



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Antecedents of entrepreneurial intention: Evidence from Republic of Macedonia

**Stojan Debarliev, Aleksandra Janeska-Iliev,
Tihona Bozhinovska, Viktorija Ilieva**

Faculty of Economics-Skopje Ss. Cyril and Methodius University in Skopje, Republic of Macedonia

corresponding e-mail: stojan@eccf.ukim.edu.mk

corresponding address: blvd. Goce Delcev 9V,1000 Skopje

This study is designed to examine the effect of the three motivational factors/the intention antecedents proposed in the theory of planned behavior (abbreviated TPB): personal attitude, subjective norm and perceived behavioral control, including a control group of variables on the entrepreneurial intention in the specific economic and cultural settings, in our case in the Republic of Macedonia. The research includes 440 respondents. In order to test the hypotheses the data was examined using hierarchical regression. The applicability of the TPB in the context of entrepreneurship has received empirical support in this study, as well. The three independent variables: personal attitude, subjective norm and perceived behavioral control have a positive impact on entrepreneurial intention. On the other hand, results only partially support the influence of the control group of variables.

JEL Classifications: L26, M13

Keywords: Entrepreneurial intention, personal attitude, subjective norm, perceived behavioral control, Republic of Macedonia

Introduction

Entrepreneurship and small business repeatedly raised particular interest among researchers in the field of business, economics and state policymakers. Interest is growing given that entrepreneurial creativity, the ability to bring innovations to the market and the willingness to face risk are changing the world. Daily millions of people, everywhere around the world open their businesses, providing existence for themselves and their families, enabling new jobs and actively participating in the overall economic development of their countries. Bearing in mind the importance of entrepreneurial ventures for the economy, a number of efforts have been made to help understanding the entrepreneurs and the processes and factors that instigate a creation of entrepreneurial ventures. The examined factors and processes, which could influence the entrepreneurial behavior are different by nature recognizing the following aspects: behavioral, cognitive, social, cultural, demographic, economic, as well as diverse exogenous and endogenous background.

A specific line of research explored the cognitive aspects of entrepreneurship and various factors related with them. Especially, there is a growing body of literature arguing that intentions are considered as the best predictor of entrepreneurial behavior, so they could play a very relevant role in the decision to start a new firm. This particular is emphasized, considering entrepreneurial intentions, in many studies in this field due to two very influential theories/conceptual frameworks: The theory of planned behavior and Shapero's model of the entrepreneurial event. The Theory of Planned Behavior (TPB) is a theory about the link between beliefs and behavior. The theory states that attitude toward behavior, subjective norm, and perceived behavioral control, together shape an individual's behavioral intention and behavior (Ajzen, 1991). Shapero's Model of the Entrepreneurial Event (SEE) states that the particular action taken depends upon (1)

perceptions of desirability (values), and (2) perceptions of feasibility (Shapero and Sokol, 1982).

Although, lately a number of papers have been published regarding this issue, still there is a gap in producing a standard or enhanced measurement instrument for entrepreneurial intention and its antecedents. Liñán and Chen (2009) in their paper noted that results from different research have supported the applicability of the TPB for entrepreneurship, but there are some conflicts between the various studies. A good part of these conflicts may have been due to measurement issues, such as using single-item variables to measure each construct, or using an unconditional measure of intention.

Also, specific cultural dimensions need to be considered for the effect of different cultures and values on the entrepreneurial intention to be better understood. Besides the variables introduced by the Theory of Planned Behavior, many empirical studies that followed this theory, look at various variables, that have been connected to either the aspects of the TPB influencing the entrepreneurial intention or directly influencing the entrepreneurial intention. The situation regarding this issue is very significant in the developing countries. According to The Global Entrepreneurship Monitor-GEM and its TEA (Total Entrepreneurial Activity) index (it measures the percentage of adults, aged 18-64 in an economy who are nascent and new entrepreneurs), in economies with low GDP per capita, TEA rates tend to be high, with a correspondingly higher proportion of necessity-motivated entrepreneurship. Conversely, high GDP economies show lower levels of entrepreneurship, but a higher proportion of those with opportunity-motivations. Particularly, Republic of Macedonia has the highest entrepreneurial activity from the countries in Europe where the GEM study was undertaken. The TEA index for Macedonia is 14.5%. This means that 14.5% from the respondents at age of 18-64 are entrepreneurs. Still, half of the entrepreneurs from Macedonia are entrepreneurs because of necessity, whereas the other half is consisted of entrepreneurs motivated by opportunity. It is considered that as the country develops, the TEA index will decrease, which will further decrease the number of entrepreneurs motivated by necessity and increase the number of entrepreneurs motivated by opportunity. This situation is even more relevant in former socialist countries in Central, Eastern and South-Eastern Europe (as is the case of Republic of Macedonia), which have gone through a process of change, when they ended the era of private enterprises being banned, by entering a new phase of creating opportunities for the reawakening of entrepreneurship and the development of small business. Hence, it is very important to investigate the factors, which could influence entrepreneurial behavior, in the following period in the context of above mentioned countries, in order to guide policy makers in formulating effective policies and programs to stimulate and support the efforts of entrepreneurs, particularly those motivated by opportunity, as upcoming entrepreneurs.

As such, the study examines the effect of the three motivational factors/the intention antecedents of TPB model (personal attitude, subjective norm and perceived behavioral control) including a control group of variables (demographic variables; educational knowledge and experiences in the field of entrepreneurship; having experiences with entrepreneurs; and perceived business climate) for the entrepreneurial intention in the specific economic and cultural settings, as it is the case of Republic of Macedonia, developing and former socialist country from the region of South Eastern Europe. The aim of this research is to find those factors that could influence entrepreneurial intention. The study will serve as a confirmation of the applicability of the TPB model for the entrepreneurial intention in specific cultural settings. Even further, by investigating the impact of the control group of variables, which have not been investigated in the TPB model and other studies based on this model, this research will make an effort to identify some additional situational factors and connections, which potentially influence entrepreneurial intentions.

Practical implications for the public decision makers could be the opportunity to understand, that besides the legal reforms that facilitate firm creation more important is to

create and promote an entrepreneurially friendly culture in which becoming an entrepreneur is a positively valued option. Many practical implications could be seen in the field of education as well. As Liñán and Chen (2009, p.611) stated, “Business plan elaboration is the basic instrument provided by the great majority of courses and programs, however, some recent studies indicate that a course consisting only of the production of a business plan may have a negative effect on personal attitudes. Therefore, the case for a wider entrepreneurship education program should be strengthened.”

Literature review

Entrepreneurship and entrepreneurial intentions

Because of their importance in creating wealth the personal and social entrepreneurs have long been the subject of intensive study. It is important to answer why some people, but not others, recognize or create new opportunities, decide to “take the plunge” and proceed, exerting vigorous efforts to convert their ideas and dreams into reality. By focusing only on the personal characteristics of entrepreneurs researchers failed to answer these questions and find a unique entrepreneurial trait (Baron, 1998). The great challenge for research was to turn to research concerning the question of whether entrepreneurs think differently from other persons and they have focused on entrepreneurial intention - the cognitive state that precedes the decision to act (Baron and Ward, 2004). The intention of the entrepreneurial behavior has been widely acknowledged in entrepreneurship research, as it is considered to be the most proximal predictor of the decision to engage in entrepreneurial behavior. According to Shaver and Scott (1991) it is well recognized that new firms do not emerge by accident, nor they are a random or passive product of environmental conditions. Instead, acting entrepreneurially is something that people choose or plan to do.

Entrepreneurial intentions show how ready an individual is to engage in entrepreneurship. They serve as indicators of how intensely one is prepared and how much effort one is planning to commit in order to carry out entrepreneurial behavior. Any planned behavior could be best predicted by observing intentions toward that behavior - not by attitudes, beliefs, personality, or mere demographics (Bagozzi et al., 1989). According to Krueger et al. (2000), behavior is often only weakly predicted by attitudes alone or by exogenous factors that are either situational (for example, employment status or informational cues) or individual (for example, demographic characteristics or personality traits). Douglas and Shepherd (2002) argue that attitudes impact on entrepreneurship via intentions. Even if people may have significant potential, they will refrain from making the transition into entrepreneurship when they lack the intentions. Accordingly, entrepreneurial intentions represent a central variable for researching the entrepreneurial process such as the transformation of knowledge into an economic outcome (Obschonka et al., 2012).

Intentions are also an unbiased predictor of action, even where time lags exist. Thus, a strong intention to start a business should result in an eventual attempt, even if immediate circumstances such as marriage, child bearing, finishing school, a lucrative or rewarding job, or earthquakes may dictate a long delay (Krueger et al., 2000).

Based on this cognitive logic and approach to entrepreneurship, Krueger et al. (2000) explain the entrepreneurial beliefs, cognitive structures, attitudes, intentions and actions through the following series of connections and relationships:

- Behind entrepreneurial action are entrepreneurial intentions;
- Behind entrepreneurial intentions are known entrepreneurial attitudes;
- Behind entrepreneurial attitudes are deep cognitive structures;
- Behind deep cognitive structures are deep beliefs.

Intention-based models

Intention-based models contend that venture creation must be preceded by the development of intentions to create a new venture, and that by understanding intentions we can better predict venture creation (Shook et al., 2003). In these models the process of venture creation begins when an individual develops intent. Once an entrepreneurial intention is formed, the search for and ultimate discovery of opportunities begins. Intentions models have always been useful for research implementing the cognitive approach to entrepreneurship as they offer an opportunity to increase the ability to explain and predict entrepreneurial activity. A prominent characteristic of intentions-based models is how they handle the antecedents of behavior. Behavior is best predicted by intentions, which derive and are best predicted by specific attitudes. In turn, attitudes derive from exogenous influences.

Following the cognitive approach of social learning theory, Ajzen (1987) built his theory of planned behavior (TPB), stating that intentions capture the motivational factors which influence behavior. The TPB offers a highly generalizable framework for understanding and predicting intentions. Past research showed that the TPB is able to predict substantial amounts of entrepreneurial intentions in general (e.g., intentions to start a business). Several models on entrepreneurial intentions have been based on Ajzen's TPB. According to Shook et al. (2003) the understanding of the role of psychological variables in the development of entrepreneurial intentions has been guided primarily by three models: (1) Bird's (1988) model of implementing entrepreneurial ideas (IEI); (2) Shapero's (1982) model of the entrepreneurial event (SEE); and (3) Ajzen's (1987) theory of planned behavior (TPB).

In Bird's model of implementing entrepreneurial ideas, personal and societal contexts interact with rational and intuitive thinking during the formation of entrepreneurial intentions concerning venture creation or creating new values for existing ventures. The social context includes an individual's social, political and economic context, and the personal context includes an individual's history, personality and abilities (Kolvereid and Isaksen, 2012).

Shapero's entrepreneurial event model, developed by Shapero and Sokol, defines the interaction of cultural and social factors that can lead to a firm creation by influencing individual's perceptions. In this sense, the model considers entrepreneurship as an alternative or available option that takes place as a consequence of an external change (Miralles et al., 2012). In this model entrepreneurial intentions depend on three elements: a) the perception of the desirability; b) the propensity to act; and c) the perception of feasibility.

Whereas the SEE model was developed specifically to explain the impact of intentions on venture creation, the TPB model was developed to explain individual behavior in general, and was subsequently adapted by entrepreneurship scholars. Although these models are sometimes regarded as competing, they overlap to a large degree. According to Gelderen et al. (2008), Shapero's perceived desirability and perceived feasibility correspond to Ajzen's attitudes and perceived behavioral control, respectively. So in both models intentions are explained by willingness and capability. Both models have consistently received empirical support and in a direct comparison both models provide satisfactory predictions. Effects for the PBC/feasibility component tend to be stronger than for the attitude/desirability component.

Krueger and Carsrud (1993) explaining the implications of TPB for practice and teaching conclude that entrepreneurship teachers, consultants and entrepreneurs should equally benefit from a better understanding of how intentions are formed and how their beliefs, perceptions and motives coalesce into the intention to start a business, especially a particular type of business. They particularly stress the benefit for educators and policy makers, to better understand the students' motivations and intentions, and thus to provide

better training, as well as to better understand that a policy initiative will affect business formations only if that policy is perceived in a way that influences attitudes (or intention-behavior relationships).

Antecedents of entrepreneurial intentions

Liñán and Fayolle (2015) by reviewing 24 influential papers (24 most-cited research works) in the field of EI research in the period between 2004 and 2013, identify the most important areas of specialization and research themes within each of these areas of specialization, grouped into six categories, as follow: core model, methodological and theoretical issues; influence of personal-level variables; entrepreneurship education and intentions; the role of context and institutions; the entrepreneurial process and the intention-behavior link; and new research areas.

The basic assumption of Ajzen's TPB is that behavioral intentions are an additive function of three latent factors: attitude towards the act, social norm and perceived behavioral control. According to this theory the interaction of social norm, individual attitude, and subjective perception entail the intentions of a person, which in turn govern individual decisions and actions. Personal attributes thus determine whether a potential entrepreneur recognizes or creates, and thereupon exploits a business opportunity (Furdas and Kohn, 2010). Numerous studies conducted in this field have found that attitude toward the act, favorable social norm, and entrepreneurial self-efficacy positively influenced the intention to be self-employed.

The first predictor of intentions is the personal attitude or attitude towards the act.

Across a wide range of studies relating to a wide variety of behaviors and the intentions to engage in those behaviors, attitudes explain over 50% of the variance in intentions. Although formal definitions of attitude vary, most contemporary theorists seem to agree that the characteristic attribute of attitude is its dispositional and evaluative nature. For instance, Ajzen (1987) defines an attitude as a disposition to respond favorably or unfavorably to an object, person, institution or event. Kim and Hunter (1993) also define an attitude as a set of interrelated predispositions to action organized around an object or situation. Attitudes reflect the individual's enduring evaluation - positive or negative - of engaging in a particular behavior. Attitude toward the act reflects the individual's assessment of the personal desirability of creating a new venture. Theorists have further argued for a distinction between affective attitudes, referring to feelings or emotions, on the one hand and cognitive attitudes, referring to beliefs, thoughts, or rational arguments, on the other (Goethner et al., 2009). Even though results have always been consistent to the applicability of the Theory of Planned Behavior (TPB) to entrepreneurship, there have been some conflicts between the various studies. A good part of these differences may have been due to measurement issues. Liñán and Chen (2006) review some of the used measures of attitude: single-item variables, belief-based measure of attitudes and an aggregate measure for attitudes which is particularly suggested because beliefs are the antecedents of attitudes (beliefs would explain attitude, while attitude would explain intention).

The second predictor of intentions, subjective norm, refers to perceived normative pressure from a specific reference group toward engaging or not engaging in a particular behavior (Goethner et al., 2009). Subjective norm reflects an individual's perceptions of what important people in an individual's life think about venture creation (Jackson et al., 2003). Included would be the individual's family expectations about the desirability of becoming a lawyer, doctor, or entrepreneur. These normative beliefs are weighted by the strength of the motivation to comply with them. To check construct validity, these subjective social norms should depend on the expected support of significant others. Interestingly, social norm is less predictive of intention for subjects with a highly internal locus of control or a strong orientation toward taking action (Krueger et al., 2000). It was shown that among individuals with a salient social identity, personal characteristics such as

attitudes and control beliefs become relatively unimportant as determinants of behavioral intentions (Obschonka et al., 2012). In the view of Gelderen et al. (2008) social norms were important considering many dependent variables and in many samples. Business students often have self-employed family members or friends, which may result in positive social norms with regard to self-employment (although negative experiences with self-employment could result in negative social norms). In addition, university business schools tend to look relatively favorably on entrepreneurship, reinforcing positive social norms.

The third predictive component of intention is perceived behavioral control, which is closely related to Bandura's view of perceived self-efficacy, the perceived ability to execute a target behavior. It reflects the perceived ease or difficulty of performing a particular behavior successfully and represents beliefs about whether one has the necessary capabilities (e.g., time, money, skills, equipment) to perform a particular behavior successfully. According to Ajzen (1987), people who do not feel able to perform the behavior are unlikely to form strong behavioral intentions, even if they have positive attitudes and an approving social environment. According to Shook et al. (2003) largely synonymous with entrepreneurial self-efficacy is perceived feasibility which reflects the individual's perception of his or her ability to successfully initiate a new venture. The TPB would expect that people, who do not perceive to have control over entrepreneurial behavior and its outcome, are unlikely to form strong entrepreneurial intentions, even if social norms and attitudes toward entrepreneurship are favorable. There is evidence that the illusion of control may play a role in the decision to start a venture. An individual's belief in his or her ability to control a venture's outcome affects his or her intentions to form a venture. This belief, however, is based upon perceptions and may be inaccurate, or an illusion. For example, entrepreneurs often overlook very real obstacles and even when venture founders have few characteristics associated with venture success, they believe their company will outperform similar ventures (Simon et al., 1999).

Entrepreneurial intentions and other factors

There are a number of studies that propose various other factors influencing the entrepreneurial intentions. Krueger and Carsrud (1993) call these factors exogenous factors, which either influence attitudes or the intentions-behavior relationship. Exogenous factors are typically either person variables (traits, demographics) or situation variables (economic climate). A different stream of the economic literature that has analyzed the entrepreneurial choices of individuals has shown that both personal characteristics such as age, education and working experience, and financial conditions play a key role in shaping the decision to become an entrepreneur (Colombo et al., 2004). According to Khuong and An (2016), at the individual level, the human capital, which is defined as the age, gender, skills, personalities, education, knowledge and prior experience in terms of their value have been proved as the influence of entrepreneurship intention.

The role model theory explains the process of learning by copying the action of other persons through observing them doing and it has been applied to entrepreneurship research to explain why individuals whose parents are entrepreneurs become entrepreneurs (Liñán et al., 2011). The children of entrepreneurial parents have more than a role model, they also have information that is unavailable to children whose parents did not start or purchase a firm (Shaver and Scott, 1991). Ucbasaran (2010) also confirms that the presence of a parent entrepreneurial role model was associated with increased education and training aspirations, task self-efficacy, and expectancy for an entrepreneurial career.

Research has provided empirical evidence that the level of education of the entrepreneurial individual is a major factor influencing the chance of the individual to have an early access to information, and in turn increases the probability of correctly

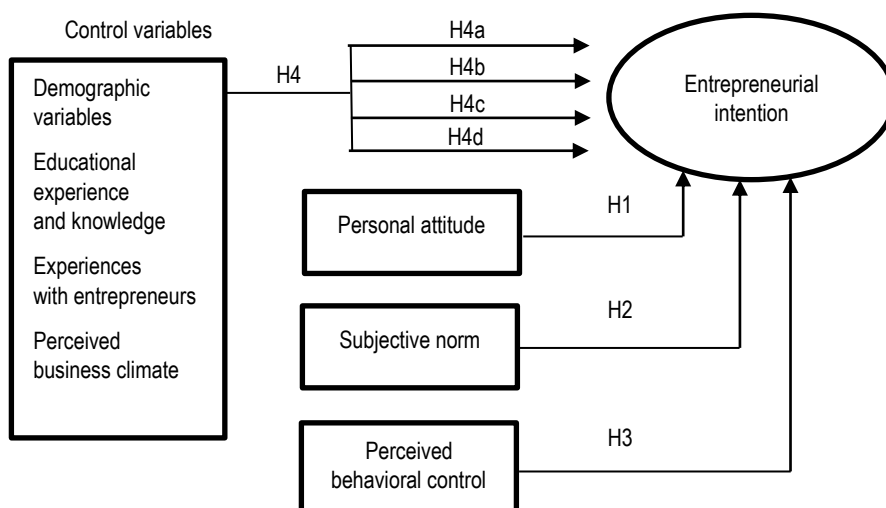
evaluating business opportunities. Firstly, the rank of education affects the business frame of mind and the higher the level of education which is available in society the more the people commit to improving products and services using innovative techniques. Secondly, the level of education of an entrepreneur also affects the appearance of the potential resources (Taktak and Triki, 2015). Individuals with higher levels of education tend to be more self-confident and as a result may have relatively high expectations of the results of their work efforts. Hence, well-educated nascent entrepreneurs may be more likely to overestimate their abilities to run a venture than entrepreneurs with lower levels of education (Verheul and Carree, 2008). According to Furdas and Kohn (2010) the effect of education on the individual propensity to start a business is ambiguous. On the one hand, higher education is associated with better opportunities in dependent employment, and thus with higher opportunity costs of a start-up. On the other hand, self-employment requires particular commercial and/or technical knowledge, which would give an advantage to higher-skilled persons. Empirical studies often find a positive effect of education on the start-up propensity of both men and women. The policy implications of Global Entrepreneurship Monitor (GEM, 2001) indicated that people with limited education are less likely to participate in entrepreneurial initiatives (Turker and Selcuk 2009). Since the education offered by a university mostly influences the career selection of students, universities can be seen as potential sources of future entrepreneurs.

Although the structural conditions are similar for everyone living in the same context, the perceptions, attitudes, and behaviors might vary. Therefore, the structural support for entrepreneurship is very significant to stimulate people to be an entrepreneur. The social and cultural factors in one country might have influence on treatment of government policies in regard of structural support of government to entrepreneurship. In a social system that gives prominence to the role of entrepreneurship, more individuals will choose the path to become entrepreneurs (Khuong and An, 2016). For instance, a culture's prevailing attitude toward entrepreneurship could affect the amount of financial support available to entrepreneurs or infiltrate the education system to determine the amount and quality of entrepreneurship education and training. For example, America's individualistic culture is amenable to entrepreneurship and the United States is currently a world leader in financial support for entrepreneurship. In contrast, Russia has been forestalled by the persisting culture of the communist regime and Russian entrepreneurs typically rely on personal funding although a transition to a more entrepreneurial culture is now evident (Hisrich et al., 2007).

Research model and hypotheses

Having in mind the importance and potential for impact of numerous and various antecedents, this paper is trying to understand the complexity of the entrepreneurial intention. Therefore, besides the variables introduced by the Theory of Planned Behavior: personal attitude, subjective norm and perceived behavioral control, which act as independent variables, the paper looks at group of control variables (demographic variables, educational experiences and knowledge, having experiences with entrepreneurs and perceived business climate) that studies have shown to be connected to entrepreneurial intentions. The group of control variables are included in the research model due to their high potential for influence on the dependent variable, and due to the aim of this paper to test the relative relationship of the TPB antecedents and entrepreneurial intentions. The control variables for themselves are not of primary interest in this research, but are important in their explanation of the total variation of entrepreneurial intention to be tested, as well.

FIGURE 1. RESEARCH MODEL



Source: Model proposed by authors.

Based on the research model (Figure 1), several research hypotheses are developed:

H1: Personal attitude positively influences entrepreneurial intention.

H2: Perceived behavioral control positively influences entrepreneurial intention.

H3: Subjective norm positively influences entrepreneurial intention.

H4: Other factors influence entrepreneurial intentions.

H4.a: Demographics factors influence entrepreneurial intention:

- Gender influences entrepreneurial intention: the entrepreneurial intention of male is bigger than female
- The entrepreneurial intention increases as the age increases

H4.b: Educational experiences and knowledge that stimulate entrepreneurship positively influences entrepreneurial intention.

H4.c: Positive experiences with entrepreneurs positively influences entrepreneurial intention.

H4.d: Positive perception of business climate positively influences entrepreneurial intention.

Research methodology

Analytical approach - statistical method for analysis of data

In order to test the hypothesis, the data was analyzed using hierarchical regression. Hierarchical or sequential regression is a type of multiple regression that focuses on the variance accounted by total effects. It is usually used for testing the statistical significance of curves and interactions, testing whether a single variable or block of variables are important additions to a regression model and for calculating total effects within a causal model (Keith, 2015). Some of the basic principles underlying the hierarchical order for entry are causal priority, research relevance and structural properties of the research

factors being studied (Cohen et al., 2003). Hierarchical regression is often used to determine the explanatory power of a model that has strong theoretical support (Tabachnick and Fidell, 2007), which is a case and one of the aims of this research.

Research sample

The research was conducted at the largest university in Macedonia, in the period from March to June 2014, with undergraduate students mainly in their first and last year of studies. As it was mentioned in the previous section, as one developing country develops, the TEA index decreases, which further decreases the number of entrepreneurs motivated by necessity, whereas the number of entrepreneurs motivated by opportunity increase. Since the aim of this research is to put more focus on entrepreneurs motivated by opportunity, as upcoming entrepreneurs, student population was selected as research sample. It is considered that individuals may be 'pushed' into starting a new venture or becoming self-employed due to threats of business closures, layoffs, mergers, relocation, rejection of the individual's ideas, and reduced job satisfaction / enjoyment (Ucbasaran, 2010). On the other hand, unemployed persons, which is a case with most of the student population, have lower opportunity costs of a start-up than employed persons and are thus more likely to become self-employed by opportunity (Furdas and Kohn, 2010).

From the distributed questionnaires, 516 responses were collected. After excluding the incomplete questionnaires the sample size dropped to 440, which is response rate of 58.3%. Mainly the analysis revolves around the capital city of Skopje, since around 70% of the respondents have implied to be living in Skopje. The average age of the respondents included in the research is 20.54 years, which clearly indicates that to a larger extent the analysis reflects the intentions of students, being at the entry level of their professional and educational experience. Furthermore, 69.2% of the respondents are female whereas only 30.8% are male, and 52.6% are in their first year of study. Since most of the respondents are full time university students it is expected that most of them have little or no working experience, so 75.6% did not have any previous working engagement. The average number of members of a household is 4.3, which is higher than the European average which is between 2 and 3. Related to the background of the respondents, it can be stressed that 30% of the respondent's parents have an university degree and that over 30% of the respondent's parents are employed in a private business. More than 50.6% of the respondents indicated that their total household income does not exceed 815 Euros per month.

The questionnaire and measures

The questionnaire covers the main sections related to the entrepreneurial intentions, personal attitude, perceived behavior control, subjective norm as well as the group of control variables, all explained above, in the research model. Besides using the original items of the instrument developed by Liñán and Chen (2009), some other sections were added to the instrument to enable gathering data for portraying the situation in Macedonia and identifying the perceptions of students regarding different aspects connected to entrepreneurial intention and entrepreneurship. The questions were added to the sections that did not measure the four central constructs of entrepreneurial intentions, but they relate to the group of control variables and served to understand the student's views and experiences that can be connected to their entrepreneurial intention. The analysis is based upon latent constructs which are not directly measured, but by connected indicators explaining the main variables in the model, measured through a Likert-type scale with seven points.

The first part of the questionnaire includes 20 items, where: A4, A6, A9-reversed, A13, A17 and A19-reversed measure entrepreneurial intention; attitude towards behavior is

measured with A2-reversed, A10, A12-reversed, A15 and A18; perceived behavioral control is measured with A1, A5-reversed, A7, A14, A16-reversed and A20; and the subjective norms are measured with the following three A3, A8 and A11.

The constructs PA and PBC included 5 indicators, the construct SN 3 indicators. Also, the construct EI included 5 indicators.

The personal attitude is calculated as a mean of the values appointed for each of the following 5 items measured on a 7-point scale:

1. Entrepreneurial career is unattractive for me (A2)
2. If I have the opportunity and resources I would love to start a new business (A10)
3. If I have a choice, I would choose anything but being an entrepreneur (A12)
4. I would be very satisfied, if I become an entrepreneur (A15)
5. In my opinion, an entrepreneurial career has more advantages than disadvantages (A18)

The subjective norm is calculated as a mean of the values appointed for each of the following 3 items measured on a 7-point scale:

1. My friends would support the idea for starting a business (A3)
2. My family and closer relatives would support the idea for starting a business (A8)
3. My colleges would support the idea for starting a business (A11)

The perceived behavioral control is calculated as a mean of the values appointed for each of the following 6 items measured on a 7-point scale:

1. For me, it is easy to start and run a firm (A1)
2. I don't believe I could start a new business (A5)
3. I am capable to control the process of starting a new business (A7)
4. If I try to start a new business, I have great chances to be successful (A14)
5. For me, it would be very hard to develop a business idea (A16)
6. I am familiar with the practical details related to starting a new business (A20)

The entrepreneurial intention is calculated as a mean of the values appointed for each of the following 6 items measured on a 7-point scale:

1. I am prepared to do everything in order to be entrepreneur (A4)
2. I will put a great effort for starting and running my one business (A6)
3. I doubt that I will ever start a own business (A9)
4. I am decided to start a new business in the future (A13)
5. My professional goal is to become an entrepreneur (A17)
6. I have small intention to start a new business in my live (A19)

As it was mentioned above, the other parts of the instrument consist of questions regarding the control variables. For the gender, dummy variable is created, and the respondents are divided into two groups: 0-male and 1-female. Age is a variable measured on ratio scale. For the experience with entrepreneurs, also dummy variable is created, and the respondents are divided into two groups: 0-the respondent does not has experience with entrepreneurs and 1-the respondent has some experience with entrepreneurs. The educational experience and knowledge is calculated as a mean of the values appointed for each item measured on a 7-point scale for measuring the extent to which education has helped in developing respondent's' entrepreneurial intentions and skills, using the following indicators: knowledge for entrepreneurial environment; creating an business idea; developing a business, gathering a team for the new venture; avoiding legal problems; developing the business venture; better understanding the role of the entrepreneur; and capabilities to inherit a family business if such exists. The business climate is calculated as a mean of the values appointed for each item measured on a 7-point scale for expressing the respondent's' attitudes regarding the supportive role of the government and the institutions towards entrepreneurship, using the following indicators: there are sufficient financial resources in the country to start a new business; the procedure for starting new business is simple in the country; the legal system in the country is favorable for doing

business; tax system in the country is favorable for doing business; the government in the country directly supports the establishment of new businesses; the government in the country supports women entrepreneurs; and the infrastructure is favorable for doing business.

In order to test reliability of the proposed scales on the researched sample of this study, Cronbach's alpha was calculated as well. Cronbach's alpha indicated that A9- reversed, A16-reversed and one item from the control variable educational experiences and knowledge should be removed from the model in order to improve the reliability. In this line after cancelling these out it could be proposed that the overall reliability of the scale is at a good level from above 0.7. To reiterate, we're looking for values in the range of .7 to .8. In this case α is above .7, so this probably indicates good reliability (Table 1).

TABLE 1. CRONBACH'S A OF LATENT VARIABLES

LATENT VARIABLE	CRONBACH'S α
Attitude towards behavior	0.734
Perceived behavioral control	0.711
Subjective norm	0.748
Entrepreneurial intentions	0.831
Business climate	0.823
Educational experiences and knowledge	0.973

Source: Authors' analysis.

In addition a principal component analysis was conducted on the items included in each latent variable. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analyses (KMO > 0.5 in every separate PCA). Bartlett's test of sphericity was statistically significant in all six PCAs ($p < 0.001$).

Some descriptive statistics regarding the main demographic attributes of the sample (age, gender, number of members in a household, household income and parents' university degree) is presented in the section related to the researched sample in this study.

Regarding the descriptive statistics of the researched variables of this study, preliminary analysis is presented as follow. Considering the gathered data 70.7 % of the respondents have indicated that they have seriously considered becoming an entrepreneur, and also 62.9% of the respondents indicated that they had followed or are following some subjects related to entrepreneurship. So, in that view it could be considered that most of the students involved in the analysis have been familiar with the term entrepreneurship. Related to the aspirations when starting an own business most of the respondents (33.1%) would aspire to have a medium sized company in the future and 28.5% aim having a small business when starting their own venture. It is interesting that respondents included in the study considered employment in large companies, small or medium companies, as entrepreneurs and as successors in family businesses as the most appealing. Most of the analysis indicates that potentially students perceive financing an entrepreneurial venture as the most difficult challenge. Therefore, most of the respondents state that if resources are available they would start their own business. Family support among respondents is considered to be at a quite high level, since most of them see their families being supportive if they would be starting a new business venture. At the same time, students involved in these study evaluate having a medium level of knowledge related to practical details is needed for starting a business. Considering the business climate for starting a new business venture the provided answers indicate positive business environment -. Especially evaluations are with levels above 4 (in a range from 1 to 7, 7 being the highest) for governmental support of startups, which clearly indicates that students consider governmental efforts favorable in light of promoting new venture creation. In respect to entrepreneurial skills, a great part of the provided data indicates that students are holding a

good level of entrepreneurial skills needed to become a successful entrepreneur. The descriptive statistics of the variables are presented in Table 2.

TABLE 2. DESCRIPTIVE STATISTICS

VARIABLE	MEAN	STD. DEV.
Entrepreneurial intentions	5.113	1.206
Age	20.40	1.907
Educational experiences and knowledge	3.992	2.017
Business climate	3.609	1.187
Subjective Norm	5.956	1.005
Personal Attitude	5.956	0.869
Perceived behavioral control	4.909	0.951

Source: Authors' analysis.

Analysis and results

Hierarchical multiple regression analyses is used for examining effect of variables introduced by the Theory of Planned Behavior: personal attitude, subjective norm and perceived behavioral control, which act as independent variables, and group of control variables (demographic variables, educational experiences and knowledge, having experiences with entrepreneurs and perceived business climate) on the dependent variable, entrepreneurial intention.

The assumptions of linearity, independence of errors, homoscedasticity, unusual points and normality of residuals were met. In order to satisfy the assumption of non existence of unusual points, some of the cases that had larger than desired leverage value were deleted. The assumption of non-existence of multicollinearity is also met. The values of the both measures of multicollinearity (Tolerance and VIF) support this claim. The tolerance is the percentage of the variance in a given predictor that cannot be explained by the other predictors. Thus, the high tolerances show that small percent of the variance in a given predictor can be explained by the other predictors. As presented in Table 3, all the tolerance values are greater than 0.5 (the lowest is 0.680). The variance inflation factor (VIF) is simply the reciprocal of tolerance. A variance inflation factor greater than 2 is usually considered problematic, and the highest in the table is 1.470.

TABLE 3. COLLINEARITY STATISTICS

VARIABLE	TOLERANCE	VIF
Age	0.938	1.066
Gender	0.942	1.062
Experience with entrepreneurs	0.977	1.024
Educational experiences and knowledge	0.886	1.129
Business climate	0.975	1.025
Personal Attitude	0.700	1.429
Subjective Norm	0.813	1.230
Perceived behavioral control	0.680	1.470

Source: Authors' analysis

The results from the sequential multiple regression analysis are presented in Table 4. Both models are statistically significant (F-statistics for both models are statistically significant). The model that includes only the control variables explains only 9% of the variations in

the dependent variable. By adding the second block of independent variables, the explanatory power of the model rises up to 53.4% (Adjusted $R^2=0.534$).

TABLE 4. RESULTS FROM HIERARCHICAL REGRESSION

VARIABLE	MODEL 1		MODEL 2	
	B	Sig.	B	Sig.
STEP 1				
Age	0.052	0.089	0.031	0.156
Gender	-0.351	0.007	-0.226	0.018
Experience with entrepreneurs	0.302	0.021	0.076	0.418
Educational experiences and knowledge	0.131	0.000	0.035	0.104
Business climate	0.077	0.106	0.011	0.761
STEP 2				
Personal Attitude			0.650	0.000
Subjective Norm			0.093	0.037
Perceived behavioral control			0.371	0.000
R ²	0.101		0.543	
Change in R ²	0.101		0.442	
Adjusted R ²	0.090		0.534	
ANOVA (F-statistics)	9.231		60.247	
Durbin-Watson				1.987

Source: Authors' analysis.

According to Model 1, which includes only control variables, four variables have statistically significant impact on entrepreneurial intentions: age ($p<0.1$), gender ($p<0.05$), experience with entrepreneurs ($p<0.05$) and educational experiences and knowledge ($p<0.01$).

In Model 1, respondent's age is positively and statistically significantly associated with entrepreneurial intentions. If the respondent's age increases by 1 year, the entrepreneurial intentions increases by 0.052.

Gender has negative and statistically significant impact on entrepreneurial intentions. The B coefficient can be interpreted on the following manner: being male will increase the perceived importance of entrepreneurial intentions by 0.351 points.

The association between experience with entrepreneurs and entrepreneurial intentions is significant and positive. The effect of respondent's experience with entrepreneurs on entrepreneurial intentions is considerable (0.302).

In Model 1, the variable educational experience and knowledge has positive and statistically strong relation with the dependent variable. If the level of entrepreneurial experience and knowledge developed through formal education increases by 1, the level of the entrepreneurial intentions of the students will increase by 0.131.

Business climate is positively related to entrepreneurial intentions which means that if the perception of the supportiveness towards entrepreneurs increases by one, the level of entrepreneurial intentions among young students will increase by 0.011. Yet, the p-value of this variable is high ($p=0.106$), which indicates that business climate is not a significant determinant of the entrepreneurial intentions.

In the second model, three latent variables are added: personal attitude, subjective norm and perceived behavioral control. By adding three new variables, the association between age and entrepreneurial intentions and educational experiences and knowledge and entrepreneurial intentions weakens. The effect of the experience with entrepreneurs on entrepreneurial intentions becomes statistically insignificant. In Model 2 the only control

variable that has statistically significant impact on entrepreneurial intentions is gender ($p < 0.05$).

Personal Attitude is latent variable measured on a 7-point Likert scale. Respondents rated five different items in accordance with their level of agreement (from 1-strongly disagree to 7-strongly agree). According to the data presented in Table 3 personal attitude represented a strong positive impact on entrepreneurial intentions ($p < 0.01$, $B = 0.650$).

Subjective norm includes items related to the perceived reactions on three different normative influences. In Model 2, this variable is significantly associated with entrepreneurial intentions ($p < 0.05$). If the rating of the perceived reactions on the three normative influences is 1 point higher on the Likert scale, then rating of the statements that reflect the entrepreneurial intentions will be higher for 0.093 points.

Perceived behavior control is a latent variable that compresses five items rated on a 7-point Likert scale. As expected, Perceived behavioral control has a strong statistical relation with the entrepreneurial intentions. The B coefficient can be interpreted on the following manner: if the ratings of the Perceived behavior control increases by one point, than the ratings of the Entrepreneurial intentions variable will increase by 0.371 points.

These results strongly confirm hypothesis 1, 2, and 3. In other words, according to the results from the hierarchical regression, the three independent variables - personal attitude, perceived behavioral control and subjective norm - have positive impact on entrepreneurial intentions. On the other hand, the hypothesis 4 is not fully supported. The presented results only partially support hypothesis 4a that states that demographics factors (age and gender) influence entrepreneurial intentions. Only the effect of gender (being male) on entrepreneurial intentions is statistically significant in both models.

Discussion

Based on the findings presented in this study, strong support for the entrepreneurial intention model has been found. The applicability of the TPB to entrepreneurship has received empirical support in this study, too. The results strongly confirm hypothesis 1, 2, and 3.

As expected, personal attitude and perceived behavioral control represented a strong impact on intentions. Moriano et al. (2012), find that attitudes toward entrepreneurship across different cultures, were the strongest predictor of entrepreneurial intentions, followed by entrepreneurial self-efficacy i.e. perceived behavioral control. On the other hand, Krueger et al. (2000) claim that intentions were predicted significantly by global perceived feasibility and attitude toward the act, and that perceived feasibility represented a stronger influence on intentions. Izquierdo and Buelens (2008) even found additional relationship of these two variables and intentions, arguing that although the two models (direct and mediated) are useful in predicting entrepreneurial intentions, a better explanatory power has been reached when attitudes mediates the relationship between self-efficacy and intentions. Turning to the individual-level predictors of the model, within the construct of attitude toward entrepreneurship, particularly perception about the importance of opportunity and resources for starting a new business has the strongest extent in this research. This is in line with the research of Nishimura and Tristan (2011), who found that attitude toward entrepreneurship based on opportunities perception had significant effect on entrepreneurial behavior, unlike the research of Goethner et al. (2009), who found that the emotional component (affective attitude) turns out to be a relevant predictor, while the rational component (cognitive attitude) does not have an effect entrepreneurial activity. Regarding the individual-level indicators within the perceived behavioral control, unlike this research which found that belief for capability of starting a new business is crucial for entrepreneurial intentions, Liñán et al. (2011) state that role model perception is a way of reinforcing self-efficacy i.e. people who personally know an entrepreneur can feel they are more able to become entrepreneurs.

Despite the fact that subjective norm is the third construct of TPB and that there is strong theoretical support for association of this construct with entrepreneurial intention, still the most of the empirical research has not found strong support for correlation between this predictor and entrepreneurial intention (Nishimura and Tristan, 2011; Moriano et al., 2012). This regularly is explained with the fact that younger people make entrepreneurial career decisions more based on personal (attitudes, self-efficacy) rather than social (subjective norm) considerations. Despite the theoretical importance of subjective norm, past meta-analytic research also found subjective norms to be least closely associated with behavioral intentions (Armitage and Connor, 2001). Frequently in different studies, social norm has been viewed as indirect predictor of entrepreneurial intention. Krueger et al. (2000) found that the social norms construct was non-significant, though the raw correlation between social norms and intentions was significant. Social norms correlated with attitude toward the act and perceived feasibility. Also, Liñán and Chen (2009) found that social norm would exert its influence on both attitudes and perceived control (which in turn explain intention), but not directly on intention. According to Moriano et al. (2012) subjective norms appeared to be the least important predictor of students' entrepreneurial intentions across cultures and the only predictors whose influence varied across cultures. Social norms significantly predicted entrepreneurial intentions in the Netherlands (an individualistic country) and India (a collectivistic country). According to results of this research subjective norm is shown as statistically significant related to entrepreneurial intention. This strong influence of social norm might be due to the fact that Macedonia is a collectivistic country and traditional society where the social values and norm are important parts of people lives. Hence, unlike the case of some countries, the social and cultural factors turn out that have very important influence on entrepreneurial intention in Macedonia.

The research shows that the only control variable that has statistically significant impact on entrepreneurial intentions is gender. Age, experience with entrepreneurs, educational experiences and knowledge and perceived business climate are statistically insignificant. According to the theory, if a university provides adequate knowledge and inspiration for entrepreneurship, the possibility of choosing an entrepreneurial career might increase among young people (Izquierdo and Buelens, 2008). Hence, the question which arises is whether the educational programmes in Macedonia, particularly in the field of entrepreneurship are good enough to encourage the students to entrepreneurial actions, which in turn casts doubt about the role of the education and the supportive university environment. Though, there are arguments which claim that the effect of education on the individual propensity to start a business is ambiguous. On the one hand, self-employment requires particular commercial and/or technical knowledge, which would give an advantage to higher-skilled persons. On the other hand, higher education is associated with better opportunities in dependent employment, and thus with higher opportunity costs of a start-up (Furdas and Kohn, 2010). Also there are some opinions that entrepreneurship education can increase awareness, confidence and enthusiasm, but also realism, so increasing the level of entrepreneurial intention should not necessarily be the aim (Gelderen et al., 2008). Nevertheless, it is very symptomatic that the students in the research manifest high level of perceived behavior control, which in turn might be considered as a consequence of acquired knowledge and skills in the educational process.

Regarding the role of experience with entrepreneurs (knowing other entrepreneurs i.e. role model), in the literature exists theoretical and empirical support for positive influence of this potential predictor on entrepreneurial intention (Fernández et al., 2009; Liñán et al., 2011). Ucbasaran (2010) confirms that the presence of a parent entrepreneurial role model was associated with increased education and training aspirations, task self-efficacy, and expectancy for an entrepreneurial career. On the one hand, the effect of personally knowing an entrepreneur on intentions is higher among the Mediterranean population. This is related to some cultural values of the Mediterranean society in which the role of family, friends or acquaintances is important. Conversely, the higher individualistic behavior of Northern European people may make the influence of other entrepreneurs

weaker in shaping their intentions (Fernández et al., 2009). Again, as in the case of educational experiences and knowledge, the experience with entrepreneurs is considered as related factor with the perceived behavioral control. According to Liñán et al. (2011) role model perception is a way of reinforcing self-efficacy because people who personally know an entrepreneur can feel they are more able to become entrepreneurs. Why this variable has not correlated with construct of perceived behavioral control in Macedonia, might be explained with the absence of longer history of entrepreneurship in the area of former socialist countries, causes the lack of positive impact of knowing other entrepreneurs as supportive factor for entrepreneurial experience.

Although the structural conditions are similar for everyone living in the same context, the perceptions, attitudes, and behaviors might vary. Therefore, the structural support for entrepreneurship is very significant to stimulate people to be an entrepreneur. However, our results show that environmental support fails to predict entrepreneurial intention i.e. the support coming from government and wider external context is not relevant in shaping entrepreneurial intention in Macedonia. The possible reason for this result might be the timing differences between perceived behavioral control and perceived business climate. It is clear that the main focus of structural support is existing entrepreneurs in the economy. Although students are currently aware of this support, they might think that this type of large scale supports will affect them in the future. On the other hand, perceived behavioral factors might be perceived as an immediate factor (Turker and Selcuk, 2009)

As was pointed above, the only control variable that has statistically significant impact on entrepreneurial intentions is gender. This finding is not without empirical confirmation in other studies. In the study of Liñán et al. (2011) males are 1.846 times more likely than females to declare a positive intention (odds ratio). Similarly, this study found that being male will increase the perceived importance of entrepreneurial intention.

Conclusion

This study provides evidence of the usefulness of the Theory of Planned Behavior in explaining entrepreneurial intention. The model that includes only the control variables explains only 9% of the variations in the entrepreneurial intentions. By adding the main constructs of TPB model (personal attitude, perceived behavioral control and subjective norm) the explanatory power of the model rises up to 53.4%. This result is more than satisfactory, not only that it is fairly high and it covers the significant portion of the entrepreneurial intention's variance, but it is even much higher compared to other studies. In the research of Gelderen et al. (2008) the model used explains about 38% of the variance considering entrepreneurial intention, whereby the research by Krueger et al. (2000), the TPB explains 35% of the variance of entrepreneurial intention, and in a study by Tkachev and Kolvereid (1999) this result reach to maximum 45%.

The main findings regarding the case of Macedonia could be summarized as follow. The three motivational factors: personal attitude, perceived behavioral control and subjective norm have positive impact on entrepreneurial intentions. At individual-level predictors, perception about the importance of opportunity and resources for starting a new business and belief for capability of starting a new business are crucial for entrepreneurial intentions. The social and cultural factors have very important influence on entrepreneurial intention in Macedonia. There is certain doubt about the role of the education and the supportive university environment in encouraging the entrepreneurial intention. The absence of longer history of entrepreneurship causes the lack of positive impact of knowing other entrepreneurs, as supportive factor for entrepreneurial intention. The support coming from government and wider external context is not relevant in shaping entrepreneurial intention in Macedonia.

Providing evidence for the efficacy of the Theory of Planned Behavior in explaining entrepreneurial intention, this study affirms the well-known, for practitioners, academia

and public decision makers', a belief that is exceptionally important to create and promote an entrepreneurially friendly culture in which becoming an entrepreneur is a positively valued option.

Limitations and further research

The paper examines and brings some insights into the contextual factors (educational experience and knowledge, experiences with entrepreneurs and perceived business climate) in the specific economic and cultural settings, as it is the case of the Republic of Macedonia. Still, there is a growing recognition in entrepreneurial research that economic behavior can be better understood within its historical, temporal, institutional, spatial and social context (Zahra and Wright 2011). There are more specific contextual factors, which this paper does not investigate, such as: cultural variations within a single country, regional context, social networks, the media representation of entrepreneurs, entrepreneurs motivated by opportunity vs. necessity, as well as other specificities which could justify the assumptions of the TPB or bring different results.

The conceptual framework, which this paper follows, provides the opportunity to investigate and identify some cross-cultural dimensions, from different countries in order to find context-related differences in the EI. Hence, the application of this methodology in cross-cultural research of TPB, especially countries from the region of South-Eastern Europe (as is the case of Republic of Macedonia), which ended the era of privatization and transitions and enter a new phase of the development of small business and entrepreneurship, could provide very useful knowledge for creating and promoting entrepreneurially friendly culture and stimulating entrepreneurial behavior, particularly that motivated by opportunity, as upcoming entrepreneurship.

References

- Ajzen I., 1987, "Attitudes, traits, and actions: Dispositional prediction of behavior in social psychology", *Advances in Experimental Social Psychology*, Vol.20, No.1, pp.1-63
- Ajzen I., 1991. "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol.50, No.2, pp.179-211
- Armitage C.J., Conner M., 2001, "Efficacy of the theory of planned behaviour: A meta-analytic review", *British Journal of Social Psychology*, Vol.40, No.1, pp.471-499
- Bagozzi, R., Baumgartner J., Yi Y., 1989. "An investigation into the role of intentions as mediators of the attitude-behavior relationship", *Journal of Economic Psychology*, Vol.10, No.1, pp.35-62.
- Baron R.A., 1998. "Cognitive mechanisms in entrepreneurship", *Journal of Business Venturing*, Vol.13, No.4, pp.275-294
- Baron R.A., Ward T.B., 2004. "Expanding entrepreneurial cognition's toolbox: Potential contributions from the field of cognitive science", *Entrepreneurship Theory and Practice*, Vol.28, No.6, pp.553-573
- Cohen J., Cohen P., West S.G., Aiken L.S., 2003. *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*, Third edition, Lawrence Erlbaum Associates, Inc., New Jersey
- Colombo M.G., Delmastro M., Grilli L., 2004. "Entrepreneurs' human capital and the start-up size of new technology-based firms", *International Journal of Industrial Organization*, Vol.22, No.8, pp.1183-1211
- Douglas E.J., Shepherd D.A., 2002. "Self-employment as a career choice: attitudes, entrepreneurial intentions, and utility maximization", *Entrepreneurship Theory and Practice*, Vol.26. No.3, pp.81-90
- Fernández J., Liñán F., Santos F.J., 2009. "Cognitive aspects of potential entrepreneurs in Southern and Northern Europe: An analysis using GEM-data", *Revista de Economía Mundial*, No.23, pp.151-178
- Furdas M., Kohn K., 2010. "What's the difference?! Gender, personality, and the propensity to start a business", *IZA Discussion Paper*, No.4778, pp.1-43

- Goethner M., Obschonka M., Silbereisen R.K., 2009. "Approaching the Agora-determinants of scientists' intentions to pursue academic entrepreneurship", *Jena Economic Research Papers*, No.2009, 079, pp.1-41
- Hisrich R., Langan-Fox J., Grant S., 2007. "Entrepreneurship research and practice: A call to action for psychology", *The American Psychologist*, Vol.62, No.6, pp.575-589
- Izquierdo E., Buelens M., 2008. "Competing models of entrepreneurial intentions: The influence of entrepreneurial self-efficacy and attitudes", in *Internationalizing Entrepreneurship Education and Training*, IntEnt2008 Conference, Oxford, Ohio
- Jackson S.E., Joshi A. and Erhardt N. 2003, "Recent research on team and organizational diversity: SWOT analysis and implications", *Journal of Management*, 296, pp.801-830
- Keith T.Z., 2015. *Multiple Regression and Beyond: An Introduction to Multiple Regression and Structural Equation Modeling*, Second edition, Rutledge, New York
- Khuong M.N., An N.H., 2016. "The factors affecting entrepreneurial intention of the students of Vietnam National University: A mediation analysis of perception toward entrepreneurship", *Journal of Economics, Business and Management*, Vol.4, No.2, pp.104-111
- Kim M.S., Hunter J.E., 1993. "Relationships among attitudes, behavioral intentions, and behavior a meta-analysis of past research", *Communication Research*, Vol.20, No.3, pp.331-364
- Kolvereid L., Isaksen E.J., 2012. *Perspectives in Entrepreneurship: A Critical Approach*, Palgrave Macmillan, London
- Krueger N.F., Carsrud A.L., 1993. "Entrepreneurial intentions: Applying the theory of planned behavior", *Entrepreneurship & Regional Development: An International Journal*, Vol.5, Iss.4, pp.315-330
- Krueger N.F., Reilly M.D., Carsrud A.L., 2000. "Competing models of entrepreneurial intentions", *Journal of Business Venturing*, Vol.15, No.5, pp.411-432
- Liñán F., Fayolle A., 2015. "A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda", *International Entrepreneurship and Management Journal*, Vol.11, Iss.4, pp.907-933
- Liñán F., Chen Y.W., 2009. "Development of cross-cultural application of a specific instrument to measure entrepreneurial intentions", *Entrepreneurship Theory and Practice*, Vol.33, Iss.3, pp.593-617
- Liñán F., Santos F.J., Fernández J., 2011. "The influence of perceptions on potential entrepreneurs", *International Entrepreneurship and Management Journal*, Vol.7, No.3, pp.373-390
- Liñán F., Urbano D., and Guerrero M.2011, "Regional variations in entrepreneurial cognitions: Start-up intentions of university students in Spain", *Entrepreneurship and Regional Development*, 23(3-4), 187-215
- Miralles F., Riverola C., Giones F., 2012. "Analyzing nascent entrepreneurs' behaviour through intention-based models". in *Proceedings of the 7th European Conference on Innovation and Entrepreneurship*, Santarem, Portugal
- Moriano, J.A., Gorgievski, M., Laguna, M., Stephan, U., Zarafshani, K., 2012. "A cross cultural approach to understanding entrepreneurial intention", *Journal of Career Development*, Vol.39, Iss.2, pp.162-185
- Nishimura, J.S., Tristan O.M., 2011. "Using the theory of planned behavior to predict nascent entrepreneurship", *Academia, Revista Latinoamericana de Administración*, No.46, pp.55-71
- Obschonka M., Göthner M., Silbereisen R.K., Cantner U., 2012. "Social identity and the transition to entrepreneurship: The role of group identification with workplace peers", *Journal of Vocational Behavior*, Vol.80, No.1, pp.137-147
- Shapiro A., Sokol L., 1982. "Social dimensions of entrepreneurship", In: Kent C.A., Sexton D.L., Vesper K.H. (Eds.), *Encyclopedia of Entrepreneurship*, Prentice Hall, Englewood Cliffs, pp.72-90
- Shaver K., Scott L., 1991. "Person, process, choice: The psychology of new venture creation", *Entrepreneurship Theory and Practice*, Vol.16, No.2, pp.23-45
- Shook C.L., Priem R.L., McGee, J.E., 2003. "Venture creation and the enterprising individual: A review and synthesis", *Journal of Management*, Vol.29, No.3, pp.379-399
- Simon M., Houghton S., Aquino K., 1999. "Cognitive biases, risk perception, and venture formation: How individuals decide to start companies", *Journal of Business Venturing*, Vol.15, No.2, pp.113-134
- Tabachnick B.G., Fidell L.S., 2007. *Using Multivariate Statistics*, 5th edition, Pearson Education, Inc., Boston

- Taktak S., Triki M., 2015. "The importance of behavioral factors: How do overconfidence affect entrepreneurial opportunity evaluation?", *Journal of Behavioural Economics, Finance, Entrepreneurship, Accounting and Transport*, Vol.3, No.1, pp.12-20
- Tkachev A., Kolvereid L., 1999. "Self-employment intentions among Russian students", *Entrepreneurship and Regional Development*, Vol.11, No.3, pp.269-280
- Turker D., Selcuk S.S., 2009. "Which factors affect entrepreneurial intention of university students?", *Journal of European Industrial Training*, Vol.33, No.2, pp.142-159
- Ucbasaran A.D., 2004. "Business ownership experience, entrepreneurial behaviour and performance: Novice, habitual, serial and portfolio entrepreneurs", [PhD thesis], University of Nottingham
- van Gelderen M., Brand M., van Praag M., Bodewes W., Poutsma E., van Gi, A, 2008. "Explaining entrepreneurial intentions by means of the theory of planned behavior", *Career Development International*, Vol.13, No.6, pp.538-559
- Verheul I., Carree M.A., 2008. "Overoptimism among founders: The role of information and motivation", *Social Science Research Network Working Paper Series*, No. ERS-2008-008-ORG, pp.1-27
- Zahra S.A., Wright M., 2011. "Entrepreneurship's next act", *Academy of Management Perspectives*, Vol.25, Iss.4, pp.67.83