# THESIS

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# EXPLORING THE INFLUENCING FACTORS OF THE ENTREPRENEURSHIP INTENTION IN CONTEXT OF HUNGARIAN STUDENTS

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# **1** Introduction

Researchers and educators have given increased attention to entrepreneurship as a career option due to the phenomenon's tremendous importance in supporting economic growth and social progress (BarNir et al. 2011).

It has recently become an important part of the policy of the European Union to encourage young people's entrepreneurial spirit and to make Europe a better place. This is due to the fact that entrepreneurship contributes to economic growth in a variety of ways, including the creation of new jobs. In spite of the fact that fifty percent of students find the thought of beginning their own business to be appealing, only a small percentage of those students actually do so (EUROFOUND 2015).

It is encouraging to see that domestic goods are gaining more and more attention in Hungary. This is a step in the right direction because when consumers begin purchasing domestic goods, they are providing support to domestic entrepreneurs and helping the economy as a whole. With the help of data from KSH, it was possible to make an educated guess that there would be 1,311,877 domestic enterprises registered in Hungary by the 31st of August in 2022. Not only is there an increase when compared to the data from the year before, but there is also a decrease of 4,543 in that year. Unfortunately, the Hungarian system is not particularly supportive of entrepreneurs on either the social or economic fronts. According to research conducted by the National Association of Young Entrepreneurs (FIVOSZ), only 7.5% of young people who come from entrepreneurial families have the expectation that they will one day take over the family business.

Personal and contextual elements, such as the development of students' entrepreneurship skills, have a substantially greater impact on the preparation of activities necessary to establish their own business (BarNir et al. 2011). According to findings from a study conducted by the Hetfa Research Institute in 2012, the vast majority of young people in Hungary do not receive an education that is relevant to the job market in terms of business skills. In addition to this, the Hungarian education system encourages students to pursue careers as employees rather than business owners.

Students, on the other hand, have the opportunity to participate in a variety of exercises and, as a result, increase their sense of self-efficacy through the achievement of measurable and observable goals when they take the appropriate entrepreneurship courses. They could invite successful businesspeople and guest speakers from a wide range of industries to talk about and discuss their own experiences with the students. Last but not least, they are able to convince students that a career as an entrepreneur is a viable option and instill in them positive feelings regarding the profession (Nowinski et al. 2019).

As shown by various theories, the purpose of engaging in entrepreneurial activity is far too complicated to fully explain. On the other hand, the factors that drive an intention can be recognized (Gubik, 2013). I came across a wealth of specialized literature on the topic, which delves into the mysteries of entrepreneurial intent. I found this literature very interesting. The connection between a number of different factors and the potential impact those factors could have on the entrepreneurial aspirations of young people. The topic of my research is also connected to this in a few different ways. I think it would be interesting to investigate some of the issues that were brought up earlier about Hungary through the eyes of students in Hungary.

In order to get responses from as many college students as possible for this study, I asked and sent my electronic questionnaire to friends who attend a variety of schools and requested that they also share it with their peers. I was able to amass a total of 309 responses through the use of these methods. I used SPSS to perform the analysis, and the findings pertained to the three primary subjects that I intended to discuss with the assistance of my questionnaire, which was fashioned after the research conducted by Jingjing Wu (Wu et al. 2022). To begin, a student's intention to start their own business may be influenced by their educational background. According to the findings, there is a discernible change that takes place in the entrepreneurial intention (EI) of Hungarian students between the time they enter a Hungarian higher education institution and the time they graduate from one of those institutions. Second, take into account the relationship that exists between intending to start there are significant distinctions to be found between the various characteristics when it comes to the intention to engage in entrepreneurial activity.

At last, an examination of the connection between the many facets of entrepreneurial self-efficacy and the intention to engage in entrepreneurial activity is presented. Because of the findings, we are able to draw the conclusion that, out of the four capacities, there are two that have a positive impact on the intention to engage in entrepreneurial activity.

The findings of this study provide a clear picture of two important aspects: first, the extent to which Hungarian students are influenced by their higher education, and second, which aspects of their entrepreneurial self-efficacy influence their aspirations to start their own businesses. Both of these aspects are critically important to the Hungarian labor market.

### **2** Literature Review

#### 2.1 Entrepreneurship Intention

In order to grasp business, we need to first comprehend entrepreneurial intention, which plays a significant role in it due to the fact that it involves the aspiration to find new things, recognize new chances, and make the most of those prospects (Gartner et al. 1994). In a nutshell, entrepreneurial intention refers to an individual's ambition to launch his or her own company, whether it be a sole proprietorship or a partnership (Krueger 2009). In recent years, a number of different models have been made to explain how the desire to start a business grows (Krueger 2009).

There are a great number of other indicators that have been proposed as possible predictors of future tendencies toward self-employment. The vast majority of the models show that both internal and external influences play a role in developing the attitudes and behaviors of prospective business owners and managers (Fernandes et al. 2018). An individual's personal history, values, attitudes, and motives, as well as the characteristics of their personality and the abilities they possess, can all play a role in whether or not they are predisposed toward an entrepreneurial mindset. Additionally, a person's inclination to break out on their own can be influenced by a number of factors, including the political and economic climate; the social backdrop as a source of social support; subjective norms; perceptions of opportunities and resources; and so on (Fernandes et al. 2018).

The self-efficacy, personality traits, risk propensity, and proactiveness are some of the most studied variables in relation to entrepreneurial activity within the psychological constructs linked with the entrepreneur phenomenon (Fernandes et al. 2018; Gartner et al. 1994; Zhao et al. 2005). There is not a lot of research that looks at how people become entrepreneurs, but there is evidence that these three qualities have a strong connection to future ambitions of independence and self-employment.

Daim et al. show that there are differences between countries and even between men and women when it comes to the social acceptability of entrepreneurial behavior and its economic viability. This shows how important the aforementioned factors are. Compared to their contemporaries in rich countries, students in developing nations have a more positive view of entrepreneurship and its benefits to society. Whether or not they set out to be entrepreneurs, women tend to have lower expectations of themselves and less faith in their own abilities than their male counterparts (Daim et al. 2016).

#### **2.2** The different theories of Entrepreneurship Intention

Over the years, numerous hypotheses and studies have been conducted to help researchers comprehend why certain individuals are more entrepreneurial than others. Since the publication of several foundational works on the issue, a growing number of research papers on entrepreneurial purposes have been published. The works by Shapero (1984), Bird (1988), and Ajzen (1991), amongst many others, are good examples. Their basic ideas have now been built on in a number of different ways, but based on what I have read about the studies and research, I can say that their ideas are still the most influential (Schlaegel & Koenig 2014).

Besides, after reading and comprehending many theories, I have to agree with Krueger, who cites Shapero's Entrepreneurial Event Model as the one that best explains entrepreneurial intention in his 1993 study (Krueger, 1993). In the sections that follow, I will describe each theory in order to provide a clear picture and to clarify my stance.

Understanding the causes, relationships, and outcomes of an action, in general, necessitates knowledge of the actor's intentions toward that conduct (Ajzen 1991). Knowing entrepreneurial goals, in particular, is critical for understanding the entrepreneurship process as a whole because intentions provide essential foundational characteristics for new businesses (Bird 1988; Krueger 1993).

#### **>** Theory of Planned Behavior (TPB)

People who work in the field of psychology are aware of this, but I believe that the general public is also aware of how complicated human behavior can be and how challenging it may be to provide satisfactory explanations for human behavior (Ajzen 1991).

The theory of planned behavior (TPB), as Ajzen wrote in his 1991 research (Ajzen 1991), was developed to demonstrate why it is critical to collect broad, aggregated, and reliable patterns of behavior in order to determine how general attitudes and personality traits influence human behavior. When compared to the influence of other, more immediate factors, they have much less of an effect on a person's decisions. It is possible to argue that general attitudes and personality characteristics only have a secondary impact on individual behaviors, shaping such behaviors through other elements that are more directly related (Fishbein & Ajzen 1980).

The TPB is a theory of reasoned action extension (Figure 1 illustrates TPB theory) (Fishbein & Ajzen 1980; Fishbein & Ajzen 1975). This was necessary because the original model could not handle behaviors over which people had only limited control. The intention of an individual to engage in a particular behavior is a key component in the concept of planned behavior, just as it was in the original theory of reasoned action. The greater one's motivation to act, the greater one's chances of actually doing so (Ajzen 1991).





The theory of planned behavior integrates the construct of self-efficacy belief, also known as perceived behavioral control, into a broader framework of beliefs, attitudes, intentions, and behavior. This theory says that an individual's perceived level of behavioral control and their level of behavioral intention can be combined to directly predict an individual's level of behavioral performance (Ajzen 1991).

When a person has limited understanding of a behavior, when circumstances change, when requirements move, or when unexpected or unfamiliar components are introduced, they may overstate their sense of control over the situation. Under these conditions, it is feasible that a measure of perceived behavioral control would not contribute significantly to the accuracy of behavior prediction. Perceived control, however, can be utilized to predict the likelihood of a successful behavioral attempt to the extent that it is realistic (Ajzen 1985).

According to the idea of planned behavior, there are three factors that influence someone's decision-making process. The first is attitude toward the activity; how someone feels about the activity, which may be thought of as how highly they think of it. The subjective norm, or perceived social pressure to engage in or refrain from an action, is the second predictor. As we saw previously, the third antecedent of intention is the degree of perceived behavioral control, which relates to the perceived ease or difficulty of doing the behavior and is thought to reflect both past experience and predicted obstructions and hurdles. Generally speaking, a person is more likely to want to do something if they have a positive attitude toward it, a positive subjective norm, and a strong intention or perception that they can control the behavior (Ajzen 1991).

According to the theory of planned behavior, one of the assumptions that determines a person's actions and intentions is whether or not they have access to significant resources and chances. These control beliefs may be influenced by previous experiences or, more importantly, secondhand information about the behavior, the experiences of acquaintances and friends, and other variables that raise or lower the perceived difficulty of performing the in question behavior. People should believe they have greater behavioral control when they believe they have more opportunities and resources available to them, and anticipate facing fewer challenges or barriers (Ajzen 1991).

The three components of TPB in terms of the process of starting a business. Attitude is an individual's positive or negative evaluation of the process of starting a new business; perceived behavioral control is the extent to which an individual sees himself in the process of starting a new business; and subjective norms are the social pressures and expectations imposed by significant others (family and friends) (Fretschner & Weber 2013; Tseng et al. 2022).

All kinds of enterprises, both brick-and-mortar and cyber, are covered in my study on entrepreneurship intentions. Nowadays, internet companies have grown in popularity thanks to improvements in mobile communications technology and the steady rise of online shopping (Chang et al. 2018). There are primarily three ways in which cyber organizations outperform over their traditional counterparts: reduced operating costs, expanded geographic reach, and deeper customer involvement (Wang et al. 2016). Despite this, more than 90% of online businesses fail within the first 120 days because they lack sufficient understanding and skills in internet marketing (Skeldon 2019). Cyber entrepreneurship is more challenging in terms of management than traditional entrepreneurship. Today's cyber entrepreneurs must select from a variety of channel possibilities and learn how to utilize and combine these channels (Verhoef et al. 2015).

Furthermore, in order to better meet the needs of their customers, they must adapt to ever-changing information technology. Therefore, cyber entrepreneurs require a great deal of commitment and persistence throughout the process of launching and managing their online businesses. TPBs explain why, despite favorable contextual conditions, some people have low cyber-entrepreneurial aspirations (Tseng et al. 2022).

Several studies (Bird 1988; Kolvereid & Isaksen 2006; Krueger & Carsrud 1993) have used the TPB to predict entrepreneurial behavior. According to an article by Fayolle et al. (Fayolle & Liñán 2014), TPB is a central model used to direct the present academic knowledge of how entrepreneurial intention is created, and empirical evidence typically supports its application in entrepreneurial contexts. Students whose families own businesses were most likely to want to work in a business-related field if they had a high level of entrepreneurial self-efficacy and a strong desire for independence (Zellweger et al. 2011). One's attitude toward starting a business is a critical determinant of entrepreneurial intent in the context of entrepreneurship education (Fretschner & Weber 2013).

#### > Theory of the Entrepreneurial Event (EEM)

One existing intentionality-based model is Shapero's model of the entrepreneurial event (1982). The Entrepreneurial Event Model, also called the Entrepreneurial Intention Model, (Krueger & Carsrud 1993; Shapero 1975; Shapero & Sokol 1982) were among the first models that could predict the intention to start a business.

In order to prevent criticism, Shapero analyzed qualitative studies prior to establishing the model for entrepreneurial intention during the model's construction, unlike Bird's implementing entrepreneurial ideas model. At the time, Bird's plan for putting entrepreneurial ideas into action was questioned because it had not been proven to work (Lo & Wang 2007).

Intention is a crucial prerequisite for goal behavior when starting a new business; in this regard, it is similar to Ajzen's models; however, in Shapero's model, it is very important for intention that the founder of the business sees the business as a well-founded career alternative, which demonstrates that the business is a desirable and viable idea (Figure 2 illustrates Shapero's EEM) (Schlaegel & Koenig 2014).



Figure 2: Shapero's Entrepreneurial Event Model Source: (Schlaegel & Koenig, 2014)

From what has been written thus far, it is clear that the entrepreneurial event model recommends evaluating the entrepreneurial opportunity based on perceived feasibility and perceived desirability. In his research, Krueger backs up this idea by saying that the entrepreneur's perceptions of desirability and feasibility will increase their entrepreneurial intention (Krueger 2000).

The Entrepreneurial Event Model postulates that there are triad factors that contribute to the formation of entrepreneurial intention. First, consider perceived desirability, which refers to a person's desire to become an entrepreneur and represents individual preferences for entrepreneurial behavior (Shapero & Sokol 1982). Then, in terms of propensity to act, an individual's propensity to act upon opportunities is the desire to act on one's decision (Schlaegel & Koenig 2014), and last but not least, perceived feasibility is determined by an individual's perception of control as well as a preference to achieve control by taking the appropriate steps (Shapero & Sokol 1982). Individuals' belief in their own ability to start a business and optimism about their future success as entrepreneurs are indicators of perceived feasibility (Shapero & Sokol 1982).

Extrinsic variables including education, unemployment, family background, and other external happenings interact indirectly through attitudes that are perceived as desired and attainable, much like Ajzen's Theory of planned action. Perceived desirability is related to Ajzen-Fishbein judgments of how enticing an action is to the individual, and perceived feasibility or self-efficacy, is related to how in control a person feels over a behavior (Schlaegel & Koenig 2014). The "willingness to act" of Shapero is accompanied with a strong feeling of volition and "displacement." This also comprises a trigger event that initiates the desired action (Schlaegel & Koenig 2014).

According to Shapero (Shapero 1975), people who have a strong locus of control believe that they can influence the outcomes of their life, whereas the propensity to take action can be operationalized through learnt optimism (Seligman 1990), as proposed by Krueger et al (Krueger et al. 2000).

In the entrepreneurial event model, all behavioral variables exhibit a significant correlation with entrepreneurial intention and a strong predictive power. In addition, Krueger (Krueger 1993) published a study based on the SEE model, in which he discovered, among other things, that this model explains entrepreneurial intention better than the others. Interestingly, there are still relatively few studies based solely on the SEE model (Lo & Wang 2007).

The Shapero model is essentially a refined version of TPB theory. Theories such as the theory of planned behaviour do not take willpower into account, despite the fact that it is what helps us decide whether or not to do something, but Shapero included it in his model with the willingness to act. In addition, the EEM contains a concept known as a "triggering event", which can be useful in mapping the relationship between intention and behaviour (Krueger, 1993). As previously stated, I believe this model to be the most effective of all.

#### Bird's model

Bird's model differs slightly from the others described thus far, Bird's implementing entrepreneurial ideas. The methodology presented here is based on exploratory inquiry (Glaser & Strauss 1967). It does not present a so-called "strategic map" for how to establish a business or how the firm will be successful, but it specifically focuses on questions related to how entrepreneurs develop, then sustain, and evolve businesses. Overall, by articulating this idea, she hopes to assist others in distinguishing between business management and strategic management.

The deliberate procedure described by Bird is an example of how entrepreneurial concepts are put into action. This procedure starts with the individual needs, values, desires, habits, and beliefs of the entrepreneur, each of which has their own set of antecedents and primary causes (Bird 1988). The diagram that may be found below (Figure 3) illustrates how these five antecedents and two plus one intrapsychic processes come together to form the core of both deliberate and behavioral consequences. These things going on in the mind of the entrepreneur have an effect on the just-mentioned five initial "points" of the entrepreneur, which are need, value, want, habit, and eventually belief.



Figure 3: Intention-direction Source: (*Bird*, 1988)

Bird (Bird 1988) indicates that the entrepreneurs' characteristics, needs, values, habits, and belief are factors to form entrepreneurial intention. Bird (1992) further proposes that entrepreneurial intention is a mindset of the entrepreneurs' attention, experiences, and behaviors to specific goals or actions (Lo & Wang 2007).

Bird's entrepreneurial idea implementation model is regarded as a conceptual model by the vast majority of academics, with only one piece of research by Boyd and Vozikis (Boyd & Vozikis 1994) providing support. However, the study by Boyd and Vozikis is somewhat different, they use variables such as self-efficacy, entrepreneurial position, and etc. Consequently, they prepared a refined and modified version of Bird's implementing entrepreneurial model, to which they applied variables impacting entrepreneurial behavior and personal decision making in their study. It is also important to note, as I mentioned previously, that there is not a lot of empirical, or real-world, research for this model.

#### **Expectancy Theory**

According to the expectancy theory, an individual will take a certain course of action if they believe that this action will lead to a desirable outcome (Vroom 1964). In simpler terms, according to the theory, an individual's actions are determined by the expected outcome. Hence, it can be concluded that the person will choose the behavior option that gives them the most "motivational force" (MF) from the choices they have. Vroom (Vroom 1964) expressed these aforementioned with an equation:

#### $MF = expectancy \times instrumentality \times valence$

In this formula, expectation refers to the likelihood or belief that one's efforts will result in the achievement of desired goals based on previous experiences, such as feedback or information from others (Gatewood 1993; Gatewood et al. 2002). There is a link between effort and performance, which indicates that an individual must believe that a certain amount of effort will result in a certain level of performance. Nonetheless, even when expectations change as a result of direct or indirect experiences or other beliefs, these changes may not

be mirrored in actual behavior, such as effort or performance (Gatewood et al. 2002). The next part of the equation is instrumentality, which is, in a nutshell, the notion that better performance will lead to more favorable rewards. Lastly, valence, or the value that the individual "craves", means that the reward or end goal must be appealing to the individual for him or her to keep working toward it until it is reached.

Vroom's equation (Vroom 1964) has a so-called multiplicative effect, which represents the expectation theory's belief that expectations have zero effect on behavior, unless in the case where the valence does not differ from zero; in addition, this valence has no effect, unless it happens that one's actions can affect the achievement of the individual's result. It is possible that outcomes are valuable because they are tied to other valenced outcomes in an instrumental way. These connections were first presented in a multiplicative (mathematical) paradigm, however Vroom himself later voiced reservations about this operation (Vroom 2005).

According to studies, entrepreneurs are driven by a number of outcomes associated with starting or expanding a business. While parts of the expectancy theory are evident in research on entrepreneurial motivation, only a small number of studies systematically examine the concepts of valence, instrumentality, and expectancy (Manolova et al. 2007).

#### > Davidsson's Model to Examine Entrepreneurial Intention

Research has demonstrated that there is a good association between the structural characteristics of the regions and the level of entrepreneurship in terms of the rate of new company formation and that the results are remarkably stable across the countries. Reynolds and Storey were able to synthesize the data of seven countries, concluding that in the majority of countries, three processes had a statistically significant impact: the development of demand, the number of business organizations displaced by small enterprises, and the dense urban context. The other mechanisms showed statistically insignificant or mixed impacts (Reynolds & Storey 1994).

The research conducted by Davidsson (1995) attempts to investigate the interaction of cultural and structural factors as regional differences in entrepreneurship. The research focuses primarily on four points: the first is values associated with entrepreneurship; the second and third are entrepreneurial spirit and beliefs about small businesses; and the last one is entrepreneurial intention. All of this was only applied to Sweden, but comparisons were made between six distinct types of structural environment (Davidsson 1995).

In this instance, culture may exist in a restricted sense, but it might nevertheless influence the observed entrepreneurial behavior in at least two ways. First, if a region receives a higher score in the "entrepreneurial culture" section, it indicates that there are a greater number of individuals with the mental preparation and other abilities required for entrepreneurial behavior.

Additionally, it is considered that those with higher values in this area are more likely to demonstrate entrepreneurial behavior. Moreover, the prevailing values and beliefs, which are based on norms, are a limitation, which does not imply any conclusion about entrepreneurial behavior nor that it would confer greater or lesser social legitimacy. It also does not reveal the types of people who actually start businesses and share the same values and beliefs (Davidsson 1995).

Individual-level examination is given a kind of social psychological dimension through research with a greater emphasis on culture. The provided results lead to the conclusion that the investigation of the previously indicated cultural dimension is crucial to the appropriate explanation of the origin of cultural-type empirical linkages (Davidsson 1995).

As Davidsson points out, in order to develop a theory, it is necessary to understand the relationship between culture and entrepreneurship. By knowing this relationship, we can improve, for instance, the process of planning and evaluation of policy measures, but it should be noted that the optimal design of these policies is not easy, as cultural and structural factors likely play a larger role. Nevertheless, the influence of society should not be underestimated, even if cultural factors are not directly influenced. In this case, society may attempt to advance business by directly influencing the determining environmental "elements". In accordance with this, the conclusion is self-explanatory, indicating that although influencing values and attitudes is not an easy task, it is easier than, say, influencing population density (Davidsson 1995).

According to Davidsson's research, in addition to unfavorable structural conditions, role models, and a relative lack of entrepreneurial values among adults in the region, teens in the region did not exhibit a lower degree of entrepreneurial intention than those living in other environments. This could be an indication that cultural change is possible and can affect the levels of entrepreneurship in different regions. In fact, his research highlighted how crucial it is to know when and where a person grew up in a certain region. In the same

region, the age group that is one year older has fewer entrepreneurial values and more negative beliefs, which can be attributed to the fact that these young people grew up in an industrial city that was economically stagnant or regressive during a period when the country in question was experiencing relatively good times, both in everyday life and in the lives of enterprises.

Young people were more skeptical of local norms and values than they were elsewhere. The end effects of this type of so-called natural cultural change can be influenced by well-planned and executed policies, but it is not at all easy to act with political measures (Davidsson 1995).

#### **2.3 Entrepreneurial Self-Efficacy**

Bandura's 1997 social cognitive theory depicts human behavior as a product of interaction, namely, of intrapersonal factors, people's conduct, and external forces operating on them jointly (Bandura 1997). One of the primary concerns of researchers and educators has been the perceived self-efficacy that influences an individual's behavior, particularly in the field of entrepreneurship, where entrepreneurial self-efficacy plays a crucial role in motivating individuals and in creating new businesses in general (Pihie & Bagheri 2013). In other words, entrepreneurial self-efficacy indicates the extent to which individuals believe that their skills and abilities are adequate to perform the necessary responsibilities, various tasks, and behaviors (Mcgee et al. 2009) to start a business in various environments or in a particular field (Zhao et al. 2005). Empirical studies (Pihie & Bagheri 2013; Carr & Sequeira 2007) show that self-efficacy is the most influential personal component on students' entrepreneurial goals. However, self-efficacy has an effect on the behavior of individuals in general, not just students (Bandura 1997). Individuals with high self-efficacy for a certain activity could be regarded as being fully prepared and capable of it; in other words, they are able to keep going and keep at it, whether it is building a new business or reaching their own goals (Memon et al. 2019).

The perception of one's self-efficacy is influenced equally by social, cognitive, and physical experiences (Canina et al. 2012), but it is also dependent on an individual's confidence in their own abilities as well as how they perceive their immediate environment. However, confidence can be aided and supported by specific factors (Pushkarskayaa et al. 2021). Because of this, it is very important for governments in different countries to support and create an atmosphere that is favorable for young entrepreneurs who possess the degree of self-confidence that is required of a successful entrepreneur (Ephrem et al. 2021). Personality qualities, the willingness to take risks, and, last but not least, initiative are the

three factors that are believed to have the most influence on entrepreneurial activity from a psychological standpoint (Wu et al. 2022; Fernandes et al. 2018). In addition to all of this, the development of entrepreneurial skills - which are important from our point of view - includes a number of important components, such as creativity, problem-solving, opportunity recognition, leadership and the communication that goes along with it, as well as networking and innovation (Liñán 2008; Wu et al. 2022).

#### Operation and Management Capacity

If I had to summarize operational capability, I would say that it is the entrepreneur's capacity to coordinate and handle multiple initiatives simultaneously (Xie et al. 2021). Well, to give an example, operational capability is thought to be when organizations within a given enterprise are able to respond as quickly and effectively as possible to market changes (Hsu et al. 2014) and are also able to develop products and services to meet the business's established objectives. The establishment and growth of organizational capacities, the flawless and timely administration of operational and management procedures, etc., constitute the core of operational and management capabilities (Burke et al. 2002). This is a highly important skill because the previously mentioned skills are crucial for the survival of a start-up business and also have an impact on the various stages of a start-life up's cycle (Tatikonda et al. 2013). The capacity to run a company effectively makes up the second half of the abilities in our sub-heading for this section, the management capacity. These are the kinds of abilities that are essential for the company's day-to-day operations, which involve duties like planning, making decisions, and even taking strategic actions and solving both small and large problems (Mamabolo et al. 2017). Management skills are required at every stage of a company's life, but there are times when they are almost essential, like during the rapid growth phase. On the other hand, there are times when this type of knowledge is barely necessary. One example of this is during the initial launch stage of a company (Olson 1987), because at this point the product or service itself is what needs to be developed or created, and this is what should be prioritized.

#### Relationship Coordination Capacity

Managers of new enterprises typically seek out network connections in the hope of gaining some sort of competitive advantage. This is a logical move considering that, as "novices," these managers require more assistance with certain tasks, such as marketing, product development, and production. In addition, because they do not have sufficient

expertise, they are compelled to initiate relationship-building in order to gather sufficient knowledge from others about what to do and how to do it (Zheng et al. 2019). Social networks are not only a relief for start-ups but also for established businesses, as they enable individuals, teams, and even organizations to acquire expertise through the use of external information and resources, thereby contributing to the growth and development of enterprises (Xie et al. 2021).

Based on what we have talked about so far, we can say that the company, seen as a network of individuals who are connected to each other, is directly linked to many of the most complicated social problems in the modern world (Lynch et al. 2021).

Organizations with a global network can locate possibilities on multiple continents far more easily than those with a more limited network (Ellis 2011). According to a study conducted by Dimitratos et al. (Dimitratos et al. 2014), domestic networks have an advantage in the early phases because entrepreneurs are more likely to rely on them at this time. Even though businesses have the ability to become multinational corporations with the support of broader partner networks, this is still the case (Huang et al. 2013).

#### Risk Tolerance Capacity

We do not even need to mention the COVID-19 pandemic or the current conflict to comprehend the hazards associated with entrepreneurship. Although risk is prevalent in all firms, it has recently gained attention since entrepreneurs frequently deal with concepts such as uncertainty, dissatisfaction, stress, and despair (Liu 2018). According to Dabic et al. (Dabic et al. 2012), a high risk tolerance is typically one of the fundamental traits of entrepreneurs because it is based on the observation that an entrepreneur's readiness to take risks in the management of a business is different from that of a colleague with a nonentrepreneurial career (Ahn 2010). Moreover, because they do not place a high value on risk, those who have a high risk tolerance are better equipped to handle the dangers that typically arise while starting a business. This enables the entrepreneur to save money, time, and energy, all of which can be used to develop the business (De Carolis et al. 2009). According to this line of reasoning, Schmitt et al. (Schmitt et al. 2018) research demonstrates that entrepreneurs with an established business who have high entrepreneurial self-efficacy can manage the uncertainties that may arise much more effectively because they are able to control the emotions that they experience when they perceive uncertainty. In addition, these entrepreneurs are much less likely to be swayed by threatening, anxiety-provoking beliefs.

Entrepreneurs who view the environment in which they operate as being more unstable than usual and who have relatively lower levels of entrepreneurial self-efficacy are more likely to react passively, meaning that they either withdraw from the situation or give up on it altogether. This is because they question both their own capabilities and whether or not they would be able to respond actively to the given situation (Schmitt et al. 2018).

However, as a consequence of the business owner's inability to turn a profit, he or she may be overcome by a sense of motivation that forces them to do more hazardous endeavors (Bergner et al. 2021). On the other hand, those who have high levels of self-efficacy take more risks but also profit more as a result of their more proactive behaviors (Neto et al. 2018). According to Fosfuri et al. (Fosfuri & Tribó 2008), organizations that are more willing to take risks are able to build their knowledge more effectively and more rapidly by maximizing the chances that come with information exchange and their network of connections, which allows them to outpace rivals.

#### Innovation and Opportunity Identification Capacity

We place an increasing amount of importance on innovation, whether it be in the field of machine development or even in the field of new products and services (Idrees & Sarwar 2020). However, we can also discuss innovation in relation to entrepreneurship (Baluku et al. 2018), or even in relation to the economic development of an entire nation. Entrepreneurs do not necessarily need to think about innovations because, when faced with a variety of barriers and obstacles, business owners frequently come up with creative and innovative solutions to the problems they have faced (Li et al. 2020).

One of the finest explanations of this potential is provided by Gielnik et al. (Gielnik et al. 2012), who assert that opportunity is an objectively existing entity that may be discovered in the environment by combining deliberate search and information gathering. As a result, the individual must continually seek and research new information, but this is not sufficient because he or she must also constantly monitor his or her environment (Bellò et al. 2017). Nevertheless, according to a different study (Schmitt et al. 2018), the process of identifying opportunities closely resembles the following: business owners repeatedly repeat dynamic activities with minor modifications in order to put their original values and concepts into practice and to continuously shape, develop, and improve them. On the other hand, according to other studies, opportunities are those market segments that entrepreneurs do not cover, those so-called unknown areas that, in a sense, wait to be identified and discovered (Hansen

et al. 2011). Before beginning a business, it is important to develop the ability to spot opportunities because doing so significantly raises one's chances of becoming an entrepreneur (Barton & Ensley 2006).

#### 2.4 Entrepreneurship Intention after Covid-19

The pandemic's disastrous effects on the economy and social order are still being felt today. Every market has experienced a growing and acute supply and demand mismatch, which has had serious repercussions, including the restriction or, in the worst case scenario, the cessation of certain commercial activity. But in addition to all of these, individuals have evolved, both in terms of their daily lives and their work, and they have become more selfaware. As we all know, everything has some benefits. As a result, people have had new business opportunities and have been encouraged to reconsider and reorganize their management models. As a result, businesses have come to understand that in uncertain times they must reconsider their goals and methods of transportation (Usman & Sun 2022). According to research by Usman et al. (Usman & Sun 2022), the practicality and necessity of starting a business are two factors that have a considerable impact on someone's intention to do so. On the other hand, fear of failure and future potential can also have a statistically significant impact (Usman & Sun 2022). The interaction effect that arises between the fear of failure and the entrepreneurial intention in the aforementioned research was lowered by our mental resilience, or how well we are able to manage mentally with the challenges offered to us.

#### Fear and anxiety of Covid-19

Numerous studies have demonstrated that a variety of factors can affect the way in which businesses operate, with risky, crisis-ridden, and uncertain conditions having the most frequently negative impact on entrepreneurial processes (Keh et al. 2002). These conditions, which include war (Amorós et al. 2017), the economic crisis, and even mental illness, are cited as the most common negative influences on entrepreneurial processes (Gorgievski et al. 2010). According to Mahmoud et al. (Mahmud et al. 2020) research, students' anxiety and dread of the pandemic can pose a significant threat to their mental health as they prepare to enter the profession as new employees.

As can be observed from previous studies, the pandemic significantly increased the so-called shock effect on entrepreneurial activity in general (Liñán & Jaén 2020; Szostak & Sułkowski 2020). On the other hand, Loan et al. (Loan et al. 2021) investigate the precise

explanation, or causes, of the COVID-19 epidemic to diminish levels of entrepreneurial self-efficacy, entrepreneurial desire, and entrepreneurial action.

His research indicates that all of the aforementioned are negatively impacted by the fear and anxiety caused by COVID-19 for three different reasons. First of all, researchers, Xiong (Xiong et al. 2020), for instance, have already shown that fear and anxiety in general have a detrimental impact on self-efficacy and that the anxiety brought on by COVID-19 has a reducing influence on self-efficacy (Arora et al. 2021). On the other hand, the pandemic has wreaked havoc not only on the economic sector but every aspect of our lives. As a result, fear and anxiety - both in general and as a result of COVID-19 - reduce an individual's desire to engage in any form of activity, be it life in any field. According to Shepherd et al. (Shepherd et al. 2014), an individual's resolution or decision to pursue entrepreneurship can be "selected out" from among a variety of professional options. But because of the fear of a pandemic, someone might be hesitant to start a business with absolute assurance during this period of increased unpredictability.

#### > Artificial Intelligence Acceptance and Digital Entrepreneurship Model

Since the introduction of the Internet, an increasing number of technical trends have evolved and will continue to pervade everyday life. Emerging technologies, such as artificial intelligence and the cloud, have prepared the way for new kinds of collaboration, cooperation, creativity, and competition (European Commission, 2017). A relatively new entrepreneurial spirit, the digital entrepreneurial spirit, has been given the potential to lead in corporate life, communication, and change, among other areas, as a result of modern technology (Upadhyay et al. 2022). These technology innovations have the ability to totally overturn established business knowledge, models, and strategies (Bag et al. 2021).

Emerging technologies like artificial intelligence, the cloud, the internet, and others open up new platforms and development chances for brand-new, cutting-edge goods and services (Dinh et al. 2018). Since its inception, AI has been able to disrupt numerous business operations and even enter into people's daily lives. Perfect examples of this include advertisements or recommendations with a straightforward "recommended for you" label; or there are, for example, smart devices with face and voice recognition. If we look even further, however, virtual assistants are already regular players in our daily lives (Intel Corporation, 2020). In our world, digital enterprises are still relatively new, but it already appears that artificial intelligence is the key to the future because it is already playing such

a significant role that several sectors of the digital economy, like manufacturing or medical technologies, view it as indispensable (Upadhyay et al. 2022).

The use of artificial intelligence (AI) is seen by many, including scientists, as a socalled breakthrough technology that they may not be ready for and that will disrupt traditional businesses, markets, and competitions (Dwivedi et al. 2021). Nevertheless, smart businesspeople see a wealth of opportunities and potential in the use of AI across all market segments (Marr & Ward 2019).

The research that Upadhyay N. et al. (Upadhyay et al. 2022) did on this topic led to the creation of a theoretical model that describes the motivation behind an entrepreneur's objective to apply artificial intelligence. The purpose of his investigation is to identify the factors that may have an effect on the choice that will be made. According to the findings of their investigation, Nambisan, Wright, and Feldman (Nambisan et al. 2019) determined that openness, affordability, and generativity are the three most important aspects for digital businesses when it comes to digital technology. Openness is the first factor to consider, and it indicates that it deals with many different aspects and components of digital technologies. This reflects, among other things, the nature, such as the nature of participation, the process, or even the nature of the result, in which the individual can participate in the activities; therefore, it is essential for digital businesses. The second factor, when viewed through the lens of digital entrepreneurship activity, is the so-called "affordability" of digital technology, which provides a specific action potential and opportunities to the actor in a certain environment, thereby representing the favorable prospect of an item. And finally, digital technology's power to generate change by involving new entities or actors without the smallest provocation ( (Donald 1991; Fauconnier & Turner 1998). This last part can be illustrated with an example: according to Upadhyay N. et al. (Upadhyay et al. 2022), the generativities of artificial intelligence technologies can characterize entrepreneurial innovation in digital entrepreneurship.

In today's society, business owners anticipate a significant amount of so-called technological performance from every solution to a challenge or issue. And entrepreneurs with a high level of technology adoption can be impacted by the aforementioned people who utilize technology to promote or implement ideas (Moghavvemi et al. 2016). Moreover, competitors who are pressured by other competitors who employ AI technologies have a tendency to give in to the pressure and start learning how to exploit those technologies in order to achieve and then maintain a competitive advantage (Lai et al. 2018).

However, AI will also be indispensable for enterprises. They implement artificial intelligence because they also want to beat their competitors, either by predicting changes in the market or by modifying the business plan and model that they utilize for their company (Upadhyay et al. 2022).

#### 2.5 Demographic Characteristics

The underlying causes of entrepreneurship have a significant impact on entrepreneurial success, and an entrepreneur's intense desire for success correlates with that achievement (Begley & Boyd 1987). By understanding the motives, comprehending them, and supporting them, we may invigorate the entrepreneurial spirit as well as the entrepreneurial goal. According to the findings of McClelland's research, there is a strong connection between entrepreneurial endeavors and performance-critical forms of motivation. Recent studies suggest that an entrepreneur's decisions and actions are influenced by their unique qualities; as a result, when gender is taken into account, there are disparities in the decisions and actions taken by male and female entrepreneurs (Al-Dajani & Marlow 2010).

#### Gender differences

Academics and teachers are becoming increasingly conscious of gender inequalities in entrepreneurship (Wilson et al. 2007). Despite an increase in female entrepreneurs over the past decade (Brush et al. 2009), men remain dominant in the entrepreneurial scene (Wilson et al. 2007). In 1989, Birley emphasized the critical importance of female entrepreneurship studies and drew attention to the fact that the rise in the number of female entrepreneurs is a symptom of societal changes.

Even among teenagers, there were noticeable disparities. According to research by Wilson et al. (Wilson et al. 2004), boys are more willing than girls to engage in entrepreneurial activities. On the other hand, girls who demonstrated an interest in starting a business were more influenced by social and relational motivations, such as respect and helping others, whereas boys were more influenced by the autonomy of the business.

Female entrepreneurs are more likely than male entrepreneurs to operate smaller, slower-growing, less lucrative businesses, often in the retail or so-called service industries. This finding supports Carter et al.'s (Carter & Williams 2003) assertion that there are gender stereotypes regarding men and women in self-employment.

As was previously said, male and female entrepreneurs usually work in different fields and build their businesses in different ways. It follows logically that, according to Verheul et al. (Verheul et al. 2004), as the number of female entrepreneurs in the economy increases, so does the diversity of entrepreneurial interactions. In addition to general support, policies that encourage women's entrepreneurship or labor market participation can help to boost national competitiveness (Kong & Choo 2022). Furthermore, decision-makers could foster an environment that values both genders (Dabic et al. 2012).

Improving women's and men's entrepreneurship requires distinct methods. For instance, Kong H. and Choo S. (Kong & Choo 2022) found that accomplishment motivation through entrepreneurship increased women's entrepreneurial intention but not men's. On this basis, entrepreneurship may be more significant for women than for men; therefore, it would be prudent to place a greater priority on enhancing the education of women's entrepreneurship skills and to offer them a variety of entrepreneurship education programs. Several studies in the entrepreneurship literature attempt to comprehend the reasons and decision-making processes that affect women and men differently in terms of their entrepreneurial activity. Self-efficacy is one of the most studied elements of this type (Dabic et al. 2012).

According to the relevant literature (Wilson & Marlino 2002), women have a lower level of self-efficacy in areas important to business performance, such as quantitative abilities, problem solving, and money management. A low degree of self-efficacy, which represents our self-image in terms of the requisite skills and abilities, has a greater negative impact on the entrepreneurial intentions of women. Women's perception of their self-image and self-confidence is poorer than that of men, according to O'Leary's research (O'Leary 2021). Efforts must be made to improve women's self-perception because it is crucial that they have the courage to enter the labor market and establish a business. As described by Wilson et al. (Wilson et al. 2007), self-efficacy plays a more significant role in women's entrepreneurial behavior than in men's; therefore, if women believe they possess the qualities necessary for success, Dabic et al. (Dabic et al. 2012) conclude that women's willingness to start their own business would increase.

The difficulty with both men's and women's occupations is that cultural norms have produced gender-biased societal roles and stereotypes.

According to the research of Gupta et al. (Gupta et al. 2009), both genders view entrepreneurship as a male-type job opportunity or as a masculine gender role stereotype. In addition, the research found that neither gender perceives a substantial association between entrepreneurial and female qualities, and that not only men but also those who are more similar to men, have a type of male gender identification, and have a higher entrepreneurial intention. The notion that entrepreneurship is a so-called male occupation is so firmly ingrained in society that I doubt it will ever be feasible to reverse this (Gupta et al. 2009) because women have a broader understanding of gender role stereotypes in regard to entrepreneurial activity than men do (Miller & Budd 1999). Moreover, whereas men link exclusively masculine characteristics with entrepreneurship, women identify both masculine and feminine characteristics with it. From what has been described thus far, it can be concluded that women are not discouraged from starting a business because they cannot imagine themselves as entrepreneurs or because they do not view the business as being suitable for women's characteristics, but rather because potential partners, resource providers, and men in the immediate environment of the given woman, such as her father and her partner, do not associate the business with female characteristics, and thus may not support them (Gupta et al. 2009). So, it would be important to get rid of negative gender stereotypes and assist women who want to start their own businesses to get practical experience and training in the field to improve their business skills.

#### Family Business Background

However, let's examine the family business background, as gender difference is not the only factor that might influence an entrepreneur's conduct. Students are exposed to various family business environments, which has an impact on their personalities and, in turn, their entrepreneurial behavior (Onjewu et al. 2022). Palmer et al. (Palmer et al. 2021), among other studies, also highlighted the positive impact that growing up in a family business has on a child's entrepreneurial mindset.

The continuation of family history motivates parents in their roles as business owners and managers (Jaffe & Lane 2004; Lambrecht 2005). In a family-owned business, the legacy (whether social, material, or biological) may encourage the following generation to work there (Houshmand et al. 2017).

Jaskiewicz and Dyer (Jaskiewicz & Dyer 2017) claim that the conflict between parents and children is similar to the conflict between employers and employees. However, there are times when a child deliberately chooses a path that is in direct opposition to his parents' and their vision, leading to a very strained connection between parents and child. Miller et al. (Miller et al. 2003) found that parental support is necessary for teenagers to succeed as adults, and Levinson (Levinson et al. 1986) contends that this support must be unambiguous and unqualified.

#### **>** Education's Role in EI

The role of education in entrepreneurship is among the most researched topics (Wach & Głodowska 2019; Kobylińska & Lavios 2020). According to Bandura's (Bandura 1982) theory, self-confidence in our capacity to effectively complete given tasks is derived from four primary sources: mastery experiences, modeling, social persuasion, and evaluation of our own physiological state. Education has a positive effect on the likelihood of becoming an entrepreneur (Nikolova et al. 2012); therefore, higher education under the right conditions can stimulate the entrepreneurial ideas of young people through the teaching of entrepreneurial skills (Gubik 2021), while simultaneously enhancing their chances in the labor market (European Commission 2012).

Cho (Cho 1998) emphasized in his research the significance of entrepreneurship education since having the necessary knowledge and skills encourages the individual to start a unique initiative (Shahab et al. 2019) or to build an original commercial venture. Moreover, entrepreneurship education is believed to be one of the most important factors in bolstering people's entrepreneurial attitudes (Potter 2008), as it modifies individuals' perceptions toward entrepreneurship, boosts their self-confidence, and positively influences their entrepreneurial behavior (Shahab et al. 2019). In their research, Ibrahim and Ellis (Ibrahim & Ellis 2002) concluded that as part of the learning process, entrepreneurship education should improve individuals' decision-making with self-belief and teach them to recognize mistakes.

According to Haddoud et al. (Haddoud et al. 2017), Poland is the only one of the four Visegrad countries to have already implemented entrepreneurship education at the secondary school level. This education attempts to promote students' interest in business rather than teach them specific skills. This early introduction of entrepreneurial education can improve the efficacy of entrepreneurship education at the university level.

According to research conducted in Sweden by Elert, Andersson, and Wennberg (Elert et al. 2015), junior entrepreneurship events are programs that provide students with the opportunity to develop entrepreneurial skills and experience the full operation of a company at this age. This is known as the "learning by doing" method, which makes these individuals more likely to engage in new ventures and generate higher income. In the Netherlands, it has been shown before (Huber et al. 2014) that entrepreneurial abilities can be developed more effectively if they are gained earlier in the educational process.

The goal of entrepreneurship education, according to Owoseni and Akambi (Owoseni & Akanbi 2010), is to teach students how to acquire ideas and different skills, such as leadership skills, with self-employment skills being one of the most important.

By developing entrepreneurial skills, students have a solid understanding of their entrepreneurial capabilities (von Graevenitz et al. 2010), hence enhancing their likelihood of operating a successful business (Kolstad & Wiig 2015). Students can boost their sense of self-efficacy through real accomplishments by completing practical projects in university courses on entrepreneurship. They can meet, view, or discuss the stories of successful entrepreneurs from a wide range of industries in the context of a guest speaker, or they can increase their self-efficacy in a targeted manner by employing potential role models (Cox et al. 2002). However, self-efficacy can be boosted in other ways, such as through social persuasion, positive reinforcement, and feedback from others (Wilson et al. 2007). And in the end, they conclude that an entrepreneurial job is attainable and will elicit positive emotions, for instance, due to the interactivity of the whole thing (Haddoud et al. 2017).

When evaluating the importance of education, it would be a mistake to consider solely the curriculum, because entrepreneurial ideas can be fostered by developing an entrepreneurial atmosphere that enables young people to try out diverse roles and enhance their theoretical knowledge via experience (Gubik 2021). All of this should be done in a way that demonstrates the institution's commitment to entrepreneurial values, as evidenced by its communication and other actions (Gubik 2021).

Several publications, such as the Eurofound report (EUROFOUND 2015), have been produced with numerous proposals for the modernisation of education as well as services designed to boost entrepreneurialism (EUROFOUND 2015; Erasmus for Young Entrepreneurs 2015).

This also suggests that there is a growing demand for new educational solutions that provide the necessary skills and information to help businesses launch and operate successfully (European Commission 2008; Slattery et al. 2018).

# **3** Individual Research

#### 3.1 Theoretical Framework & Hypotheses

Using a questionnaire I created, this study aims to shed light on the key elements that may influence Hungarian students' entrepreneurial intentions. I could categorize the examined prospective elements into three groups. The first of these factors is the impact of Hungarian higher education on students' entrepreneurial tendencies, if any. Second, I look into the potential impact of various demographic characteristics. Finally, I examined the relationship with entrepreneurial self-efficacy, which I divided into four groups – based on Jingjing Wu' research (Wu et al. 2022) - to determine which of the four has a significant impact on Hungarian students' entrepreneurial intentions and which does not. The model below (Figure 4) depicts my theoretical framework.



Figure 4: Theoretical Framework designed by me

As can be seen in the upper portion of the model, Hypothesis 1 is the result of a comparison between entrepreneurial ambitions prior to enrolling in Hungarian higher education and entrepreneurial intentions after enrolling in Hungarian higher education. As indicated by the vast majority of the data I have analyzed to this point, higher education has a positive effect on students' entrepreneurial inclinations, particularly if the school itself is economics-focused and incorporates entrepreneurship courses. On the basis of the preceding description, the following hypothesis was formulated:

# **Hypothesis 1:** There is a significant difference in the entrepreneurial intentions of Hungarian students before and after entering higher education

My second hypothesis can be found in the lower right corner of the model. It investigates whether the numerous demographic characteristics (gender, age, financial source, family business background, entrepreneurial experience, and business courses) have any bearing on students' entrepreneurial inclinations. There are major differences between them, and if so, what types of distinctions may we discuss? I am curious as to which of these, if possessed by a student, may encourage higher levels of entrepreneurial intent in that individual! In light of comparable findings, I propose the following hypothesis:

# **Hypothesis 2:** There is a significant difference on entrepreneurship intention among the different demographic characteristics of the Hungarian students.

The first group in terms of self-efficacy is the operation and management group, which plays a crucial role in the lives of entrepreneurs because operation and management capability help to overcome the initial difficulty, and with good operation and planning skills, almost any problem can be solved. The greater the entrepreneur's proficiency in this area, the more confidently he will be able to manage the company over its complete life cycle. However, because the initial focus is on the product or service itself, in order to build and improve it, operation and management skills are not as critical at this point, and the skills can even be partially mastered during this time. However, if someone is aware that they possess this skill, they have a significant edge at the beginning. In light of this, I formulated the following hypothesis:

# **Hypothesis 3:** Operation and management capacity in case of entrepreneurial self-efficacy, positively influence the entrepreneurial intention of the Hungarian students.

In addition to entrepreneurial self-efficacy, my second primary category is risktolerance capability. Entrepreneurship is nearly impossible without some degree of risk tolerance. If a person is incapable of distancing herself/himself from their fear of failure, even to a small degree, then she/he will always be fearful, preventing her/him from progressing. And by not taking as many risks, he may fall into failure regardless. As noted by Litzky et al., those with a strong risk-taking capacity overcome hurdles considerably more readily, as their time and energy are not consumed by the concept of danger but rather by the possibility of development, and therefore significantly more profit (De Carolis et al. 2009). While people with a lower ability to do so are more likely to adopt a passive strategy in uncertain conditions and lose out on possible gains, those with a higher ability to do so are more likely to choose an active approach (Schmitt et al. 2018). But also, as we all know, in today's world, nothing is certain, especially in Europe. Consequently, based on what we have just discussed, the following is my fourth hypothesis:

# **Hypothesis 4:** *Risk tolerance capacity in case of entrepreneurial self-efficacy, positively influence the entrepreneurial intention of the Hungarian students.*

Due to the significance of the relationship network, the third crucial skill is the ability to coordinate relationships. Even if we consider not only business but also daily life, connections are very important, especially for entrepreneurs. The stronger an entrepreneur's capacity for relationship coordination, the more prosperous the enterprise. To be able to assist each other as rapidly as possible, it is not only necessary to have contact networks outside the firm, but also those within the company. The entire ambiance of the office depends on the connections within the organization, how individuals get along with one another, and how they resolve disagreements. The relationships within the organization are determined by the entrepreneur. Based on the preceding, I propose the following hypothesis:

# **Hypothesis 5:** *Relationship coordination capacity in case of entrepreneurial self-efficacy, positively influence the entrepreneurial intention of the Hungarian students.*

Last but not least, innovation and opportunity capacity, which play an indescribably important role, but what is the significance of innovation and opportunity capacity?! Firstly, without this capacity, the business would hardly exist. Without recognizing the opportunities, we either do not notice them or we notice them too late. Also, as I mentioned in the very first stage, the most important thing for the company is to develop the product or service, making it even better with the help of innovation capacity, after we have taken advantage of the opportunities presented to us. It is essential to be aware of our capabilities and areas where we can still develop; where it is worthwhile to deviate, so that we can generate more and more original ideas and so enhance the quality of our firm as a whole. According to studies by Loan et al., recognizing opportunities has a substantial, beneficial impact on student entrepreneurs (Loan et al. 2021). In light of the preceding, I also developed a sixth hypothesis.

**Hypothesis 6:** Innovation and opportunity identification capacity in case of entrepreneurial self-efficacy, positively influence the entrepreneurial intention of the Hungarian students.

### 3.2 Research Methods

#### > Measurement

I collected data for my study through the use of an online questionnaire that was Google Form-based. The questionnaire was developed using a variety of prior domestic and foreign studies, with JingJing Wu's study being the most influential (Wu 2022). The established hypotheses, from which the study objective was derived, also had a key influence on the design of the components of the questionnaire, in addition to the literature. From the very beginning of the questionnaire, even before they started filling it out, the respondents were informed of the questionnaire's aim, the protection of their anonymity, and the confidentiality of their responses.

- 1. The first part of the form asks for basic demographic information about the person filling it out, such as their gender, age, and major field of study. Most of these questions are multiple-choice, but the age question is open-ended, so the student had to provide their own age when responding to that question.
- 2. In the following section of the questionnaire, questions are posed regarding what are known as "external influencing factors." In this section, they needed to provide responses to multiple-choice questions addressing the individual's business courses, family entrepreneurial background in any field, and previous experience in the field of entrepreneurship.
- **3.** The third section of this questionnaire examines students' aspirations to start their own businesses, with two primary questions regarding students' entrepreneurial intentions prior to and after enrolling in Hungarian higher education. These questions in this part of the study are matrix type questions. In both cases, I questioned them about the identical assertions to find out the extent to which they agreed with the statements

(1-No, not at all; 2-A little; 3-Moderately; 4-Very much; 5-Yes, completely).

**4.** The topic of one's own self-efficacy as an entrepreneur was covered in the final portion of the questionnaire. This question was also presented in the form of a matrix-

type question as a component of the entrepreneurial self-efficacy test. As was the case with the portion that came before it, the respondent was expected to indicate the degree to which they agreed with each proposition (1-No, not at all; 2-A little; 3-Moderately; 4-Very much; 5-Yes, absolutely).

#### > Sample and Data Collection

I shared and requested my friends to also post the link to the questionnaire that was generated by Google Form on any social media platform that they use. The "snowball" sampling technique is the name given to this specific approach, which resulted in a total of 322 questionnaires being received, of which only 309 contained answers worthy of examination or were valid. This was discovered after conducting a thorough inspection of the answers. To the best of my knowledge, I was able to reach out to at least nine higher educational institutions with my questionnaire, where, as you will see, more than sixty percent of the completed students study in an economic field.

#### > Analytical Methods

To analyze the data for my study, I used Google Form to convert the data into an Excel table so that I could see all the responses in one table, and then, after a second check, I made the answers compatible with SPSS (Statistical Package for Social Sciences) because I wanted to use the SPSS 27 program to analyze the data. I was able to divide the analyses into five groups, and I used various analytical techniques and tools for each category. The following were the components and techniques:

- **1.** The first is a descriptive analysis of the participants' demographic characteristics. For this, I used the descriptive statistical tool in SPSS 27.
- 2. Secondly, I checked the reliability of the entrepreneurship intention before and after enrolling in higher education, as well as the various entrepreneurial self-efficacy capability categories (operation and management capacity, relationship coordination capacity, risk-tolerance capacity, innovation, and opportunity identification capacity), which were determined with the assistance of SPSS. To evaluate the reliability of each of these, I ran the Cronbach's Alpha Test in SPSS.
- **3.** In the next part, by using the Paired-Samples T-Test, I then examined if there was a significant difference between the entrepreneurial intent of Hungarian students before and after attending higher education.
- **4.** In the fourth section, I utilized the Independent Sample T-test and the One-Way Between Groups ANOVA test to determine if there was a statistically significant

difference between the different demographic characteristics of the Hungarian students. The One-Way Between Groups ANOVA test was utilized for the age categories, while the Independent Sample T-test was utilized for the remaining categories.

**5.** Fifthly, I examined whether the four dimensions of entrepreneurial self-efficacy (operation and management capacity, relationship coordination capacity, risk-tolerance capacity, and innovation and opportunity identification capacity) influence the formation of entrepreneurial intention among Hungarian university students. And to do this, I applied the Standard Multiple Regression analysis, which involves putting all independent variables into the equation at the same time.

### 3.3 Sample Characters Analysis

I was able to create the following tables and charts using SPSS descriptive analysis, which reflect basic data on the demographics of the respondents, including their gender, age, and financial background.

#### **Gender of Respondents**

As shown in the pie chart below, approximately 29.8% of the returned responses seem to be from men, while the vast majority, 70.2%, are from women. This time, it appears that women were more than twice as active as men among Hungarian students.



**Figure 5: Sample Characters of Genders** (n=309) Source: Personal computations using SPSS 27 (2022)

#### > Age of Respondents

As you can see from the age group limit values, I was able to target young people in their 20s with my research questionnaire, but the majority are from the group of 21 or under, with the fewest responses coming from those over 27.



**Figure 6: Sample Characters of Ages Groups** (n=309) Source: Personal computations using SPSS 27 (2022)

#### > Marital Status of Respondents

In terms of marital status, nothing surprising occurred, given that the majority of respondents are under the age of 23, but leaving such thoughts aside, it is clear from the data that nearly four times as many people from the respondents are unmarried as married.



**Figure 7: Sample Characters of Marital Statuses** (n=309) Source: Personal computations using SPSS 27 (2022)

#### > Educational Program

Education Program	Frequency	Valid Percent
Preparatory Course	18	5,8
Bachelor	213	68,9
Master	54	17,5
Phd	12	3,9
Postgraduate Specialist Training Course	7	2,3
Undivided Training	2	0,6
Online Course	3	1,0
Total	309	100,0

Table 1: Sample Characters of Educational Programs (n=309)

Source: Personal computations using SPSS 27 (2022)

The educational program received more colorful responses, but there is one category that stands out from the rest, and that is the bachelor's, with 68.9%. Following that is the master's program, which is nearly a quarter of the bachelor's (17,5%). The remaining five programs account for only 14% of the total.

#### Educational Mode

We already know how students are distributed between programs from the previous table (Table 1), so the distribution of education mode is not surprising. Full-time students account for 77% of all students, while correspondence students account for 23%.

Based on the data, it is possible to conclude that the majority of students would like to take university classroom session-type classes after high school.



**Figure 8: Sample Characters of Educational Modes** (n=309) Source: Personal computations using SPSS 27 (2022)

#### Studying Field of the Respondents

Table 2: Samp	le Characters	of the Stu	dying Fields	(n=309)
				( /

Studying Field	Frequency	Valid Percent
Natural Sciences	12	3,9
Engineering	27	8,7
Medical and Health Sciences	3	1,0
Agricultural Sciences	21	6,8
Social Sciences	18	5,8
Political and Law Sciences	3	1,0
Liberal Arts	12	3,9
Economic Sciences	189	61,2
Information Technology	6	1,9
Pedagogy and Psychology	18	5,8
Total	309	100,0

Source: Personal computations using SPSS 27 (2022)

Just as there was almost always an answer option that soared above the rest in the previous ones, it is now in the field of study, and this is the field of economic sciences, but to be honest, it would be surprising if the entrepreneurial intention was not a large proportion among those studying economics. Students studying economics provide roughly three-fifths (61,2%) of the answers. Engineering (8.7%) and agricultural (6.8%) studies are the next two largest groups.

#### Financing Source

The final character evaluation I would like to discuss concerns the type of financing. Scholarship recipients outnumber self-finenced respondents by slightly more than twice, according to the graph. Scholarship students account for 67% of the total, with self-finement students accounting for 33%.



**Figure 9: Sample Characters of Financing Sources** (n=309) Source: Personal computations using SPSS 27 (2022)

#### **3.4** Statistical Analysis

#### > Reliability

The reliability of the scale shows how random error-free the sample is. The Cronbach-alpha coefficient is the most commonly used indicator. The coefficient must be between 0 and 1, and the closer it is to 1, the more reliable the sample datas (Pallant 2011). As shown in the table below (Table 3), the smallest Cronbach's Alpha in our case is for Innovation and Opportunity (0.783) and the two largest are for Entrepreneurship Intention before (0.923) and after (0,914). These are excellent statistics, as this result should preferably be greater than 0.7.

		Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Entrepreneurship Before		0,923	0,924	6
Intention	After	0,914	0,913	6
Operation and Management Capacity		0,890	0,890	8
Relationship Coordination Capacity		0,881	0,882	4
Risk Tolerance C	apacity	0,832	0,831	6
Innovation a Opportunity Ca	nd pacity	0,783	0,792	5

#### Table 3: Cronbach's Alpha Test

Source: Personal computations using SPSS 27 (2022)

# Relationship between Hungarian students' entrepreneurship intentions before and after entering Hungarian higher education

A Paired Sample T-test is performed to examine if there has been a change in the extent to which Hungarian students desire to start their own enterprises (entrepreneurial intention) before to and after enrolling in higher education. The Paired Sample T-test is applicable for collecting data from the same group of individuals on two distinct occasions or under two varied environmental conditions (Pallant 2011). The results of an analysis that I conducted using the Paired Sample T-test to compare all six pairs/statements are presented in Table 4 below. If the p-value (Sig. (2-tailed)) column has a value that is lower than 0.05, this indicates that there is a statistically significant difference between the values of the entrepreneurial intention questions before and after entering higher education.

The fact that the p-value for the fifth statement, which reads, " I have saved money or considered the source of funds for starting a company," has a value greater than 0.05 (0,114) shows that there is no statistically significant difference regarding this matter. In contrast, there is a significant difference between the remaining five questions. We could use the paired mean differential to find out which question had the highest difference between the averages; in other words, we could find out which question experienced the most significant change as a direct result of higher education. The replies to the first question, which asked, "I had a sense of entrepreneurship," revealed the greatest disparity between the two groups (0.660). The sixth question, "I hope to get wealth and a sense of achievement through starting a business," was only one hundredth of a point behind the first question (0.650) in terms of the p-value.

Moreover, the fourth question - "I spent time to extend my entrepreneurial knowledge and other people's entrepreneurial experience." - lagged behind the second largest change by almost the same amount, 0.009 (0.641).

Comparis Intention b hi	son of Entrepro efore and after igher education	eneurial Entering	Mean	Paired Mean Difference	Std. Deviation	Sig. (2-tailed)
Pair 1	FL 1a	Before	2,52	- 0.660	1,255	< 0.001
1 all 1.	LI_IQ	After	3,18	0,000	1,270	<0,001
Dair 2	EL 2a	Before	2,92	- 0.175	1,442	0.004
I all 2.	EI_2q	After	3,10	0,175	1,306	0,004
Dair 2	EI_3q	Before	2,61	- 0,447	1,325	<0,001
rair 5.		After	3,07		1,348	
Doin 1	EI_4q	Before	2,64	- 0.641	1,323	<0.001
Pair 4.		After	3,28	- 0,041	1,378	<0,001
Doin 5	EL 5a	Before	2,90	0 126	1,513	0.114
Pair 5.	EI_3q	After	2,78	-0,120	1,360	0,114
Doin 6	EI 6a	Before	2,73	- 0.650	1,465	<0.001
r all'0.	EI_0q	After	3,38	0,030	1,431	<0,001

Table 4: Paired Sample T-test (for Elbefore and Elafter)

Source: Personal computations using SPSS 27 (2022)

We can conclude that there is a significant difference between Hungarian students' entrepreneurial intentions before and after entering Hungarian higher education.

#### > The Relationship between Demographic Variables and Entrepreneurial Intention

When comparing the mean score on a continuous variable between two distinct participant groups, the Independent Sample T-test is the statistical method of choice (Pallant 2011). In my situation, the Independent Sample T-test will tell me if there is a statistically significant difference between the two mean scores of the two groups: males and females, self-financed and scholarship, those with a family business background and those without, those with entrepreneurial experience and those without, those with business courses and those without, differ significantly in their entrepreneurial intention.

The variables in Table 5 - located after the paragraphs that are included in this section - that have p-values that are less than or equal to 0.05 are indicated by an asterisk. In these particular circumstances, the two groups are very different from one another in a significant way. It has been demonstrated that the only variable is gender, where compared to one another, males and females do not significantly differ with regard to their ambitions to start their own business.

It is possible to analyze further the other variables by using Cohen's d, which represents the effect size for the Independent Sample T-test (a little effect corresponds to Cohen's d = 0.2, a medium effect refers to Cohen's d = 0.5, and a large impact relates to Cohen's d = 0.8). The following overarching conclusions are attainable by extrapolating from this study:

• Students in Hungary who self-finance their education have much better entrepreneurial inclinations (mean = 3.50) as compared to students who receive scholarships

(mean = 2.95). If we look at the Cohen's d value for this variable's row, we can see that the effect size of being a student who pays for their own education is close to medium effect (0.494).

- In addition, those who have a family business background have considerably higher average scores (mean = 3.62) on the entrepreneurial intention questions than those who do not have a background in a family business (mean = 2.84). This variable has the largest effect size of all the variables, 0.732, which indicates a relatively strong effect size.
- Students who have previous entrepreneurial experience have significantly higher entrepreneurial intention ratings (mean = 3.47 vs. 3.03) than students who do not. We are able to calculate the significance of the effect using Cohen's d. The effect size in this instance is 3.04, which indicates that if a student has previous experience in entrepreneurship, it has only a minor positive effect on their intention to engage in entrepreneurial activity.
- The fact that a Hungarian student has taken entrepreneurship courses results in a higher average score (Mean = 3.21) for entrepreneurial intention than a student who has never participated in such a course (Mean = 2.88). In this circumstance, Cohen's d is the smallest, so this variable has the smallest effect size, with a value of 0.298, demonstrating that the presence or absence of specific entrepreneurial subjects has a minimal effect on students' entrepreneurial intentions.

Variables		n	Mean	SD	Mean Diff.	SE Diff.	t	Cohen's d
Condon	Male	92	3,24	1,216	0.15	0 147	1,014	0.122
Genuer	Female	217	3,09	1,089	0,15	0,147		0,132
Fin.	Self-financed	102	3,50	0,982	0.54	0 1 2 2	1007*	0.404
Source*	Scholarship	207	2,95	1,154	0,54	0,155	4,082*	0,494
Family	Yes	114	3,62	0,957				
Bus.	NT	105	2.04	1 100	0,78	78 0,120	6,471*	0,732
Backgr.*	No	195	2,84	1,123				
Entrepr.	Yes	90	3,37	0,834	031	0 120	2 827*	0 304
Exp.*	No	219	3,03	1,217	0,54	0,120	2,027	0,304
Bus.	Yes	237	3,21	1,101	0 33	0 151	2 212*	0.208
Courses*	No	72	2,88	1,184	0,33	0,151	2,213	0,290

**Table 5: Independent Sample T-test** 

Source: Personal computations using SPSS 27 (2022)

Regarding age, however, I created three age groups rather than two, thus I was unable to use the Independent Sample T-test to establish whether there are significant differences between the age groups. For this analysis, the One-Way Between-Groups ANOVA test was performed. One-Way Between Groups indicates that there is only one independent variable but that there are unique individuals in each group. In my situation, the groupings are determined by age (Pallant 2011). The mean values for each group are shown in Table 6.

Table 6	6: Descriptives	

	Ν	Mean	Std. Dev.
≤ <b>2</b> 1	117	3,094	1,156
22 - 26	105	3,543	1,056
27 ≤	87	2,684	0,998
Total	309	3,131	1,128

Source: Personal computations using SPSS 27 (2022)

The Post-hoc test is only significant if we observed a significant difference in our overall ANOVA (Table 7), i.e., if the Sig. value was equal to or less than 0.05. In this situation, my Sig. value is <0.001, which is less than 0.05, suggesting a statistically significant outcome among the groups (Pallant 2011). Therefore, the Post-hoc test in Table 8 will inform me precisely where the discrepancies between the groups exist. In the that table, the exact significance value is indicated in the column labeled Sig., indicating that the two groups being compared differ substantially at the p<0.05 level.

#### **Table 7: ANOVA**

	Sum of	df	Sig
	squares	ai	big.
<b>Between Groups</b>	35,361	2	<0,001
Within Groups	356,580	306	
Total	391,942	308	

Source: Personal computations using SPSS 27 (2022)

#### **Table 8: Post-Hoc Test**

		Mean Difference	Sig.
< 21	22 – 26	-0,449	0,006
$\leq 21$	$27 \leq$	0,410	0,021
22 26	$\leq 21$	0,449	0,006
22 - 20	$27 \leq$	0,859	<0,001
27 -	$\leq 21$	-0,410	0,021
$27 \leq$	22 - 26	-0,859	<0,001

Source: Personal computations using SPSS 27 (2022)

The Turkey post-hoc test (Table 8) demonstrates that there is a statistically significant difference in entrepreneurial intention between those aged 21 and younger and those aged 22 to 26 (p = 0.006), as well as between those aged 21 and younger and those aged 27 and older (0.021). In addition, there is a substantial difference (0.001) between individuals aged 27 and older and those aged 22 to 26. To determine the magnitude of the age variable's effect on entrepreneurial intent, we must calculate it. It differs from a t-test on independent samples. Instead of Cohen's d, we employ Eta-squared for calculating effect size with ANOVA. The small effect in the case of Eta-squared is 0.01, the medium effect is 0.06, and the large effect is 0.14 (Pallant 2011). This is the formula for Eta squared:

$$Eta \ squared = \frac{Sum \ of \ squares \ between \ groups}{Total \ sum \ of \ squares} = \frac{35,361}{391,942} = 0,09$$

Since 0.09 is closer to 0.06, it has a medium effect size. This data also indicates that age accounts for 9% of the variance.

# The Relationship Between Entrepreneurial Intention and the four dimensions of Entrepreneurial Self-Efficacy

Multiple regression reveals directly what proportion of the variance in entrepreneurial intention can be explained by the four distinct components of entrepreneurial self-efficacy. (Pallant 2011) In the case of standard multiple regression, all four dimensions enter the equation at once.

Before beginning the analysis, the sample size must be determined using the following formula: N > 50 + 8m, where m is the number of entrepreneurial self-efficacy dimensions. Using the right inputs, the computation demonstrates that 309 is larger than 82, which is accurate; therefore, we may proceed with the check. On the Pearson correlation matrix (Table 9), we must ensure that none of the coefficients are greater than 0.8, since a number greater than this implies multicollinearity (Shrestha 2020).

	Mean	SD	EI_after	OMC	RCC	RTC	IOIC
<b>EI_after</b>	3,131	1,128	1	-	-	-	-
OMC	3,438	0,909	0,522	1	-	-	-
RCC	4,070	0,889	0,275	0,494	1	-	-
RTC	3,309	0,845	0,535	0,647	0,495	1	-
IOIC	3,342	0,835	0,507	0,750	0,578	0,737	1

 Table 9: Descriptive Statistics and Pearson Correlation Matrix

Source: Personal computations using SPSS 27 (2022)

#### Table 10: Coefficients and Model Summery

	Standardized	t	Sig.	<b>R</b> <sup>2</sup>	<b>R</b> <sup>2</sup>	F	Sig.
	Coefficients		(p-value)		Change	Change	F Change
(Constant)	-	1,791	0,074	0,347	0,347	40,314	<0,001
OMC	0,269	3,735	<0,001	-	-	-	-
RCC	-0,083	-1,440	0,151	-	-	-	-
RTC	0,311	4,409	<0,001	-	-	-	_
IOIC	0,123	0,467	0,143	-	-	-	-

Source: Personal computations using SPSS 27 (2022)

After completing this verification, we may go on to the next phase, which is to analyze with Table 10 to assess the predictive value of the four forms of entrepreneurial self-efficacy. The result, 0.347 in column R<sup>2</sup> indicates that entrepreneurial self-efficacy may account for 34.7% of the variance in entrepreneurial intention. In addition, there are only two dimensions for which p<0.001, hence only for these two dimensions may a statistically significant influence be noticed. The capacity for risk tolerance has the greatest positive effect on the entrepreneurial intention of Hungarian students ( $\beta = 0.311$ ; p<0.001), followed closely by the capacity for operation and management ( $\beta = 0.269$ ; p<0.001). The remaining two dimensions have no statistically significant impact on the entrepreneurial intent of Hungarian university students (p>0.05).

## 4 Discussion

Based on the findings, the hypotheses that I established at the start of my research were confirmed or rejected as follows (Table 11):

Table 11	: Summary	Table
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Research Questions	Hypotheses	SPSS Analysis Methods	Acceptance/ Rejection
How the beginning of higher education in Hungary influences the entrepreneurial intentions of Hungarian students?	<b>H1:</b> There is a significant difference in the entrepreneurial intentions of Hungarian students before and after entering higher education	Paired Sample T-test	$\oslash$
How the students' demographic characteristics relate to their entrepreneurial intentions?	H2: There is a significant difference on entrepreneurship intention among the different demographic characteristics of the Hungarian students	Independent Sample T-test ANOVA	$\oslash$
Whether the four components of entrepreneurial self-efficacy have an impact on these intentions, and to what extent?	<b>H3:</b> Operation and management capacity in case of entrepreneurial self-efficacy, positively influence the entrepreneurial intention of the Hungarian students		$\oslash$
	H4: Risk tolerance capacity in case of entrepreneurial self-efficacy, positively influence the entrepreneurial intention of the Hungarian students	Standard Multipla	$\oslash$
	H5: Relationship coordination capacity in case of entrepreneurial self-efficacy, positively influence the entrepreneurial intention of the Hungarian students	Regression Analysis	$\otimes$
	<b>H6:</b> Innovation and opportunity identification capacity in case of entrepreneurial self-efficacy, positively influence the entrepreneurial intention of the Hungarian students		$\otimes$

In essence, my research seeks to answer three fundamental questions: first, how the start of higher education in Hungary affects the entrepreneurial intentions of Hungarian students; second, how demographic characteristics relate to the entrepreneurial intentions; and third, whether the four components of entrepreneurial self-efficacy have an impact on the entrepreneurial intentions, and if so, to what extent. Using the outcomes of the analysis, I came to the conclusion that, for the majority of entrepreneurial aspirations in Hungary, there is a discernible difference between intent before and after entering higher education. The fifth statement, "I have saved money or thought about the source of funding for beginning a company," was the only one that did not change significantly once students showed favorable significant differences for entrepreneurial intention. The two statements with the greatest averages before the students entered higher education were, "I hope to create a company in the future" (Mean = 2.92) and "I have saved money or thought about the source of funding for beginning a company," (Mean = 2.90).

However, once they had already begun their higher education programs, two other statements—"I spend time gaining entrepreneurial information and other people's entrepreneurial experience" (Mean = 3.28) and "I hope to get wealth and a sense of achievement through starting a business" (Mean = 3.38)—became those with the highest means . I also saw that all of the average values for the statements were near three, which suggests that Tehseen and Haider's research, which asserts that self-employment is always an attractive career route for students, may be accurate. (Tehseen & Haider 2021).

Regarding the demographic characteristics, gender was the only one where there was no significant difference between the groups; therefore, in the case of the Hungarian students who participated in this study, no conclusion can be drawn, as in the majority of research on this topic (Dabic et al. 2012; Kong & Choo 2022), that women's entrepreneurial intentions are lower than men's. Regarding the other personal variables, however, there was a discernible difference, including the type of finance, the family business background, entrepreneurial experience, and the entrepreneurship course. As expected, as Mustafa et al. have noted, such characteristics have a substantial effect on entrepreneurial intent (Mustafa et al. 2016). Still, **I accepted hypothesis 2 (H2)** because four-fifths of the demographic characteristics demonstrated a substantial difference between the groups.

After examining entrepreneurial self-efficacy, it was discovered that the risk-tolerance ability and the operation and management capacity influence the entrepreneurial ambitions of Hungarian higher education students (p<0.05). The fact that operation and management skills have a significant impact on students' entrepreneurial intentions is not surprising and is consistent with expectations given that these skills are primarily affect the successful operation, development of start-ups and will be indispensable for the entire management, from the beginning to the end. Regarding risk-tolerance ability, it is also very important, especially in the midst of today's uncertainties. Therefore, it is not surprising that this ability has such a significant impact on the entrepreneurial intentions of Hungarian students. Since they attach less importance to risk and fear of it, they are able to devote more time, energy, and

resources to the business itself and how it could develop. Consequently, **I also accepted hypotheses 3 (H3) and 4 (H4)**, but in the case of relationship coordination capacity ( $\beta = -0.083$ , p > 0.05) and innovation and opportunity identification ( $\beta = 0.467$ , p > 0.05) having no effect on entrepreneurial intention, **I had to reject hypotheses 5 (H5) and 6 (H6)**. This aspect of entrepreneurial self-efficacy is somewhat unexpected, given that the relationship coordination capacity is responsible for all of these social networks, international relationships, as well as the relations within the company, which in today's globalized world is an essential ability for maintaining a business. It is also unexpected that their ability to be innovative and their ability to spot opportunities have no effect on their desire to start a business. Spotting and taking advantage of an opportunity is the first step in starting a business, and if a person ca not do that, their chances of starting a business are diminishing.

### 5 Conclusion & Proposals

In the instance of Hungarian students, this study provides evidence to emphasize the significance of higher education, the influence of distinct individual characteristics, and the beneficial effect of individual entrepreneurial capabilities in light of entrepreneurial intentions.

According to the findings, higher education can have a considerable impact on the growth of students' entrepreneurial aspirations; therefore, it would be crucial for the university management to prioritize the students' needs in this regard. For one statement in the questionnaire pertaining to entrepreneurial intention, the mean value of responses given after the beginning of higher education was 0.12 points lower than the mean value of answers provided before. The statement in dispute was, "I have saved money or thought about the source of funding for starting a company."

#### **Suggestion for the higher education management:**

In order to change the aforementioned, it would be required to incorporate a complete elective subject that covers how to obtain a source of capital to start a business into the curriculum.

Moreover, the demographic characteristics of the students are vital and must be addressed and encouraged in every way feasible. According to the results, those with a family business background, entrepreneurial experience, an entrepreneurship course, or a self-financed type of financing, are more likely to have a better entrepreneurial mindset.

#### Suggestion for the students who possess the above qualities:

These students can encourage and support their classmates within the context of lectures or group discussions, whether in a single class at an institution of higher education or at activities planned independently.

Regarding entrepreneurial self-efficacy, the results indicate that operation and management capabilities and risk-tolerance ability solely influence entrepreneurial intention among Hungarian university students. However, the other two categories, relationship coordination capacity and innovation and opportunity identification capacity, fell short of expectations.

#### **Suggestion for the professors and the students:**

Regarding the skill of relationship coordination, it would be important for students to first learn why this skill is so important in today's ever-changing world, either with the assistance of professors or independently through the use of books, videos, and many conversations, so that they actually desire to master the knowledge and skills of how to build and maintain a relationship system.

I saved for last the skills of innovation and opportunity identification, which, as I have already said, are the first steps in starting your own business, as it is difficult to capture an opportunity if you do not recognize it.

#### **Suggestion for the professors and the students:**

It may not be feasible to assist someone discover possibilities, but by emphasizing to students the significance of always being awake and receptive to opportunities, we can plant the seeds of awareness in their heads, and they may become more vigilant. However, innovation can unquestionably be enhanced. In recent years, innovation has played a significant role in the success of businesses. By inviting guest speakers who can share their own experiences and by assigning students tasks that encourage diverse creative and innovative solutions, educators can help students now, so later they can color, develop, and renew the world with their own ideas.

### 6 Summary

Overall, the dedication to being an entrepreneur is too difficult to express in detail, but the driving forces behind the aim can be discovered (Gubik, 2013). It is essential to learn more about these elements since entrepreneurial purpose has a substantial impact on the economy of a nation.

I divided the findings of my inquiry into five substantial chapters. More than two pages are devoted to introducing the study in the opening chapter. Following the introduction is the literature review, which explores many theories on entrepreneurial intention and potential influencing factors. These hypotheses were based on the most significant domestic and international scientific publications and other works of literature. In the third main chapter, individual research is discussed. I utilized a Google Form-created online survey to collect data for my research. Using the so-called "snowball" sampling technique, I was able to collect 309 legitimate responses, which, to the best of my knowledge, were completed by students from nine different universities. I validated the data in an Excel spreadsheet before transferring it to IBM SPSS Statistics 27 so that I could evaluate my hypothesis by conducting the necessary analysis. This is followed by a two-page discussion, and at the very end, in the fifth chapter, the suggestions and the conclusion. In addition to everything else, there is a list of figures, a list of references, and appendices.

My research seeks to answer three fundamental questions: first, how the beginning of higher education in Hungary influences the entrepreneurial intentions of Hungarian students; second, how the students' demographic characteristics relate to their entrepreneurial intentions; and third, whether the four components of entrepreneurial self-efficacy have an impact on these intentions, and to what extent.

Regarding the aforementioned questions, the outcomes of the study paint a relatively clear picture. Given that these are all essential elements of the labor market, higher education and self-efficacy are modifiable factors that can be used to encourage entrepreneurial intent among students.

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APPENDICES

#### **Appendices I – Hungarian Questionnaire**

A Magyar hallgatók vállalkozási szándékát befolyásoló tényezők kutatása

Kedves Kitöltő!

A Magyar Agrár- és Élettudományi Egyetem (volt SZIE) alapszakos hallgatója vagyok, és a segítségedet szeretném kérni a kérdőívem kitöltésében, és/vagy terjesztésében.

Kérlek, akkor töltsd ki az alábbi kérdőívet, hogyha Magyarországon tanuló magyar hallgató vagy, akinek vállalkozási szándékai voltak/vannak.

Előre is köszönöm a segítséged!

- 1) Rész: Demográfiai jellemzők
  - 1. Nem:
    - a. Nő b. Férfi
  - 2. Kor:
  - 3. Családi állapot:
    - a. Egyedülálló/ Elvált/ Özvegy b. Házas
  - 4. Képzési program:
    - a. Előkészítő képzés/ FOSZK b. Alapképzés
    - c. Mesterképzés d. PhD-képzés e. Egyéb: .....

### 5. Képzési mód:

a. Nappali b. Levelezős

### 6. Képzési terület:

- a. Természettudomány b. Műszaki tudományok
- c. Orvos- és egészségtudomány d. Agrártudomány
- e. Társadalomtudomány f. Állam- és jogtudomány
- g. Bölcsészettudomány h. Gazdaságtudomány
- i. Informatika j. Pedagógia és Pszichológia

#### 7. Finanszírozási forma:

- a. Önköltséges b. Állami ösztöndíjas
- 2) Rész: A külső befolyásoló tényezők szerepe a vállalkozási szándék alakulásában
  - 8. Voltak-e már vállalkozással kapcsolatos tantárgyaid?
    - a. Igen b. Nem
  - 9. Mennyi ideje dolgozol? Beleértve az esetleges szakmai gyakorlatot, részmunkaidőt, illetve alkalmi munkákat!
    - a. Még nem dolgoztam b. Kevesebb mint 1 éve
    - c. 2-3 éve d. Több mint 4 éve

10. Van-e bármilyen mértékű vállalkozói tapasztalatod?

- a. Nem, nincs b. Igen, van
- 11. Van bármiféle családi vállalkozási háttered? Ha igen, akkor milyen területen?
  - a. Nem, nincs
  - b. Igen, van:

i.	Építőipar	ii.	Szépségipar	i	ii.	Gyógyszeripar
iv.	Élelmiszeripar	r v	. Textilipar	•	vi.	Magán Praxis
vii.	Autóipar	viii.	Agrár	ix.	Eg	yéb:

- 3) Rész: A magyar felsőoktatás hatása a hallgatók vállalkozási szándékára
  - 12. Milyenek voltak a vállalkozási szándékaid mielőtt felsőoktatásra jelentkeztél? (1-Nem, egyáltalán nem; 2-Kicsit; 3-Mérsékelten; 4-Nagyon; 5-Igen, teljes mértékben)

	1	2	3	4	5
Jó vállalkozói érzékem volt.					
Azt terveztem, hogy a későbbiekben céget alapítok.					
Kerestem a vállalkozói projekteket és lehetőségeket.					
Időt szakítottam a vállalkozói ismereteim bővítésére.					
Gondolkodtam a pénzforrási lehetőségeken egy					
cégalapításához.					
Bíztam abban, hogy sikerül elég pénzforrást találni,					
hogy elkezdjek egy vállalkozást.					

 Mik a vállalkozási szándékaid most? (1-nem, Egyáltalán nem; 2-Kicsit; 3-Mérsékelten; 4-Nagyon; 5-igen, teljes mértékben)

	1	2	3	4	5
Van vállalkozói érzékem.					
Terveim szerint a jövőben céget alapítok.					
Vállalkozói projekteket és lehetőségeket keresek.					
Időt szakítok a vállalkozói ismeretek és mások					
vállalkozói tapasztalatainak elsajátítására.					
Megtakarítottam vagy átgondoltam a pénzforrást egy					
cégalapításához.					
Remélem, elég vagyonhoz és eredményhez jutok, hogy					
elkezdjek egy vállalkozást.					

- 4) Rész: A vállalkozói szándék alakulása a vállalkozói énhatékonyság hatására
  - 14. Vállalkozói énhatékonysági teszt: (1-Nem, egyáltalán nem értek egyet;....; 5-Igen, teljes mértékben)

	1	2	3	4	5
Képes vagyok átlátható tervet készíteni a vállalkozás jövőbeli fejlesztéseivel kapcsolatban.					
Rendelkezem a megfelelő üzemeltetési készségekkel.					
Rendelkezem a megfelelő vezetési ismeretekkel.					
Jól tudok feladatokat kiosztani.					
Kollégáimat a feladat sikeres elvégzéséhez segítem,					
motiválom.					
Tudom elemezni a pénzügyi adatokat.					
El tudom készíteni a működési költségvetést.					
Vállalkozási oktatásban részesültem, és tudom, hogyan kell					
vállalkozást indítani.					
Hatékony a kommunikációs képességem.					
Munkatársaimmal jó kapcsolatot tudok kialakítani.					
Képes vagyok mások szemszögéből mérlegelni a					
problémákat.					
Jók a konfliktuskezelői képességeim.					
Hajlamos vagyok elfogadni a bizonytalanságot.					
Kevésbé aggódom az esetleges bizonytalanságok miatt.					
Képes vagyok a kockázatok elemzésére.					
Tudok észszerű terveket készíteni a kockázatok csökkentésére					
Nem félek a vállalkozásalapítás kudarcának kockázatától					
Van bátorságom szembenézni a kudarccal, és újra					
próbálkozni.					
Mindig elő tudok állni új és jó ötletekkel.					
Könnyen tudom teljesíteni a kihívásokat.					
Megtudom határozni az innováció potenciális értékét.					
Nagyobb figyelmet fordítok a vállalkozás és az innováció					
híreire, hogy segítsenek megtalálni a vállalkozás					
indításának lehetőségét.					
Erős idegennyelv-tudásom segíthet a vállalkozás					
beindításában.					
Rendelkezem a vállalkozási területen szükséges alapvető					
ismeretekkel és készségekkel.					

### **Appendices II – English Questionnaire**

Exploring the influencing factors of the entrepreneurship intention in context of Hungarian

students

Dear Ladies and Gentlemen,

As an undergraduate student at the Hungarian University of Agriculture and Life Sciences (previously SZIE), I would appreciate your assistance in completing and/or distributing my survey.

Please only complete the following questionnaire if you are a Hungarian student studying in Hungary with entrepreneurial ambitions.

Thank you for your assistance!

Part 1: Demographic characteristics

1.	Gender:
	a. Female b. Male
2.	Age:
3.	Marital status: a. Single/ Divorced/ Widowed b. Married
4.	Educational programme: a. Preparatory Course b. Bachelor c. Master d. PhD e. Other:
5.	Mode of the education:a. Full time trainingb. Correspondence training
6.	Field of study:a.Natural Sciencesb.Engineeringc.Medical and Health Sciencesd.Agricultural Sciencese.Social Sciencesf.Political and Law scienceg.Liberal Artsh.Economic Sciencei.Information Technologyj.Pedagogy and Psychology
7.	Financing source: a. Self-financed b. Scholarship
Part 2: The ro intentio	le of external influencing factors in the development of entrepreneurial on
8.	Have you ever taken courses related to business? a. Yes b. No
9.	How long have you been working?

(Including internships and part-time jobs)

- a. No experience b. Less than 1 year
- c. 2-3 years d. More than 4 years

- 10. Entrepreneurial experience: (Including all individual trade activities)a. No, I do not have. b. Yes, I have.
- 11. Do you have any family business background? If yes, in which field?
  - a. No, I do not have.
  - b. Yes, I have:
    - i. Building Industry ii. Beauty Industry
    - iii. Pharmaceutical Industry iv. Food Industry
    - v. Textile Industry vi. Private Practice
    - vii. Car Industry vii. Agriculture ix. Other: ......

Part 3: The impact of Hungarian higher education on students' entrepreneurial intentions

12. What were your entrepreneurial intentions before you applied for higher education?

(1-No, not at all; 2-A little; 3-Moderately; 4-Very much; 5-Yes, completely)

	1	2	3	4	5
I had sense of entrepreneurship.					
I planned to start a company in the future.					
I had been looking for entrepreneurial projects and					
opportunities.					
I spent time to extend my entrepreneurial knowledge.					
I considered the source of funds for starting a					
company.					
I was hoping that I could get enough money to start a					
business.					

- 13. What are your entrepreneurial intentions now?
  - (1-No, not at all; 2-A little; 3-Moderately; 4-Very much; 5-Yes, completely)

	1	2	3	4	5
I have sense of entrepreneurship.					
I plan to start a company in the future.					
I have been looking for entrepreneurial projects and					
opportunities.					
I spent time to extend my entrepreneurial knowledge.					
I considered the source of funds for starting a					
company. a. I hope that I could get enough money to					
start a business.					
I hope that I could get enough money to start a					
business.					

Part 4: The evolution of entrepreneurial intention as a result of entrepreneurial self-efficacy

14. Entrepreneurial Self-Efficacy Test (1-No, not at all; 2-A little; 3-Moderately; 4-Very much; 5-Yes, completely)

	1	2	3	4	5
I am willing and able to make a clear plan for the future					
development of the enterprise.					
I have skills of operation and management.					
I have the knowledge of operation and management.					
I can assign tasks well.					
I help and motivate my colleagues to complete the tasks					
successfully.					
I can analyse the financial data.					
I can prepare the operating budget.					
I have received entrepreneurship education and known how					
to start a business.					
I can communicate with others effectively.					
I can maintain a long-term and good relationship with my					
colleagues.					
I can consider problems from the point of view of others.					
I have good conflict resolution skills.					
I tend to accept uncertainty.					
I am less concerned about possible uncertainties.					
I have the ability to identify risks.					
I can make reasonable plans to reduce the possibility of					
risks.					
I am not afraid of the risk of failure brought by starting a					
business.					
I have the courage to face failure and I can try again.					
I can always come up with some new and good ideas.					
I can easily accept and deal with the challenges of new					
things.					
I can identify the potential value of innovation.					
I pay more attention to the news of entrepreneurship and					
innovation to help me find the possibility of starting a					
business.					
My strong foreign language capacity can help me to start a					
business.					
I have the core knowledge and skills needed in the field of					
entrepreneurship.					

#### STUDENT DECLARATION

Signed below, **KOLLÁR KÍRA**, student of the Szent István Campus of the Hungarian University of Agriculture and Life Science, at the BSc Course of **BUSINESS ADMINISTRATION AND MANAGEMENT** declare that the present Thesis is my own work and I have used the cited and quoted literature in accordance with the relevant legal and ethical rules. I understand that the one-page-summary of my thesis will be uploaded on the website of the Campus/Institute/Course and my Thesis will be available at the Host Department/Institute and in the repository of the University in accordance with the relevant legal and ethical rules.

Confidential data are presented in the thesis: yes <u>no</u>

Date: 2023. 10. 27.

Kollár Kíra

#### SUPERVISOR'S DECLARATION

As primary supervisor of the author of this thesis, I hereby declare that review of the thesis was done thoroughly; student was informed and guided on the method of citing literature sources in the dissertation, attention was drawn on the importance of using literature data in accordance with the relevant legal and ethical rules.

Confidential data are presented in the thesis: yes <u>no</u>

Approval of thesis for oral defense on Final Examination: <u>approved</u> not approved

Date: 2023. 10. 27.

B. R.h. (1

Dr. habil Rudnák Ildikó PhD

#### **ABSTRACT OF THESIS**

# Exploring the influencing factors of the entrepreneurship intention in context of Hungarian students

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The intention to start a business is very important in a country's economy, but according to a Hungarian study (FIVOSZ), only 7.5% of young people who come from entrepreneurial families have the expectation that they will one day take over the family business. The dedication to being an entrepreneur is too difficult to express in detail, but the driving forces behind the aim can be discovered (Gubik 2013). My research seeks to answer three fundamental questions: first, how the beginning of higher education in Hungary influences the entrepreneurial intentions of Hungarian students; second, how the students' demographic characteristics relate to their entrepreneurial intentions; and third, whether the four components of entrepreneurial self-efficacy have an impact on these intentions, and to what extent.

In the beginning to my thesis, I present my connection to the topic and the common interpretation. The literature review, encompasses many theories on entrepreneurial intention and potential influencing factors, based on the most significant domestic and international scientific publications and other works of literature. For individual research, I utilized a Google Form-created online survey to collect data for my research. I was able to collect 309 legitimate responses. I validated the data in an Excel spreadsheet before transferring it to IBM SPSS Statistics 27 so that I could evaluate my hypothesis by conducting the necessary analysis. This is followed by a discussion, and at the very end, the suggestions and the conclusion.

Regarding the aforementioned questions, the outcomes of the study paint a relatively clear picture. Hungarian higher education, most demographic characteristics, and two of the four self-efficacy skills were found to have a significant positive influence. Higher education and self-efficacy are factors that can be influenced positively in order to increase students' entrepreneurial intentions, as these are all critical components of the labour market. Additionally, it is essential to learn more about these elements since entrepreneurial purpose has a substantial impact on the economy of a nation.