.594	3	2.198	2.232	0.085
	Within Groups		235.406	239	0.985		
	Total		242.000	242			
Family values * Are your parents entrepreneurs? (Either as a partnership owner or as a sole proprietor.)	Between Groups	(Combined)	50.814	3	16.938	21.174	0.000
	Within Groups		191.186	239	0.800		
	Total		242.000	242			
Intrinsic motivation * Are your parents entrepreneurs? (Either as a partnership owner or as a sole proprietor.)	Between Groups	(Combined)	4.879	3	1.626	1.639	0.181
	Within Groups		237.121	239	0.992		
	Total		242.000	242			
a. The grouping variable Are your parents entrepreneurs? (Either as a partnership owner or as a sole proprietor.... is a string, so the test for linearity cannot be computed.							

**Correlation matrix of principal component analysis of factors hindering young people's entrepreneurship:**

Correlation Matrix <sup>a</sup>										
		Please rate on a scale from 1 to 7 that... - Lack of a business relationship system...	Please rate on a scale from 1 to 7 that... - Low income...	Please rate on a scale from 1 to 7 that... - Too much work, too little free time...	Please rate on a scale from 1 to 7 that... - Too much work, too little free time...	Please rate on a scale from 1 to 7 that... - Lack of business support (incubation, consulting, mentoring)	Please rate on a scale from 1 to 7 that... - Family issues...	Please rate on a scale from 1 to 7 that... - Lack of role models...	Please rate on a scale from 1 to 7 that... - Prejudice...	Please rate on a scale from 1 to 7 that... - Lack of connections...
Correlation	Please rate on a scale from 1 to 7 that... - Lack of a business relationship system...	1.000	0.375	0.303	0.250	0.553	0.190	0.370	0.313	0.797
	Please rate on a scale from 1 to 7 that... - Low income...	0.375	1.000	0.676	0.505	0.417	0.398	0.330	0.343	0.376
	Please rate on a scale from 1 to 7 that... - Too much work, too little free time...	0.303	0.676	1.000	0.711	0.336	0.398	0.324	0.358	0.328
	Please rate on a scale from 1 to 7 that... - Too much work, too little free time...	0.250	0.505	0.711	1.000	0.330	0.416	0.282	0.266	0.217
	Please rate on a scale from 1 to 7 that... - Lack of business support (incubation, consulting, mentoring)	0.553	0.417	0.336	0.330	1.000	0.254	0.413	0.312	0.582

	Please rate on a scale from 1 to 7 that... - Family issues...	0.190	0.398	0.398	0.416	0.254	1.000	0.507	0.430	0.200
	Please rate on a scale from 1 to 7 that... - Lack of role models...	0.370	0.330	0.324	0.282	0.413	0.507	1.000	0.558	0.416
	Please rate on a scale from 1 to 7 that... - Prejudice. ...	0.313	0.343	0.358	0.266	0.312	0.430	0.558	1.000	0.408
	Please rate on a scale from 1 to 7 that... - Lack of connections...	0.797	0.376	0.328	0.217	0.582	0.200	0.416	0.408	1.000
Sig. (1-tailed)	Please rate on a scale from 1 to 7 that... - Lack of a business relationship system...		0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
	Please rate on a scale from 1 to 7 that... - Low income...	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Please rate on a scale from 1 to 7 that... - Too much work, too little...	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000
	Please rate on a scale from 1 to 7 that... - Too much work, too little free time	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
	Please rate on a scale from 1 to 7 that... - Lack of business support (incubation, consulting ,	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000

	mentoring )									
	Please rate on a scale from 1 to 7 that... - Family issues...	0.001	0.000	0.000	0.000	0.000		0.000	0.000	0.001
	Please rate on a scale from 1 to 7 that... - Lack of role models...	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000
	Please rate on a scale from 1 to 7 that... - Prejudice. ..	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	Please rate on a scale from 1 to 7 that... - Lack of connectio ns...	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	
a. Determinant = .014										

**Hindering factors influencing the entrepreneurial motivation of young people participating and not participating in business start-up and startup competitions, comparison of means of main component scores**

Report				
Have you participated in any startup competitions?		Lack of connections	Hindering factors related to the success of a business	Hindering factors related to external conditions
Yes	Mean	0.0466900	0.2880001	0.0280637
	N	39	39	39
	Std. Deviation	1.15069021	0.84218251	1.01992018
No	Mean	-0.0089260	-0.0550588	-0.0053651
	N	204	204	204
	Std. Deviation	0.97147338	1.01998370	0.99860593
Total	Mean	0.0000000	0.0000000	0.0000000
	N	243	243	243
	Std. Deviation	1.00000000	1.00000000	1.00000000

ANOVA Table <sup>a</sup>							
			Sum of Squares	df	Mean Square	F	Sig.
Lack of connections * Have you participated in any startup...	Between Groups	(Combined )	0.101	1	0.101	0.101	0.751
	Within Groups		241.899	241	1.004		
	Total		242.000	242			
Hindering factors related to the business * Have you participated in any startup...	Between Groups	(Combined )	3.853	1	3.853	3.899	0.049
	Within Groups		238.147	241	0.988		
	Total		242.000	242			
Hindering factors related to external circumstances * Have you participated in any startup competitions? ...	Between Groups	(Combined )	0.037	1	0.037	0.036	0.849
	Within Groups		241.963	241	1.004		
	Total		242.000	242			
a. The grouping variable Have you participated in any startup competitions? ... is a string, so the test for linearity cannot be computed.							

**The relationship between business performance and main components that hinder business start-ups**

Report				
Which statement best describes the success of your business, apart from epidemic restrictions?		Lack of connections	Hindering factors related to the success of a business	Hindering factors related to external conditions
My business is outstandingly profitable.	Mean	-0.1489723	0.0501086	0.0004123
	N	41	41	41
	Std. Deviation	0.88547688	0.99404038	0.99253948
My business is moderately profitable.	Mean	-0.1064515	-0.0453928	-0.0259863
	N	135	135	135
	Std. Deviation	0.93952099	0.88490401	0.91288320
My business generates wages and operating costs, but does not generate profit.	Mean	0.3245764	0.0293909	0.1556312
	N	46	46	46
	Std. Deviation	1.22951303	1.17703766	1.18131332
My business is loss-making.	Mean	0.2642054	0.1295998	-0.1746566
	N	21	21	21
	Std. Deviation	0.88252950	1.31203282	1.14632999
Total	Mean	0.0000000	0.0000000	0.0000000
	N	243	243	243
	Std. Deviation	1.00000000	1.00000000	1.00000000

ANOVA Table <sup>a</sup>							
			Sum of Squares	df	Mean Square	F	Sig.
Lack of connections * Which statement best describes the success of your business, apart from epidemic restrictions ?	Betwe en Groups	(Combin ed)	8.752	3	2.917	2.989	0.032
	Within Groups		233.248	239	0.976		
	Total		242.000	242			
Hindering factors related to the business * Which statement best describes the success of your business, apart from epidemic	Betwe en Groups	(Combin ed)	0.774	3	0.258	0.255	0.857
	Within Groups		241.226	239	1.009		
	Total		242.000	242			

restrictions ?							
Hindering factors related to external circumstances * Which statement best describes the success of your business, apart from epidemic restrictions ?	Betwe en Groups	(Combin ed)	1.846	3	0.615	0.612	0.608
	Within Groups		240.154	239	1.005		
	Total		242.000	242			
a. The grouping variable Which statement best describes the success of your business, apart from epidemic restrictions?... is a string, so the test for linearity cannot be computed.							

**Cross-tabulation analysis - Distribution of the form of operation of the business by women and men**

Please enter your sex... * In what form of operation do you carry out your entrepreneurial activity? Crosstabulation									
			In what form of operation do you carry out your entrepreneurial activity?						Total
			Other	Self-employed with KATA taxation	Self - employed, with other taxation	LP	Ltd.	Private limited company	
Please enter your sex...	Male	Count	9	50	11	6	63	4	143
		Expected Count	7.7	65.9	11.2	7.7	48.3	2.4	143.0
		% within Please enter your sex...	6.3%	35.0%	7.7%	4.2%	44.1%	2.8%	100.0%
		% within In what form of operation do you carry out your entrepreneurial activity?	69.2%	44.6%	57.9%	46.2%	76.8%	100.0%	58.8%
		% of Total	3.7%	20.6%	4.5%	2.5%	25.9%	1.6%	58.8%
	Female	Count	4	62	8	7	19	0	100
		Expected Count	5.3	46.1	7.8	5.3	33.7	1.6	100.0
		% within Please enter your sex...	4.0%	62.0%	8.0%	7.0%	19.0%	0.0%	100.0%
		% within In what form of operation do you carry out your entrepreneurial activity?	30.8%	55.4%	42.1%	53.8%	23.2%	0.0%	41.2%
		% of Total	1.6%	25.5%	3.3%	2.9%	7.8%	0.0%	41.2%
Total		Count	13	112	19	13	82	4	243
		Expected Count	13.0	112.0	19.0	13.0	82.0	4.0	243.0
		% within Please enter your sex...	5.3%	46.1%	7.8%	5.3%	33.7%	1.6%	100.0%



	% within In what form of operation do you carry out your entrepreneurial activity?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	5.3%	46.1%	7.8%	5.3%	33.7%	1.6%	100.0%

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	24,528 <sup>a</sup>	5	0.000
Likelihood Ratio	26.608	5	0.000
N of Valid Cases	243		
a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 1.65.			

Symmetric Measures					
		Value	Asymptotic Standard Error <sup>a</sup>	Approximate T <sup>b</sup>	Approximate Significance
Nominal by Nominal	Phi	0.318			0.000
	Cramer's V	0.318			0.000
	Contingency Coefficient	0.303			0.000
Ordinal by Ordinal	Kendall's tau-b	-0.234	0.056	-4.152	0.000
	Kendall's tau-c	-0.265	0.064	-4.152	0.000
	Gamma	-0.397	0.090	-4.152	0.000
N of Valid Cases		243			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					

**Cross-tabulation analysis - Distribution of ownership by women and men**

Please enter your sex... * What share of ownership do you have in your business? Crosstabulation								
			What share of ownership do you have in your business?					Total
			0%	1-49%	50%	51-99%	100%	
Please enter your sex...	Male	Count	0	24	11	17	91	143
		Expected Count	1.2	15.9	12.9	14.1	98.9	143.0
		% within Please enter your sex...	0.0%	16.8%	7.7%	11.9%	63.6%	100.0%
		% within What share of ownership do you have in your business?	0.0%	88.9%	50.0%	70.8%	54.2%	58.8%
		% of Total	0.0%	9.9%	4.5%	7.0%	37.4%	58.8%
	Female	Count	2	3	11	7	77	100
		Expected Count	0.8	11.1	9.1	9.9	69.1	100.0
		% within Please enter your sex...	2.0%	3.0%	11.0%	7.0%	77.0%	100.0%
		% within What share of ownership do you have in your business?	100.0%	11.1%	50.0%	29.2%	45.8%	41.2%
		% of Total	0.8%	1.2%	4.5%	2.9%	31.7%	41.2%
Total		Count	2	27	22	24	168	243
		Expected Count	2.0	27.0	22.0	24.0	168.0	243.0
		% within Please enter your sex...	0.8%	11.1%	9.1%	9.9%	69.1%	100.0%
		% within What share of ownership do you have in your business?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	0.8%	11.1%	9.1%	9.9%	69.1%	100.0%

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16,577 <sup>a</sup>	4	0.002
Likelihood Ratio	19.181	4	0.001
N of Valid Cases	243		
a. 2 cells (20,0%) have expected count less than 5. The minimum expected count is .82.			

Symmetric Measures					
		Value	Asymptotic Standard Error <sup>a</sup>	Approximate T <sup>b</sup>	Approximate Significance
Nominal by Nominal	Phi	0.261			0.002
	Cramer's V	0.261			0.002
	Contingency Coefficient	0.253			0.002
Ordinal by Ordinal	Kendall's tau-b	0.142	0.058	2.427	0.015
	Kendall's tau-c	0.139	0.057	2.427	0.015
	Gamma	0.293	0.120	2.427	0.015
N of Valid Cases		243			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					

***Cross-tabulation analysis - Distribution by co-owners between women and men***

Please enter your sex... * Did you start your business on your own or with co-owners? Crosstabulation									
			Did you start your business on your own or with co-owners?						Total
			I have intended to and started it on my own.	I planned to start the business with co-owners, but I couldn't find a suitable one, so I started it alone.	I started with 1 co-owner	I started with 2 co-owners	I started with 3 co-owners	I started with 4 or more co-owners	
Please enter your sex..	Male	Count	77	4	37	14	6	5	143
		Expected Count	87.7	4.1	34.1	9.4	3.5	4.1	143.0
		% within Please enter your sex...	53.8%	2.8%	25.9%	9.8%	4.2%	3.5%	100.0%
		Did you start your business on your own or with co-owners ?	51.7%	57.1%	63.8%	87.5%	100.0%	71.4%	58.8%
		% of Total	31.7%	1.6%	15.2%	5.8%	2.5%	2.1%	58.8%
	Female	Count	72	3	21	2	0	2	100
		Expected Count	61.3	2.9	23.9	6.6	2.5	2.9	100.0
		% within Please enter your sex...	72.0%	3.0%	21.0%	2.0%	0.0%	2.0%	100.0%
		Did you start your business on your own or with co-owners ?	48.3%	42.9%	36.2%	12.5%	0.0%	28.6%	41.2%
		% of Total	29.6%	1.2%	8.6%	0.8%	0.0%	0.8%	41.2%
Total		Count	149	7	58	16	6	7	243

	Expected Count	149.0	7.0	58.0	16.0	6.0	7.0	243.0
	% within Please enter your sex...	61.3%	2.9%	23.9%	6.6%	2.5%	2.9%	100.0%
	Did you start your business on your own or with co-owners?	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	61.3%	2.9%	23.9%	6.6%	2.5%	2.9%	100.0%

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13,834 <sup>a</sup>	5	0.017
Likelihood Ratio	16.904	5	0.005
N of Valid Cases	243		
a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is 2.47.			

Symmetric Measures					
		Value	Asymptotic Standard Error <sup>a</sup>	Approximate T <sup>b</sup>	Approximate Significance
Nominal by Nominal	Phi	0.239			0.017
	Cramer's V	0.239			0.017
	Contingency Coefficient	0.232			0.017
Ordinal by Ordinal	Kendall's tau-b	-0.198	0.056	-3.462	0.001
	Kendall's tau-c	-0.206	0.060	-3.462	0.001
	Gamma	-0.384	0.106	-3.462	0.001
N of Valid Cases		243			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					

**Cross-tabulation analysis - Judgement of women and men on the profitability of their business**

Please enter your sex... * Which statement best describes the success of your business, apart from epidemic restrictions? Crosstabulation							
			Which statement best describes the success of your business, apart from epidemic restrictions?				Total
			My business is outstandingly profitable.	My business is moderately profitable.	My business generates wages and operating costs, but does not generate profit.	My business is loss-making.	
Please enter your sex...	Male	Count	33	78	22	10	143
		Expected Count	24.1	79.4	27.1	12.4	143.0
		% within Please enter your sex...	23.1%	54.5%	15.4%	7.0%	100.0%
		% within Which statement best describes the success of your business, apart from epidemic restrictions?	80.5%	57.8%	47.8%	47.6%	58.8%
		% of Total	13.6%	32.1%	9.1%	4.1%	58.8%
	Female	Count	8	57	24	11	100
		Expected Count	16.9	55.6	18.9	8.6	100.0
		% within Please enter your sex...	8.0%	57.0%	24.0%	11.0%	100.0%

		% within Which statement best describes the success of your business, apart from epidemic restrictions?	19.5%	42.2%	52.2%	52.4%	41.2%
		% of Total	3.3%	23.5%	9.9%	4.5%	41.2%
Total		Count	41	135	46	21	243
		Expected Count	41.0	135.0	46.0	21.0	243.0
		% within Please enter your sex...	16.9%	55.6%	18.9%	8.6%	100.0%
		% within Which statement best describes the success of your business, apart from epidemic restrictions?	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	16.9%	55.6%	18.9%	8.6%	100.0%

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11,393 <sup>a</sup>	3	0.010
Likelihood Ratio	12.131	3	0.007
N of Valid Cases	243		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.64.			

Symmetric Measures					
		Value	Asymptotic Standard Error <sup>a</sup>	Approximate T <sup>b</sup>	Approximate Significance
Nominal by Nominal	Phi	0.217			0.010
	Cramer's V	0.217			0.010
	Contingency Coefficient	0.212			0.010
Ordinal by Ordinal	Kendall's tau-b	0.189	0.057	3.302	0.001
	Kendall's tau-c	0.208	0.063	3.302	0.001
	Gamma	0.342	0.099	3.302	0.001
N of Valid Cases		243			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					



***Cross-tabulation analysis - Participation in a startup competition - type of settlement***

What type of settlement do you live in? * Have you participated in any startup competitions? Crosstabulation					
			Have you participated in any startup competitions?		Total
			Yes	No	
What type of settlement do you live in?	Capital city	Count	28	82	110
		Expected Count	17.7	92.3	110.0
		% within What type of settlement do you live in?	25.5%	74.5%	100.0%
		% within Have you participated in any startup competitions?	71.8	40.2%	45.3%
		% of Total	11.5%	33.7%	45.3%
	County capital	Count	4	35	39
		Expected Count	6.3	32.7	39.0
		% within What type of settlement do you live in?	10.3%	89.7%	100.0%
		% within Have you participated in any startup competitions?	10.3%	17.2%	16.0%
		% of Total	1.6%	14.4%	16.0%
	Other city	Count	3	56	59
		Expected Count	9.5	49.5	59.0
		% within What type of settlement do you live in?	5.1%	94.9%	100.0%

		% within Have you participated in any startup competitions?	7.7%	27.5%	24.3%
		% of Total	1.2%	23.0%	24.3%
	Municipality	Count	4	31	35
		Expected Count	5.6	29.4	35.0
		% within What type of settlement do you live in?	11.4%	88.6%	100.0%
		% within Have you participated in any startup competitions?	10.3%	15.2%	14.4%
		% of Total	1.6%	12.8%	14.4%
	Total	Count	39	204	243
		Expected Count	39.0	204.0	243.0
		% within What type of settlement do you live in?	16.0%	84.0%	100.0%
		% within Have you participated in any startup competitions?	100.0%	100.0%	100.0%
		% of Total	16.0%	84.0%	100.0%

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14,012 <sup>a</sup>	3	0.003
Likelihood Ratio	14.889	3	0.002

N of Valid Cases	243		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.62.			

Symmetric Measures					
		Value	Asymptotic Standard Error <sup>a</sup>	Approximate T <sup>b</sup>	Approximate Significance
Nominal by Nominal	Phi	0.240			0.003
	Cramer's V	0.240			0.003
	Contingency Coefficient	0.233			0.003
Ordinal by Ordinal	Kendall's tau-b	0.195	0.056	3.309	0.001
	Kendall's tau-c	0.168	0.051	3.309	0.001
	Gamma	0.476	0.137	3.309	0.001
N of Valid Cases		243			

**Cross-tabulation analysis - Program supporting the start-up and operation of a business - type of settlement**

What type of settlement do you live in? * 19. Have you participated in any business start-up and operation support programs? (Young Entrepreneurs... Crosstabulation						
			19. Have you participated in any business start-up and operation support programs? (Young Entrepreneurs		Total	
			Yes	No		
What type of settlement do you live in?	Capital city	Count	33	77	110	
		Expected Count	31.2	78.8	110.0	
		% within What type of settlement do you live in?	30.0%	70.0%	100.0%	
		% within 19. Have you participated in any business start-up and operation support programs? (Young Entrepreneurs	47.8%	44.3%	45.3%	
		% of Total	13.6%	31.7%	45.3%	
	County capital	Count	11	28	39	
		Expected Count	11.1	27.9	39.0	
		% within What type of settlement do you live in?	28.2%	71.8	100.0%	
		% within 19. Have you participated in any business start-up and operation support programs? (Young Entrepreneurs	15.9%	16.1%	16.0%	
		% of Total	4.5%	11.5%	16.0%	

	Other city	Count	12	47	59	
		Expected Count	16.8	42.2	59.0	
		% within What type of settlement do you live in?	20.3%	79.7%	100.0%	
		% within 19. Have you participated in any business start-up and operation support programs? (Young Entrepreneurs	17.4%	27.0%	24.3%	
		% of Total	4.9%	19.3%	24.3%	
	Municipality	Count	13	22	35	
		Expected Count	9.9	25.1	35.0	
		% within What type of settlement do you live in?	37.1%	62.9%	100.0%	
		% within 19. Have you participated in any business start-up and operation support programs? (Young Entrepreneurs	18.8%	12.6%	14.4%	
		% of Total	5.3%	9.1%	14.4%	
Total			Count	69	174	243
			Expected Count	69.0	174.0	243.0
			% within What type of settlement do you live in?	28.4%	71.6%	100.0%

	% within 19. Have you participated in any business start-up and operation support programs? (Young Entrepreneurs)	100.0%	100.0%	100.0%	
	% of Total	28.4%	71.6%	100.0%	

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3,341 <sup>a</sup>	3	0.342
Likelihood Ratio	3.402	3	0.334
McNemar-Bowker Test			. <sup>b</sup>
N of Valid Cases	243		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.94.			
b. Computed only for a PxP table, where P must be greater than 1.			

Symmetric Measures <sup>c</sup>					
		Value	Asymptotic Standard Error <sup>a</sup>	Approximate T <sup>b</sup>	Approximate Significance
Nominal by Nominal	Phi	0.117			0.342
	Cramer's V	0.117			0.342
	Contingency Coefficient	0.116			0.342
Ordinal by Ordinal	Kendall's tau-b	0.009	0.061	0.148	0.882
	Kendall's tau-c	0.010	0.065	0.148	0.882
	Gamma	0.017	0.115	0.148	0.882

Measure of Agreement	Kappa	0.010	0.028	0.360	0.719
N of Valid Cases		243			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					
c. Correlation statistics are available for numeric data only.					

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