

# The Impact of Personality Traits and Internal Locus of Control on Entrepreneurial Intention

Katerina Fotova Čiković<sup>1</sup> D

Received: June 2, 2022 Accepted: July 4, 2022 Published: December 30, 2022

### **Keywords:**

Personality traits; Internal locus of control; Entrepreneurship; Entrepreneurial intention; Literature review

tention (EI) turned into a central category that is widely researched in the literature.

The main goal of this PRISMA-guided systematic literature review is to identify, present and qualitatively analyse relevant papers regarding entrepreneurial intention, personality traits and especially the internal locus of control. Moreover, other goals are to highlight the importance and influence of personality traits and the internal locus of control on entrepreneurial intentions and to present the findings regarding the interrelatedness of entrepre-

neurial intention, internal locus of control and personality traits.

Abstract: A country's economic growth and development are closely

linked to entrepreneurship and innovation, which is why entrepreneurs are

recognized as one of the key drivers of the economy. Moreover, job creation, employment and innovation of products and services not only affect the na-

tional economy but also the global economy. Having that in mind, it is com-

prehensible why the ability to understand and predict entrepreneurial in-

This article uses a systematic review according to the PRISMA statement guidelines with stringent selection criteria to include relevant articles on the impact of personality traits and internal locus of control on entrepreneurship (i.e. entrepreneurial intentions). The two largest scientific databases, i.e. Scopus and Clarivate Web of Science databases have been explored with the key phrases "PERSONALITY TRAITS", "INTERNAL LOCUS OF CONTROL" and "ENTREPRENEURIAL INTENTION". This PRISMA method led to a total of 9 relevant papers regarding the impact and influence of personality traits and internal locus of control on entrepreneurship (i.e. entrepreneurial intentions).

The scientific contribution of this paper is mirrored in the presentation of these relevant articles, their findings and in raising awareness among academic members, researchers and governments across the globe regarding the traits that impact entrepreneurial intentions, with a special focus on the findings regarding the internal locus of control. This article provides practical implications for national governments regarding their entrepreneurial policies, support system and climate.

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-Non-Commercial 4.0 License (https://creative-commons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission.

## 1. INTRODUCTION

Entrepreneurship and venture creation have been recognized as key drivers and significant forces of economic and social growth, regional and national competitiveness, social development and job creation through self-employment, innovation and technological advancement in society in both developed and underdeveloped countries (Denanyoh et al., 2015; Voda & Florea, 2019; Munir et al., 2019). It is now generally accepted that entrepreneurship is positively associated with higher economic development (Rajh et al., 2018). However, entrepreneurship is no longer associated with economic growth only but also with social and environmental performance (Fatoki, 2020). More importantly, entrepreneurs are considered to "bring an enormous contribution to a country's economic growth" (Voda & Florea, 2019). Moreover, "the

University North, Trg dr. Žarka Dolinara 1, 48000 Koprivnica, Republic of Croatia



creation of a country's wealth and dynamism depends upon the competitiveness of its firms and this, in turn, relies fundamentally on the capabilities of its entrepreneurs and managers" (Cuervo et al., 2007). Both national governments and major international organizations worldwide, such as The World Bank and United Nations Industrial Development Organization (UNIDO) are starting to focus on improving countries' business and investment environments (e.g. establishing units to promote private sector development in developing countries and providing technical assistance in the formulation of SME and entrepreneurship policy) for increasing self-employment through entrepreneurship, as a part of their poverty reduction, growth and economic development programs (Acs & Virgill, 2009).

Entrepreneurship has a multidimensional nature and it is a subject of interest to many disciplines: economics, sociology and psychology, which all try to give a summary of the debatable question: what stimulates the self-employability of people and why do different people have different occupational choices (Jovanov Aspasieva et al., 2020). According to Eroğlu et al. (2011), "entrepreneurship is mostly about risks, innovation, creative thinking and the entrepreneur is the one who creates and innovates something recognized around perceived opportunities by accepting risks and failures". "Because entrepreneurship is increasingly seen as a way of dealing with global challenges, it becomes relevant to understand how young people might develop into entrepreneurs" (Ozaralli et al., 2016). Entrepreneurship is often defined as a career path characterised by considerable risk and uncertainty, which renders entrepreneurship attractive to individuals with a high propensity for risk-taking (Karimi et al., 2015). The entrepreneurial function, which discovers and exploits opportunities, leads to the creation of additional economic activities and the generation of new values and benefits for society (Reynolds, 2005). Entrepreneurship as a concept is a subject of great interest in the practice and academic literature. This is since entrepreneurship as an activity creates value for academics, business people and the government in each country around the world (Cuervo, et al. 2007). Therefore, considering the positive impact that entrepreneurship exercises on economic and overall societal development by integrating people, introducing innovations, and creating competition, it is clear why interest in this topic has been increasing rapidly.

Entrepreneurship is an essential element for social progress as it manifests its fundamental importance in different ways: a) by identifying, assessing and exploiting business opportunities; b) by creating new firms and/or renewing existing ones by making them more dynamic; and c) by driving the economy forward – through innovation, competence, job creation- and by generally improving the wellbeing of society (Cuervo et al., 2007). The fascination with entrepreneurs is not brand new and literature dating to the 18th century explores what drives entrepreneurs and whether their traits matter for the outcomes of their ventures (Kerr et al., 2017). Therefore, it should come as no surprise that entrepreneurship research appears to be "one of the most widely cited subjects in the management discipline", mostly due to its practical implications (Paul et al., 2017).

The main objective of this paper is to explore the two most relevant global scientific databases (the Scopus and Clarivate Web of Science) and to identify relevant papers regarding entrepreneurship, entrepreneurial intention, personality traits and internal locus of control. For this reason, a PRISMA-guided systematic literature review has been conducted. For more on the methodology see Liberati et al. (2009). Other objectives of this paper are to highlight the importance and impact of personality traits and the internal locus of control on entrepreneurial intentions and to present and elaborate on the findings regarding the interrelatedness of entrepreneurial intention, internal locus of control and personality traits.

This paper is organized as follows. The next section provides a brief theoretical background for understanding entrepreneurial intention (EI), Personality traits and Internal locus of control. The third section then presents the research approach. Section 4 presents the research results, i.e. the 9 surveyed papers and their findings. The study ends with a discussion and conclusions regarding the study's implications, limitations and directions for future research.

#### 2. THEORETICAL BACKGROUND

## 2.1. A Theoretical Approach towards Understanding Entrepreneurial Intention

Entrepreneurial intention (EI) is referred to as "the first step in understanding the entrepreneurial process" (Ajzen, 1991; Munir et al., 2017). Entrepreneurial intention refers to the "positive or negative intention of an individual toward creating a new business". Thus, "entrepreneurial intention is the base of entrepreneurial actions" (Çolakoğlu & Gözükara, 2016). Entrepreneurial intention shows the intention of a person to choose to be an entrepreneur for his/her career. People who have entrepreneurial intentions plan to take calculated risks, gather required resources and establish their own ventures. Entrepreneurial intention initiates entrepreneurial actions (Karabulut, 2016). In an entrepreneurial context, the entrepreneurial intention is "a significant construct that determines the process of creating ventures" (Çolakoğlu & Gözükara, 2016).

A large number of academic members and researchers have covered EI (entrepreneurial intention) (Lüthje & Franke, 2003; Fini et al., 2012; Nabi & Linan, 2013; Karabulut, 2016; Kerr et al., 2017; Rajh et al, 2018; Šubić et al., 2019). It can be defined as one's willingness to undertake an entrepreneurial activity or the intention to be self-employed and start one's own business. Strong entrepreneurial intention is likely to result in an attempt to start a new business (Ozaralli et al., 2016). According to Voda & Florea, (2019), "intentionality represents a state of mind that can turn actions into actual behaviour". They also claim that EI is influenced by three global concepts as follows: "attitude (how attractive the target behaviour is for the individual), perceived social norms (social pressure in favour or against target behaviour) and perceived control over behaviour (individual perception and the ability to adopt the respective behaviour)".

Theory of Planned Behaviour (TPB) has also shown to be very useful in the examination of the entrepreneurial intent of people. When it comes to TPB, the intention of an individual to perform certain behaviour is considered as its central factor, i.e. the stronger the intention is, the more likely would the performance be (Ajzen, 1988). The intention of the (potential) entrepreneur as a factor, grasps all the motivational factors that stimulate people to behave in a certain way, and their willingness to try to put an effort into performing the behaviour. Papers researching TPB and entrepreneurial intent show a direct link between the personal attitude and perceived behavioural control with behavioural (entrepreneurial) intention, which can be used in predicting behavioural (entrepreneurial) achievement (Rajh, et al. 2018; Jovanov Apasieva, et al., 2020).

# 2.2. A Theoretical Approach towards Understanding Personality traits

The personality traits approach is one of the classical and early approaches to entrepreneurship (Pupavac, 2015). At the same time, it is one of the more controversial areas of research (Rauch & Frese, 2007). In the 1980s, the literature led some researchers to criticize the trait approach and to draw conclusions that there was no correlation between personality and entrepreneurship. Namely, according to Gartner (1989), the trait approach has been unfruitful and the attempt to answer the

question "Who is an entrepreneur?" (which focuses on the traits and personality characteristics of entrepreneurs) will neither lead to a definition of the entrepreneur nor help us understand the phenomenon of entrepreneurship. There were other scholars in the 2000s (Utsch & Rauch, 2000) who believe research on entrepreneurial personality and entrepreneurial success has three major weaknesses: first, most studies investigate global traits that ignore the specific requirements of the entrepreneurial task. Second, studies of the direct relationship between personality and entrepreneurial success ignore the role of entrepreneurial behaviour. Whenever one investigates the personality of an entrepreneur one must also study the actions of the entrepreneur. Third, studies of entrepreneurship often use inadequate statistical methods or fail to exhaust the advantages of modern statistical methods. Furthermore, Utsch & Rauch (2000) argue that the problem with the trait approach in entrepreneurship research is that most investigated traits are not linked to the entrepreneurial situation or task. Personality characteristics are useful in explaining the generation of behaviour when the situation is considered. This means that the power of personality characteristics to predict a certain behaviour depends on the fit between these personality characteristics and the environment in which the behaviour is shown. Therefore, entrepreneurship research should use personality characteristics, which have face validity for the specific entrepreneurial task and work situation. Notwithstanding, a significant number of scholars and researchers have stood up for the traits approach and argued it cannot be dismissed and undervalued and that it still provides a number of promising issues for exploration and insight. Over time, the tide changed and there is now a revival of personality research in performance and leadership research and many other areas of industrial and organizational psychology too. There is now the consensus that there is ample evidence for the validity of certain personality variables in entrepreneurship research (Rauch & Frese, 2007). Consequently, the better recognition of heterogeneity among entrepreneurs and powerful new data sources suggest it might be fruitful to re-examine some of these areas again, some 20-30 years later. After all, the focus for many is now on describing how personality may influence the creation of new organizations, addressing at least some of Gartner's concerns (Kerr et al., 2017).

In the theoretical background, personal history, social context, attitudes toward entrepreneurship, planned behaviour and personality traits are pointed out as factors that have an impact on the propensity to engage in entrepreneurship, and these factors are categorized as internal (personality) and external (contextual or environment) (Yıldırım et al., 2016).

Personality traits are the constructs describing behavioural patterns in individuals' lives (Karabulut, 2016). They have also been extensively researched by previous researchers (Karabulut, 2016; Rajh et al., 2018; Jovanov Apasieva et al., 2020; Kerr et al., 2017; Utsch & Rauch, 2000; Karimi et al., 2015; Lüthje & Franke, 2003).

Rauch & Frese (2007) have distinguished two sets of personality traits in their model: broad personality traits (extraversion, emotional stability, openness to experience, agreeableness, conscientiousness) and specific personality traits (need for achievement, risk-taking, innovativeness, autonomy, locus of control and self-efficacy).

While personality theory remains rife with its own set of contentions, researchers have primarily gravitated over the last few decades to the Big-5 factor personality model. Several additional traits have been fused into the Big-5 for entrepreneurial work, including self-efficacy, innovativeness, locus of control, and risk attitudes (Kerr et al., 2017). Locus of Control and Risk-Taking Propensity represent personality variables and might allow exploring how personality differences affect entrepreneurial intention (Rajh et al., 2017).

# 2.3. A Theoretical Approach towards Understanding Internal locus of control

An important trait in entrepreneurship literature is locus of control (LOC). LOC is a personality characteristic that shows the level of control feeling (Karabulut, 2016) and is considered to be a culturally dependent trait (Kerr et al., 2017). Locus of control is conceptualized in two forms, internal and external, former is concerned with the self-efficacy of an individual to influence the outcomes and later talks about the influence of external determinants of the outcomes (Farrukh et al., 2018). A person with an internal LOC "conceptualizes that their own decisions control their lives". In contrast, those with an external LOC believe "the true controlling factors are chance, fate, or environmental features that they cannot influence and thus externally controlled people may be more passive" (Karabulut, 2016). If one believes that one is not able to control business outcomes, one has no reason to actively change one's environment (Rauch & Frese, 2007). Persons with internal LOC believe that they can influence outcomes through their own ability, effort, or skills, rather than external forces controlling these outcomes.

Locus of Control (LoC) is represented as the extent to which a person believes he/she has control over his/her life, i.e. "the level of feeling of being in control" and is considered "a relevant trait in the literature of entrepreneurship" (Karabulut, 2016). The locus of control is a personality variable that reveals "how one's personality can influence entrepreneurial intention" (Rajh et al., 2017). There is internal locus of control and external locus of control. The internal locus of control shows the extent to which a person believes has control over their own life, whereas the external locus of control reveals the extent to which a person believes they are affected by external variables such as destiny, luck and other individuals (Karabulut, 2016). Moreover, LoC is considered one of the "core personality traits in entrepreneurial activities" (Çolakoğlu & Gözükara, 2016). According to Karabulut (2016), "internal locus of control, need for achievement, risk tolerance, and entrepreneurial alertness are dimensions of personality traits which lead a person to develop the entrepreneurial intention".

A person with an internal LOC conceptualizes that their own decisions control their lives. In contrast, those with an external LOC believe the true controlling factors are chance, fate, or environmental features that they cannot influence and thus externally controlled people may be more passive (Rauch & Frese, 2007). Persons with internal LOC believe that they can influence outcomes through their own ability, effort, or skills, rather than external forces controlling these outcomes.

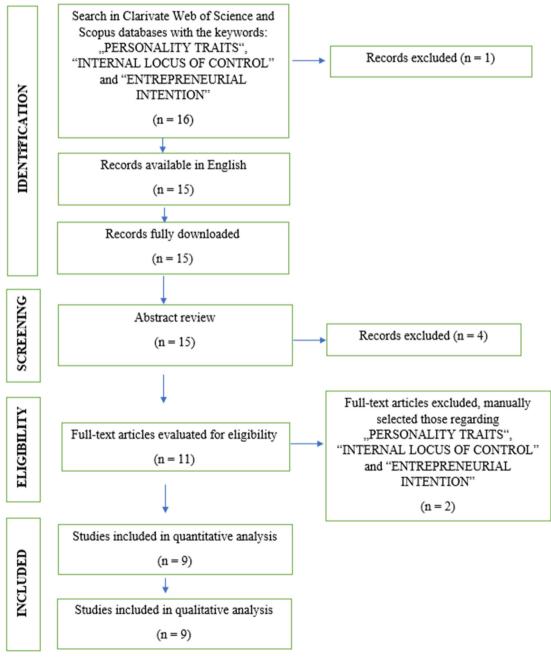
Personality reflects the factors that affect the individual's emotions, thoughts and behaviours, and it reflects both the traits of an individual and the traits of the society. The effect that personality has on entrepreneurship intention has been a widely debated topic recently (Irengun & Arikboga, 2015). According to Lumpkin (1985), locus of control (internal control and external control, i.e. chance) alongside risk-taking propensity according to Luthje & Franke (2003), are considered to be key personality traits that greatly influence entrepreneurial intent of a person. Due to the limited research on internal locus of control and its impact on entrepreneurial intent, this review focuses solely on studies regarding internal locus of control.

## 3. RESEARCH APPROACH

This in-depth systematic literature review has surveyed both Scopus and Clarivate Web of Science (WoS) scientific databases without imposing any exclusion criteria regarding the period of publication. Therefore, all of the published work has been included in the survey. The keywords

"personality traits", "internal locus of control" and "entrepreneurial intention" have been applied to identify the relevant studies that focus on personality traits that impact the entrepreneurial intention, with a special focus on the internal locus of control. The survey was focused on peer-reviewed papers in journals in the English language with no exclusion criteria regarding the year of publication. This approach resulted in 6 hits in Scopus and 10 hits on WoS, which eventually (after the exclusion of 3 duplicate papers, and after the abstract screening), led to a total of nine studies remaining for the qualitative analysis (in the inclusion phase).

The complete survey process with the use of the PRISMA-guided systematic literature review is shown in Figure 1, and a more detailed analysis of these studies and their findings is presented in Section 4.



**Figure 1.** The selection process using the PRISMA method **Source:** Author, based on Liberati et al., (2009)

The systematic literature review as a methodology provides a summary of past findings in a research area, and it "minimizes bias and maximizes a review's contribution to science". The PRISMA guidelines were developed in 2009 and consist of a "four-phase flow diagram that describes the identification, screening, eligibility and inclusion criteria of the reports that fall under the scope of a review" (Selçuk, 2019). According to Liberati et al. (2009), a PRISMA-guided systematic literature review represents an "essential tool for summarizing evidence accurately and reliably".

### 4. RESEARCH RESULTS

By researching the world literature with the implementation of the PRISMA-guided systematic literature review, it is obvious that too few scientists are dealing with the research field of entrepreneurial intention and personality with a focus on internal locus of control. Considering that the framework of entrepreneurial behaviour and economic development provides a tool for analysis of the long-term economic performance of national economies, and particularly of the rise and decline of nations (Thurik et al., 2002), this study reveals there is a literature gap waiting to be addressed by scholars.

This study identifies all the relevant previous work regarding entrepreneurial intention, personality traits and internal locus of control and it provides a presentation of the studies and their findings. A short overview of the surveyed papers is presented in Table 1, and a thorough presentation and analysis of the findings are presented thereafter.

Table 1. Surveyed papers

Author/s and year of	Title of the paper	Data sample	Country
publication	_		_
Saeed et al. (2013)	Who is the most potential entrepreneur? A case of	100 business	Pakistan
	Pakistan	graduates from 5 public universities	
Karabulut (2016)	Personality Traits on Entrepreneurial Intention	480 students	Turkey
Çolakoğlu &	A comparison study on personality traits based	226 vocational	Turkey
Gözükara (2016)	on the attitudes of university students toward entrepreneurship	school students	J
Molino et al. (2018)	Personality and social support as determinants of entrepreneurial intention. Gender differences in Italy	658 Italian participants	Italy
Munir et al. (2019)	Personality traits and theory of planned behavior comparison of entrepreneurial intentions between an emerging economy and a developing country	1,016 students	China and Pakistan
Voda & Florea (2019)	Impact of Personality Traits and Entrepreneurship Education on Entrepreneurial Intentions of Business and Engineering Students	270 students	Romania
Mahmood et al. (2020)	Attitude towards entrepreneurship: a study among Asnaf Millennials in Malaysia	310 Asnaf Millennials	Malaysia
Fatoki (2020)	Determinants of Sustainability-Oriented Entrepreneurial Intentions of University Students	408 participants	South Africa
Presenza et al. (2020)	Start-up entrepreneurs' personality traits. An exploratory analysis of the Italian tourism industry	112 members of the Italian Tourism Start-up Association	Italy

Source: Author's processing

Saeed et al. (2013) found that "among all big-five personality traits, only extraversion and openness to experience are significantly related to entrepreneurial intentions among business graduates in Pakistan". Moreover, risk taking is found to be "significantly related to entrepreneurial intentions". However, both internal and external locus of control do not impact entrepreneurial intentions.

*Karabulut (2016)* explored the impact of personality traits on entrepreneurial intention (EI), by using a sample of 480 graduate students in Turkey. The used methodologies are factor analyses and multiple regression analysis. The results confirm that "personality traits have a positive impact on the entrepreneurial intention". His study is one of the most popular studies in the research field of personality traits.

*Çolakoğlu & Gözükara (2016)* conducted research at a foundation university in Istanbul, Turkey with the goal "to compare personality traits based on the attitudes of university students toward entrepreneurship". Their findings reveal that "students with entrepreneurial intention are more innovative, have a higher need for achievement and greater internal locus of control than those who do not have such intention". Their results confirm that "entrepreneurial intention is significantly related to certain personality traits". They furthermore suggest promoting entrepreneurship and including entrepreneurship education in order to "create an economically strong country".

Molino et al. (2018) have focused on exploring the impact of personality traits and social support on entrepreneurial intention, with a special emphasis on gender differences in Italy. In their study, they gathered information from a sample of 658 Italian participants, of which 319 male and 339 female participants and developed a multi-group structural equation model. Their findings reveal that "self-efficacy totally mediated the relationship between internal LoC, self-regulation and EI". Moreover, they found that contextual characteristics were the key mediational function of self-efficacy and found gender differences in the entrepreneur role.

Munir et al. (2019) have explored the differences between the entrepreneurial intentions between an emerging economy and a developing country, i.e. China and Pakistan. Their sample consists of 1.016 university students in their final year of studies. The used methodologies are structural equation modelling and the partial least square (PLS) method and present PLS path modelling, mediation analysis and multigroup analysis. Their findings show that the impact of TPB (theory of planned behaviour) "was positive and significant in both countries". However, interestingly enough, the "TPB demonstrated more explaining power in China's student sample", meaning they found a stronger influence of personality traits among Chinese students. Their study is the first of a kind due to the comparison between two economies and it brings new insights for academic members as well as policymakers. Moreover, the integrated model they present is novel and original.

Voda & Florea (2019) have analysed the entrepreneurial intentions, locus of control, need for achievement and entrepreneurial education among 270 students from two universities in Romania in the period from March 2017 to October 2017. In their study, they have implemented multivariate logistic regression estimates, frequency analysis, internal consistency reliability of the constructs and moderating effects, and their findings indicate that "locus of control, need for achievement and entrepreneurial education proved to be important determinants for venture creation among young students, both independently and under the action of control variables".

Moreover, they found that the respondents' gender impacts "one's intention of opening a business in the future, with males being more inclined to become entrepreneurs than females". Interestingly, not only gender but also age and faculty type impact the distribution of the answers for entrepreneurial intention. This study provides new and valuable insights regarding entrepreneurial intentions, locus of control, need for achievement and entrepreneurial education among students from a post-transition country.

Mahmood et al. (2020) explored the effects of selected entrepreneurial traits on the attitude of 310 randomly selected Asnaf Millennials from Kelantan, Malaysia towards entrepreneurship. They used structured interviews and found a "positive and statistically significant effect of innovativeness, internal locus of control, need for achievement and proactive personality on the attitude of Asnaf Millennials on entrepreneurship". Their work is novel since emphasizes the "non-cognitive skills for individual characteristics regarding entrepreneurship for the benefit of development practitioners and policymakers".

Fatoki (2020) has developed a unique multi-dimensional model that incorporates personality traits as antecedents of SOEI (sustainability-oriented entrepreneurial intentions), which is based on Ajzen's TPB (Theory of Planned Behaviour). This model has been later on examined by Partial Least Square Structural Equation modelling (The PLS SEM) and tested on a sample of 408 participants (220 females and 189 males) between the age of 20 to 30 years old. The results imply that "attitude towards sustainable entrepreneurship has a significant positive relationship with SOEI". Moreover, a significant positive relationship between perceived behavioural control and SOEI has been found and results show the "internal locus of control has a significant positive relationship with SOEI".

Presenza et al. (2020) examine the personality traits of "start-up entrepreneurs within the Italian tourism industry". Their goal is to "investigate how the specific personality traits of narcissism, locus of control, and the Big Five (i.e. extraversion, agreeableness, conscientiousness, neuroticism, openness to experience) influence the tourism start-up entrepreneur's behaviour". Their study has a significant scientific and practical contributes due to the two main results that arose from the empirical analysis, as follows: "tourism entrepreneurs seem to be particularly narcissistic, extroverted and friendly (extraversion), disciplined (agreeableness), self-assured, efficient and organized (conscientiousness), unconventional (openness to experience), and proactive and vigorous (internal locus of control); some personality traits are found to influence the efficiency and innovative capacity of entrepreneurs which ultimately lead to the success of start-ups".

## 5. DISCUSSION AND CONCLUSION

The main goal of this paper was to survey, identify and present the relevant studies regarding entrepreneurial intention, personality traits and especially the internal locus of control. Moreover, other goals were to highlight the importance and influence of personality traits and the internal locus of control on entrepreneurial intentions and to present the findings regarding the interrelatedness of entrepreneurial intention, internal locus of control and personality traits. For this reason, the PRISMA-compliant systematic literature review of publications regarding entrepreneurship, personality traits and internal locus of control has been the main methodology for this research.

The research approach (shown in Figure 1) has been initiated by the exploration of the two most reputable and renowned scientific databases nowadays (i.e. the Scopus and the Web of Science

databases), with the use of three key phrases as follows: "entrepreneurial intention", "personality traits" and "internal locus of control". This resulted in a total of 9 published manuscripts (after the exclusion of the non-relevant papers). The research approach and the PRISMA method have led the authors to exclusion of papers that were not in English (1 paper), exclusion of papers after the screening and abstract revision (6 papers), which ultimately led to a total of 9 relevant papers for further qualitative analysis.

Eight out of nine surveyed studies use samples from one national economy. Only the study of Munir et al. (2019) is a cross-country study, employing the same research to samples from both China and Pakistan. Two of these studies analyse the entrepreneurial intention of Turkish students (Karabulut, 2016; and Çolakoğlu & Gözükara, 2016), two are regarding Italian students (Molino et al., 2018; and Presenza et al., 2020), while two analyse the entrepreneurial intention in Pakistan (Saeed et al., 2013 and Munir et al., 2019). It is evident that these studies are mostly conducted in developing and emerging countries in Asia, Africa and Europe, and the countries from Northern Europe and the Americas are less presented. This could be due to the fact that entrepreneurship education has already been integrated into the system thus providing a greater percentage of successful entrepreneurs that contribute to the economy.

The largest sample of 1016 students is used in the study of Munir et al. (2019), whereas the smallest sample has been applied to the study of Saeed et al. (2013), i.e. 100 students.

The surveyed papers give new insights into the entrepreneurial intent, i.e. SOEI (sustainability-oriented entrepreneurial intention) in South Africa, EI of start-up entrepreneurs in Italy, Asnaf Millennials in Malaysia, etc. Most of these studies confirm that personality traits and internal locus of control have a positive impact on entrepreneurial intention. These findings offer profound implications for governments, policymakers and entrepreneurship educators.

A major limitation of this study (as for any systematic literature review study) is the exploration and survey of only two scientific databases (in this case, the Scopus and the Clarivate Web of Science). Therefore, not all published relevant papers and studies may have been presented in this study due to their indexation in other scholarly databases. However, this study, through the presented findings, largely contributes to scholarly literature and the policymakers, as well as the interested public.

In future work, an empirical study is to be conducted to explore the impact of personality traits, internal locus of control and risk propensity on entrepreneurial intent in students in public universities in Croatia.

## **REFERENCES**

- Acs, Z., Virgill, N. (2009). Entrepreneurship in developing countries, *Jena Economic Research Papers*, *No. 2009*, *0*23, Friedrich Schiller University Jena and Max Planck Institute of Economics, Jena.
- Ajzen, I. (1988). Attitudes, personality, and behavior. Chicago: DorseyPress.
- Ajzen, I. (1991). The theory of planned behavior, *Organizational Behavior and Human Decision Processes*, 50(2), pp.179-211, DOI: 10.1016/0749-5978(91)90020-T.
- Çolakoğlu, N., Gözükara, I. (2016). A comparison study on personality traits based on the attitudes of university students toward entrepreneurship, *Procedia Social and Behavioral Sciences* 229, pp. 133 140. DOI:10.1016/j.sbspro.2016.07.122
- Cuervo, Á., Ribeiro, D., Roig, S. (2007). Entrepreneurship: Concepts, Theory and Perspective. Introduction. *In: Cuervo, Á., Ribeiro, D., Roig, S. (eds) Entrepreneurship.* Springer, Berlin, Heidelberg. DOI: 10.1007/978-3-540-48543-8\_1.
- Denanyoh, R., Adjei, K., Nyemekye, G.E., (2015). Factors That Impact on Entrepreneurial Intention of Tertiary Students in Ghana, *International Journal of Business and Social Research*, 5(3), pp.19-29.
- Eroğlu, O. & Picak, M. (2011). Entrepreneurship, national culture and Turkey, *International Journal of Business and Science 2*, pp. 146-151.
- Farrukh, M., Alzubi, Y., Shahzad, I.A., Waheed, A. and Kanwal, N. (2018). Entrepreneurial intentions: The role of personality traits in perspective of theory of planned behaviour, *Asia Pacific Journal of Innovation and Entrepreneurship*, *12*(3), pp. 399-414. DOI: 10.1108/APJIE-01-2018-0004.
- Fatoki, O. (2020). Determinants of Sustainability-Oriented Entrepreneurial Intentions of University Students. *Southern African Business Review*, 24, DOI: 10.25159/1998-8125/7795.32.
- Fini R., Grimaldi R., Marzocchi G.L., Sobrero M., (2012). The determinants of corporate entrepreneurial intention within small and newly established firms, *Entrepreneurship Theory and Practice*, *36*, pp. 387-414. DOI: 10.1111/j.1540-6520.2010.00411.x
- Gartner, W. (1989). Who Is an Entrepreneur? Is the Wrong Question. *Entrepreneurship Theory and Practice*. *13*. DOI: 10.1177/104225878801200401.
- Irengun, O. & Arikboga, S. (2015). The effect of personality traits on social entrepreneurship intentions: a field research. *Social and Behavioral Sciences 195*, pp. 1186-1195. DOI: 10.1016/j.sbspro.2015.06.172
- Jovanov Apasieva, T., Cabuleva, K., Mitreva, M. (2020). Theory of planned behavior: personal attitude and perceived behavioral control as key determinants in creation of entrepreneurial societies and social inclusion of young people. *Balkan Social Science Review, 15*, pp. 275-297. DOI: https://doi.org/10.46763/BSSR20150276ja
- Karabulut, A. T. (2016). Personality Traits on Entrepreneurial Intention, *Procedia Social and Behavioral Sciences 22*, pp. 12 21. DOI: 10.1016/j.sbspro.2016.07.109
- Karimi, S., Biemans, H., Mahdei, K.N., Lans, T., Chizari, M. & Mulder, M. (2015). Testing the Relationship between Personality Characteristics, Contextual Factors and Entrepreneurial Intentions in a Developing Country. *International Journal of Psychology*, *52*. DOI: 10.1002/ijop.12209.
- Kerr, S.P., Kerr, W.R., Xu, T. (2017). Personality Traits of Entrepreneurs: A Review of Recent Literature. Harvard Business School. *Working Paper 18-047*.
- Liberati, A., Altman, D., Tetzlaff, J., Mulrow, C., Gøtzsche, P, Ioannidis, J., Clarke, M., Devereaux, P.J. Kleijnen, J. & Moher, D. (2009). The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions:

- Explanation and Elaboration. *Journal of clinical epidemiology.* 62. e1-34. DOI: 10.1016/j. jclinepi.2009.06.006.
- Lumpkin, J. R. (1985). Validity of a brief locus of control scale for survey research. *Psychological Reports*, *57*(2), pp. 655–659.
- Lüthje, C., & Franke, N. (2003). The 'making' of an entrepreneur: Testing a model of entrepreneurial intent among engineering students at MIT. *R&D Management*, 33(2), pp. 135–147. DOI: 10.1111/1467-9310.00288
- Mahmood, T.M.A.T., Al Mamun, A. & Ibrahim, M.D. (2020). Attitude towards entrepreneurship: a study among Asnaf Millennials in Malaysia. *Asia Pacific Journal of Innovation and Entrepreneurship 14*(1), pp. 2-14. DOI 10.1108/APJIE-06-2019-0044.
- Molino, M., Dolce, V., Cortese, CG., Ghislieri, C., (2018). Personality and social support as determinants of entrepreneurial intention. Gender differences in Italy. *PLoS ONE 13*(6): e0199924. DOI: 10.1371/journal.pone.0199924.
- Munir, H., Jianfeng, C. & Ramzan, S. (2019). Personality traits and theory of planned behavior comparison of entrepreneurial intentions between an emerging economy and a developing country. *International Journal of Entrepreneurial Behavior & Research*, 25 (3), pp. 554-580. DOI: 10.1108/IJEBR-05-2018-0336.
- Nabi, G., & Linan, F. (2013). Considering business start-up in recession time: The role of risk perception and economic context in shaping the entrepreneurial intent. *International Journal of Entrepreneurial Behaviour & Research*, 19(6), pp. 633-655. DOI: 10.1108/IJEBR-10-2012-0107
- Ozaralli, N., Rivenburgh, N.K. (2016). Entrepreneurial intention: antecedents to entrepreneurial behavior in the U.S.A. and Turkey. *Journal of Global Entrepreneurship Research*, 6(3), pp. 1-32, DOI: 10.1186/s40497-016-0047-x.
- Paul, J., Hermel, P., Srivatava, A. (2017). Entrepreneurial intentions theory and evidence from Asia, America, and Europe, *Journal of International Entrepreneurship*, 15(3), pp. 324-351. DOI: 10.1007/s10843-017-0208-1
- Presenza, A., Abbate, T., Meleddu, M. & Sheehan, L. (2020). Start-up entrepreneurs' personality traits. An exploratory analysis of the Italian tourism industry, *Current Issues in Tourism*, 23(17), pp. 2146-2164, DOI: 10.1080/13683500.2019.1677572.
- Pupavac, D. (2015). Extroverted Personality As An Advantage In Entrepreneurship. *Obrazovan- je za poduzetništvo E4E*, 5 (2), pp. 133-143.
- Rajh, E., Budak, J., Ateljević, J., Davčev, Lj., Jovanov, T. & Ognjenović, K. (2017). Entrepreneurial intentions in selected South-East European countries. In: *Economic development and entrepreneurship in transition economies: is free trade working for transitional and developing economies?* Conference proceedings. Faculty of Economics, Banja Luka, pp. 592-610.
- Rauch, A., & Frese, M. (2007). Born to Be an Entrepreneur? Revisiting the Personality Approach to Entrepreneurship. In J. R. Baum, M. Frese, & R. A. Baron (Eds.), The organizational frontiers. The psychology of entrepreneurship (pp. 41–65). Lawrence Erlbaum Associates Publishers.
- Reynolds, P. D. (2005). Understanding business creation: Serendipity and scope in two decades of business creation studies. *Small Business Economics*, 24, pp. 359-364.
- Saeed, R., Nayyab, H.H., Rashied, H., Lodhi, R.N., Musawar, S. & Iqbal, A. (2013). Who is the most potential entrepreneur? A case of Pakistan. *Middle East Journal of Scientific Research*. 17. pp. 1307-1315. DOI: 10.5829/idosi.mejsr.2013.17.09.12296.
- Selçuk A. A. (2019). A Guide for Systematic Reviews: PRISMA. *Turkish archives of otorhi-nolaryngology*, *57*(1), pp. 57–58. DOI: 10.5152/tao.2019.4058.

- Šubić, R., Načinović Braje, I. & Žagi, K. (2019). Family background and financial literacy as a prerequisite for entrepreneurial intention of university students. In: *Proceedings of FEB Zagreb 10th International Odyssey Conference on Economics and Business* DOI: 10.22598/odyssey.
- Thurik, A. R., L. M. Uhlaner and S. Wennekers, (2002). Entrepreneurship and Its Conditions: A Macro Perspective, *International Journal of Entrepreneurship Education* 1(1), pp. 25–64.
- Utsch, A. & Rauch, A. (2000). Innovativeness and initiative as mediators between achievement orientation and venture performance. *European Journal of Work and Organizational Psychology*, *9*(1), pp. 45–62. DOI: 10.1080/135943200398058.
- Voda, A.I., Florea, N. (2019). Impact of Personality Traits and Entrepreneurship Education on Entrepreneurial Intentions of Business and Engineering Students. *Sustainability*, *11*, 1192; DOI: 10.3390/su11041192.
- Yıldırım, N., Çakır, Ö., Bige Aşkun, O. (2016). Ready to Dare? A Case Study on the Entrepreneurial Intentions of Business and Engineering Students in Turkey, *Procedia Social and Behavioral Sciences* 229, pp. 277 288. DOI: 10.1016/j.sbspro.2016.07.138