T.C.

MUGLA SITKI KOCMAN UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES

DEPARTMENT OF INTERNATIONAL BUSINESS AND TRADE PROGRAM MASTER'S THESIS

Exploring Entrepreneurial Intention in the Context of Theory of Planned Behavior: A Cross-Cultural Comparison

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Supervisor

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Planlı Davranış Teorisi Kapsamında Girişimcilik Niyeti: Kültürlerarası Bir Karşılaştırma

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I hereby declare that this master's thesis titled as "**Exploring Entrepreneurial Intention in the Context of Theory of Planned Behavior: A Cross-Cultural Comparison**" has been written by myself in accordance with the academic rules and ethical conduct. I also declare that all materials benefited in this thesis consist of the mentioned resourses in the reference list. I verify all these with my honour.

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ABSTRACT

Exploring Entrepreneurial Intention in the Context of Theory of Planned Behavior: A Cross-Cultural Comparison

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This study aims to examine motivational factors affecting entrepreneurial intentions (EIs) of university students in Portugal and Turkey within the scope of the Theory of Planned Behavior (TPB). The literature reveals that the factors that affect EI, which is thought to cause entrepreneurial behavior within the scope of TPB, have not been sufficiently understood, although the positive impact of entrepreneurship on economic growth and prosperity has been highly discussed and determined by empirical evidences. Also, extant EI studies have focused mostly on personality variables, demographic characteristics, background and social environment. However, psychological and motivational factors that were thought to affect EI are less investigated. In this context, the study discussed the effects of three motivational precursors of TPB (Attitude Towards Behavior (ATB), Subjective Norms (SNs) and Perceived Behavioral Control (PBC)) on EI within the scope of TPB. Using the Partial Least Squares Structural Equation Modeling (PLS-SEM), it was investigated whether there was an empirical difference in establishing EI among university students in two countries (Turkey and Portugal) with different cultural backgrounds. The findings reveal that ATB and PBC are significant predictors for EI in both samples, whereas SN is not a significant predictor for EI in either sample. This result shows that university students' EI is influenced by the attitude toward entrepreneurship (ATB) and the perception of the feasibility of the initiative (PBC). However, university students' support, which they expect from their close environments (family, relatives, classmates, etc.) had no significant impact on the EI. Background factors (gender and occupation of parents) were also investigated by the control variables added to the theory. In addition, whether these factors affect the three motivational factors of EI was also investigated. While this study focuses on the countries Turkey and Portugal, the findings are intended to advance the general level of knowledge and awareness of entrepreneurship.

Keywords: entrepreneurship; entrepreneurial intention (EI); theory of planned behavior (TPB), PLS-SEM

ÖZET

Yüksek Lisans Tezi

Planlı Davranış Teorisi Kapsamında Girişimcilik Niyeti: Kültürlerarası Bir Karşılaştırma

Büşra TUNCER

Muğla Sıtkı Koçman Üniversitesi

Sosyal Bilimler Enstitüsü

Uluslararası İşletmecilik ve Ticaret Anabilim Dalı

Uluslararası İşletmecilik ve Ticaret Tezli Yüksek Lisans Programı

Bu çalışma, Planlanmış Davranış Teorisi (PDT) kapsamında Portekiz ve Türkiye'deki üniversite öğrencilerinin girişimcilik niyetlerini etkileyen motivasyonel faktörleri incelemeyi amaçlamaktadır. Literatürde girişimciliğin ekonomik büyüme ve refaha olan olumlu etkisi oldukça fazla tartışılmış ve görgül kanıtlarla saptanmış olmasına ragmen PDT kapsamında girişimci davranışa neden olduğu düşünülen ve GN'yi etkileyen faktörler ise yeterince anlaşılmamıştır. Bu kapsamda yapılan girişimcilik niyeti (GN) çalışmaları ise daha çok GN üzerinde etkisi olan kişilik değişkenlerine, demografik özelliklere, arka plana ve sosyal çevreye odaklanmıştır ancak GN'yi etkilediği düşünülen psikolojik ve motivasyonel faktörler daha az araştırılmıştır. Bu bağlamda çalışma, PDT kapsamında üç motivasyonel öncülün (Davranışa Yönelik Tutum (DYT), Öznel Değerler (ÖD) ve Algılanan Davranışsal Kontrol (ADK)) GN üzerindeki etkilerini araştırmak üzere tasarlanmıştır. Farklı kültürel geçmişlere sahip olan iki ülkedeki (Türkiye ve Portekiz) üniversite öğrencileri arasında girişimci niyetlerin yaratılmasında ampirik olarak bir farklılığın olup olmadığı kısmi küçük kareler yol analizi (PLS-SEM) yaklaşımı ile araştırılmıştır. Sonuçta, DYT ve ADK'nin her iki örnekleminde de GN'nin tahmini için önemliyken, ÖN'nin her iki örneklemde de GN için önemsiz olduğu bulunmuştur. Bu sonuç, üniversite öğrencilerinde girişimcilik niyetinin, girişimciliğin algılanma şeklinden (DYT) ve girişimin yapılabilirliği algısından (ADK) etkilendiğini ortaya koymaktadır. Ancak üniversite öğrencilerinin yakın çevrelerinden (aile, akrabalar, sınıf arkadaşları vs.) gördükleri desteğin GN üzerinde olası bir etkisinin olduğuna dair görgül bir kanıt bulunamamıştır. Buna ek olarak arka plan faktörleri (cinsiyet ve ebeveynlerinin meslekleri) olarak teoriye eklenen kontrol değişkenleri ile de EI’nin PDT kapsamındaki üç ön bileşenini etkileyip etkilemediği de araştırılmıştır.

Anahtar Kelimeler: girişimcilik; girişimcilik niyeti (GN); planlanmış davranış teorisi (PDT); PLS-SEM

PREFACE

As a woman who lives in the Republic of Turkey, I owe my gratitude to the great leader Mustafa Kemal Atatürk who is the greatest supporter of Turkish women to *exist in the world of science. I remember him with respect, gratitude and appreciation.*

I owe my gratitude to a number of people and things that contributed to this study's process as this study will live with me for the rest of my life. First, I would like to thank Associate Professor Faruk ŞAHİN who shared his time and effort with me. I would also like to thank my committee member, Assistant Professor Dr Hande KARADAĞ for her guiding approaches. In addition, I would like to thank Associate Professor Serkan ÇİÇEK for his intellectual support in this process.

I am grateful to all my professors in the Department of International Business and Trade of Dokuz Eylül University who shared their time and effort with me during the course stage of my master's degree. Also, I would like to thank the professors from ISEG, University of Lisboa, who supported me in data collecting with enthusiasm and patience. Also, this study would not have been possible if many Turkish and Portuguese students had not volunteered their time and energy to contribute to finding out about the entrepreneurial intentions of university students. Thank you!

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ABBREVIATIONS

ATB:	Attitude Toward Behavior
CB-SEM:	Covariance-Based Structural Equation Modelling
EI:	Entrepreneurial Intention
PBC:	Perceived Behavior Control
PLS-SEM:	Partial Least Square Structural Equation Modelling
PT:	Portugal
SEM:	Structural Equation Modelling
SN:	Subjective Norm
TPB:	Theory of Planned Behavior
TR:	Turkey
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INTRODUCTION

This chapter presents an overview of the study. It identifies the context of the study, its purpose, significance, overview of the methodology, existing research gap and related research questions used in this thesis.

Context of the Study

In recent years, increasing consumption habits have increased people's need for many goods and services in almost every field including technology, health and services (food and beverage). The number and diversity of the increasing needs have led to an interdependency among countries. Therefore, the importance of the concept of globalization has increased. Emerging economies are characterized by a growing and internationalized market orientation on an expanding economic basis. Companies that manage the market orientation in this global world's business settings contribute to the economies of the countries by internationalizing. In fact, some of these companies are the leading economic powers of the world and can compete with the economies of the country. The concept of entrepreneurship plays a key role in this economic development (Bruton, Ahlstrom, & Obloj, 2008, p. 2). Developed countries are already aware of this reality and they have made considerable progress over the past three decades in transforming their entrepreneurial potential into reality by keeping their economies up with this change. As Mueller and Thomas (2000, p. 52) pointed out, entrepreneurship is seen as a potential catalyst for technological progress but also as a tool of revitalizing stagnated economies and of coping with unemployment problems in developed countries. Furthermore, studies have shown that a potential growth in entrepreneurship activities has a positive impact on social development as well as on the contribution of the national economy (Gürol & Atsan, 2006, p. 52; Yaman, 2018; Zarefard & Cho, 2017). All in all, we know that "Entrepreneurs contribute to employment and prosperity in their communities" (GEM, 2018−2019 Global Report, p. 25). On the other hand, little is known about entrepreneurship in developing countries.

Turkey is one of those developing countries. With the adoption of an export-oriented industrialization policy in the 1980s, a major shift was recorded in the economic development strategy of Turkey, which has become a more open country. Thus, Turkey's economy has evolved into a rapidly growing free market economy so far (Gürol & Atsan, 2006, p. 26). In this context, the importance of entrepreneurship and small enterprises in the economy is now widely recognized and provided with national incentives by governments. However, these incentives need to be improved and the concept of entrepreneurship needs to be understood better compared to developed countries, such as the USA and the UK.

By 1974, Portugal was a colonial power that lived under a single-party regime and held key parts of Africa. After joining the EU in 1986, Portugal also made significant progress in socio-economic terms through incentives and financial assistance for private investment, in addition to providing funding for the development of physical and educational infrastructure. However, as the Portuguese economy has become more integrated into the EU market, this has led to consolidation and 'shake-out' [1] in some markets, resulting in lower operating ownership rates and increased unemployment rates (Baptista & Thurik, 2007, p. 80). Portugal, despite being included in the category of developed countries, is struggling with these lower operating ownership rates and high unemployment rates. Portugal needs also to improve the concept of entrepreneurship in order to correct these deficiencies in the economy, like Turkey and all the other countries.

Therefore, this study is primarily concerned with the context of Turkey and Portugal, designed to contribute to the understanding of cross-cultural studies of entrepreneurial intention (EI), which is acknowledged as the first condition of entrepreneurial behavior, while providing a better understanding of EI's motivational factors within the Theory of Planned Behavior (TPB). In this case, countries need to realize that enterprises have become dependent on their ability to survive by keeping up with this change. In other words, businesses are expected to have a global focus, while they need to capture the change and development in technological, legal, political and cultural environments (Bahadır, 2018). In this context, countries have developed new policies as they have been aware of this reality. Policymakers offer

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[1] Klepper's (1996) 'shake out' phenomenon.

important opportunities for those who wish to choose entrepreneurship as a career by developing a social structure that encourages entrepreneurship efforts through legal and educational reforms. For instance, it is known that entrepreneurship education (with the discussion of its theoretical and practical applications) has increased in developed or developing countries (Carrier, 2005; Küttim, Kallaste, Venesaar, & Kiir, 2014; Liñán, Rodríguez-Cohard, & Rueda-Cantuche, 2011). In addition, public support for entrepreneur candidates and incentives has increased considerably (Fayolle, Gailly, & Lassas-Clerc, 2006, p. 701).

In the literature, the contribution of entrepreneurship to the economy has been highly processed and the positive impact of entrepreneurship on the economy has been empirically proven many times (Audretsch et al., 2001; Carree & Thurik, 2003; Quadrini, 2009; Reynolds et al., 2005; Schmitz, 1989; Wong et al., 2005). However, for more than a decade, policymakers and researchers have done a lot of work on discovering the factors that influence EI and trying to understand the literature on entrepreneurship (Kautonen, Van Gelderen, & Fink, 2015). The main objective of the researchers and policymakers in this area is to positively influence the entrepreneurial intentions of individuals and to transform these intentions into new business set-ups in the real world. The first step for this is to understand the 'entrepreneurial intention (EI)'. According to Cognitive Theory, *intention* can be defined as a specific tendency that leads an individual to perform an action or a series of actions, as it is the product of conscious thinking that directs behavior (Ajzen, 1991). In this context, EI can refer to the intention of an individual to create a new firm and/or a new job. Researchers have developed many models to explain intention (e.g. the Entrepreneurial Event Model (EEM), Theory of Planned Behavior (TPB)). The most comprehensive and widely accepted theory that describes EI is TPB. TPB basically assumes that there are three antecedents that affect EI. These are perceived behavioral control (PBC), attitude towards behavior (ATB) and subjective norms (SNs). Although these antecedents are discussed in detail later in the study, following the study of Liñán and Chen (2009), it [i.e. the study] has also tried to once again reveal the strength of this model in predicting EI. Therefore, the EI in this study has been discussed within the scope of TPB.

In this study, the EI was measured among university students. This is because, in line with the literature (Liñán & Chen, 2009; Nabi, Liñán, Fayolle, Krueger, & Walmsley, 2017) ‘university students’ are marked as the most important potential entrepreneur candidates. Many studies (Nabi et al., 2017, p. 278; Nabi & Liñán, 2011) have emphasized that university students are the most important tool in combating unemployment as well as increasing competitiveness (Türker & Selçuk, 2009, p. 143). Thus, the way to transform potential entrepreneur candidates (here, university students) into real entrepreneurs would seem to be to have the ability to identify factors affecting EI with deeper knowledge. This cross-cultural study aims to contribute to the EI literature by making a comparison among students in Turkey and Portugal.

According to Turkey’s GEM Report, Turkey’s EI has better results than many other countries. Portugal is one of these countries. Moreover, according to the World Economic Forum’s Global Competitiveness Report (2017−2018), Portugal is considered as one of the *innovation-driven economies* while Turkey is considered as one of the *efficiency-driven economies* but also as being currently in transition from this stage to an innovation-driven economy (p. 320). There is also quite a difference in terms of population between the two countries. According to the World Economic Forum’s Global Competitiveness Report 2018, there are 80.8 million people in Turkey (p. 567) and 10.3 million people in Portugal (p. 471). However, Portugal presents better data in terms of economy size, according to many internationally recognized indexes, such as the Democracy Index (The Economist, 2017), the Corruption Perception Index (Transparency International, 2018) and the Rule of Law Index (World Justice Project, 2019). On the other hand, despite all these differences, considering the cultural dimensions of Hofstede, these two countries are not considered to be very different cultures. In order to make the study more efficient (Liñán & Chen, 2009, p. 595), the potential impact of all these similarities and differences on EI will be discussed in a single pot among the university students in these two countries. However, these elements are not assigned as variables to the model of the study and will only be discussed as a *proxy*, which implies a background that qualifies for the context of the study.

Purpose of the study

The main objective of this study is to evaluate the university students’ perspective − primarily in Turkey and then in Portugal − on entrepreneurship and motivational factors that leads them to aim to create a business in the future, by comparing the findings. Accordingly, the objective of this research is fourfold. First, to examine the motivational factors that affect the entrepreneurial intentions of university students in Portugal and Turkey within the context of TPB. Second, to increase the understanding of TPB in the literature in terms of EI. Third, to guide policymakers in producing information that will guide them in their activities. Fourth and finally, to contribute to the literature of cross-cultural EI studies by comparing the findings from Turkey and Portugal, which has not been done before.

Significance of the study

According to the Organisation for Economic Co-operation and Development (OECD) report, the unemployment rate in Turkey was 11 per cent in 2018 and the unemployment rate of young people was 19 per cent (OECD Economic Outlook 104 Database, November 2018). The report also indicates that the presence of around 4 million refugees also contributes to the social inclusion challenge in Turkey (OECD Economic Surveys: Turkey, 2018, p. 47). On the other hand, according to OECD data, although the economic conditions in Portugal have improved significantly over the last few years, the unemployment rate was measured as 7 per cent in 2018. Despite recent developments, the long-term unemployment rate remains relatively high, especially among low-skilled people (OECD Economic Surveys: Portugal, 2019, p. 10).

According to another report, which is published by the Global Entrepreneurship Monitor (GEM), in most economies, the most common age group for newly started enterprises was identified as the age range 25−34 or 35−44. People of this age may be more courageous about their future and more excited about pursuing opportunities (GEM, 2018−2019 Global Report, p. 22). In this context, considering the young population of Turkey, the pool of people with entrepreneurial potential is expected to be large. Although the young population in Portugal is lower than that in Turkey, the potential of the present young population should not be neglected.

This study examines the entrepreneurial intentions of educated young people in Turkey and Portugal and provides suggestions to policymakers in both countries for potential policies that could strengthen the economies. Without understanding the factors related to EI among university students, both countries may neglect the entrepreneurial pool that is likely to form after they graduate. Countries with a high unemployment rate should use their entrepreneurial potential for good economic conditions and welfare. Especially in low-and middle-income countries (such as Turkey), the role of the entrepreneur in the economy is quite important. According to the GEM Report, there is a high expectation of growth among entrepreneurs in Europe and North America, especially in the US and Turkey. With high Total Early-stage Entrepreneurial Activity (TEA) rates, entrepreneurship has the potential to contribute substantially to employment in the US and Turkey (GEM, 2018−2019 Global Report, pp. 25−26).

However, GEM reports show promising results for Turkey in terms of EI. According to the GEM 2018−2019 Global Report (p. 110) although the TEA rate in Turkey has declined since 2015, the percentage of TEA operating in technology sectors (high or medium) rose from 1.54 per cent to 5 per cent in 2016. This proves that Turkey has started to attach importance to quality rather than quantity. Moreover, the high expectations for growth and job creation are one of the characteristics that distinguishes Turkish entrepreneurs from other GEM countries, according to the report. Turkey has proved this by taking second place among 42 countries in terms of high growth and job creation expectations at the TEA stage. In terms of economic size and unemployment rates, Portugal has better results than Turkey. However, in the GEM's EI report, Portugal tends to exhibit a lower EI than Turkey (OECD Economic Surveys: Turkey, 2018, p. 45). Policymakers need to better examine the differences between these countries' results and to investigate their causes more thoroughly.

To conclude, this study is important in terms of producing information that will guide policymakers in their activities to focus on EI, to understand it and its motivational factors within the scope of TPB. In addition, this study is also important in terms of guiding future studies to contribute to the literature of cross-cultural EI studies by comparing the samples of Turkey and Portugal, which has not been done before.

Method Overview

In terms of methodology, this study follows a quantitative approach to develop a model and to test hypotheses. First, a comprehensive and detailed study on the review of the literature on EI was carried out and a structural modelling was followed in order to form the study's model and hypotheses based on TPB. After the structural model was developed, the most appropriate data collection tool, which is the questionnaire, was prepared based on the scales confirmed in previous studies. This research was developed to involve a sample of university students from each of the target countries. The method of data collection was a survey by self-administered questionnaire.

The questionnaire was designed in two different languages (Portuguese and Turkish) with the help of previous studies (Do Paço, Ferreira, Raposo, Rodrigues, & Dinis, 2011; Yeşilay & Yavaş, 2017) for use in both countries. The required controls are provided with the two-way translation method. The survey consists of two parts, including measures for estimating factors affecting EI in this study and descriptive items for participants' socio-cultural background.

The seven-point Likert-type items in the first part were related to EI and factors affecting it within the scope of TPB. Respondents are asked to indicate their level of agreement with each, using a scale of 1 (totally disagree) to 7 (totally agree). The Entrepreneurial Intention Questionnairs (EIQ) was used to measure university students' EI in the context of TPB as this scale's validity and reliability have been proven many times in the international literature (Do Paço et al., 2011; Yeşilay & Yavaş, 2017). This scale, which was originally developed by Liñán and Chen (2009), is rooted in Ajzen's (1991) TPB. In addition, gender and parents' occupational status of respondents are included in the study's model as control variables to investigate their potential impacts on motivational factors within the scope of TPB.

After the survey was reviewed, in both countries, a pretest was carried out with 25 participants in a classroom setting. After being sure that the evaluation of the data collected for the pretest was appropriate in terms of terminology and language, in both countries, the questionnaire was distributed to the university students in two different languages. Finally, the participants' data for the main study were collected from two faculties, namely the Fethiye Faculty of Business Administration in Muğla Sıtkı Koçman University in Turkey, and the ISEG Business Faculty, University of Lisboa in Portugal.

The questionnaires were collected from among 321 university students (173 Turkish students and 148 Portuguese students), who were selected from the target populations according to the respondents' accessibility. After receiving the questionnaires for the main study, the data analysis process for descriptive statistics and data scanning was started. The validity and reliability of the questionnaire was verified after the evaluation and analysis of the data scanning process, which contains normality, incorrect data, missing data, and outliers.

Then, structural equation modelling (SEM) was applied to develop the structural model and to test the proposed hypotheses. In this context, the structural model was examined in six steps and the necessary path analysis was performed by following Hair, Hult, Ringle and Sarstedt's (2017) PLS-SEM procedure. As a result, the findings and evaluations of the analyses were discussed and documented.

Literature Gap and Research Questions

In the literature, the contribution of entrepreneurship to the economy has been strongly emphasized and the positive impact of entrepreneurship on the economy has been empirically proven many times (Audretsch et al., 2001; Carree & Thurik, 2003; Quadrini, 2009; Reynolds et al., 2005; Schmitz, 1989; Wong et al., 2005). Furthermore, whether personal characteristics lead people to see 'entrepreneurship' as a career option has also been investigated for many years in the literature (see Boyd & Vozzikis, 1994; Littunen, 2000; Şahin, Karadağ, & Tuncer, 2019). However, as Fayolle and Liñán (2014) pointed out, in the literature, motivational factors that directed entrepreneur candidates towards entrepreneurship were less noticeable and there was a literature gap at this point. In order to fill this gap in the literature, empirical studies have continued for more than a decade, aiming to reveal the elements that affect EI and trying to understand the entrepreneurship literature (Iakovleva, Kolvereid, & Stephan, 2011; Türker & Selçuk, 2009). It is also mentioned in the literature that only a small fraction of studies examining motivational factors affecting EI have cross-cultural characteristics. Within these studies, the study of Liñán and Chen (2009) can be described as a cornerstone. In their study, they compared Spain and Taiwan in terms of EI and developed the EIQ. They encouraged subsequent studies to fill the gap in EI literature by using this scale. Therefore, responding to this call by Liñán and Chen, this study aims to fill the gap in cross-cultural literature by examining the samples of Turkey and Portugal in the context of the TPB. In substance, this study aims to better assess the factors affecting EI within the scope of TPB in order to contribute to cross-cultural EI studies by using samples that have not previously been compared. This study was essentially designed to answer the following questions to serve this thesis's purpose:

1. Can EI be estimated within the scope of TPB?

2. What are the interrelations between the TPB antecedents and entrepreneurial intention (EI) among university students?

2.1. How does attitude toward entrepreneurship (ATB) relate to EI?

2.2. How does the subjective norm (SN) relate to EI?

2.3. How does perceived behavioral control (PBC) relate to EI?

3. What are the internal interrelations of the TPB antecedents?

3.1. How does the subjective norm (SN) relate to attitude toward entrepreneurship (ATB)?

3.2. How does the subjective norm (SN) relate to perceived behavioral control (PBC)?

4. Does the country matter when estimating EI?

CHAPTER 1

THEORETICAL BACKGROUND

In this chapter, theoretical background and definitions of the terms that constitute the basis of the research are given and related literature is reviewed. EI, which is the dependent variable of the research, depends on the prerequisite for the correct understanding of the concepts of entrepreneurship and the entrepreneur. Thus, 'who is an entrepreneur?' and 'what is entrepreneurship?' are the starting point in searching for answers and to lead to further questions for /in this study. Then, the leading EI models widely accepted in the literature will be mentioned, and the TPB on which the study is based will be further elaborated. Finally, the two countries (Turkey and Portugal) brought together in the study's sample will be discussed in terms of formal and non-formal industrial environments.

1.1. Entrepreneurship and Entrepreneur

In the eighteenth century, the word 'entrepreneur' was coined by Cantillon and he suggested that *entrepreneurship* is an action that entails bearing the risk of buying capitals at certain prices and selling them at ambiguous prices (as cited in Stevenson & Jarillo, 1990, p. 18). In the nineteenth century, John Stuart Mill introduced this *entrepreneurship* term into American literature, after that it gained even more popularity.

One of the contributors to the historical development of the concept of entrepreneurship was Jean-Baptiste Say (1803) who accepted *entrepreneurship* as a *production factor*, and defined an entrepreneur as an individual who manages the production, which is the centre of many connections (wages, interests and rents), and manages all the accidental advantages of production as well as the profit belonging to himself (Gartner, 1988, p. 55).

Although entrepreneurship has been studied and its important role in the capitalist economic system was emphasized by neoclassical economists until the twentieth century, modern entrepreneurship studies are founded on Schumpeter (1934), who was the first economist to argue for the central role of the entrepreneur in economic development. Schumpeter was one of the main 'knowledge creators' whose concepts and ideas have been the foundation to many of the recent entrepreneurial studies (Ferreira, Reis, & Pinto, 2017, p. 31).

Until the twentieth century, the concept of entrepreneurship was defined as mostly starting a business and taking risks in this context, while the entrepreneur concept was used for the active business people; now, it has gained a new meaning. Today, the entrepreneur is seen as the person who takes risks and innovates by observing more environmental opportunities beyond the executive identity. In other words, the concept of entrepreneurship was expanded as activities of introducing ideas, transforming them into products and services and putting them on the market (Zhao, 2005).

The literature reveals different approaches to the entrepreneurship concept and there is no unique definiton of 'entrepreneurship' and 'entrepreneur' (Landström, 2005, p. 7). Although, entrepreneurship was first studied and explored extensively in the field of economics, it became a popular topic in psychology, sociology and history. They began to contribute and research the phenomenon as well asking different questions and using different methods to apply their studies. In particular, Mitchell, Smith, Seawright and Morse (2000, p. 989) argued that international entrepreneurship value creation was progressing more rapidly (i.e. gaining momentum) than the other topics already existing in the social sciences. In this sense, the entrepreneurship concept today has expanded as it has numerous definitions from different science viewpoints.

In substance, without losing sight of today's meanings of the term, *entrepreneurship* can be defined as introducing new ideas and products to the market, new production methods, new organizational structures and new product market combinations, in spite of obstacles such as uncertainty and risk, as well as perceiving and creating new economic opportunities (Wennekers & Thurik, 1999).

To date, the definition of the entrepreneur has been made many times in the literature. In 1991, Bygrave and Hofer (p. 14) defined an *entrepreneur* as '. . . someone who perceives an opportunity and creates an organization to pursue it' (as cited in Mueller & Thomas, 2000, p. 53). Harbi and Anderson (2010, p. 437) referred to an entrepreneur as one who is expected to catch up with new opportunities in the market. Many definitions can be added as the studies are numerous. However, it will be more useful to focus on frequently used elements when defining the entrepreneur (Filion, 2011, p. 5). These elements are innovation, risk, coordination of resources for production; organizing factor of production or of the management of resources, value creation, projective and visionary thinking, focus on action, leadership, dynamo of the economic system, venture creation, opportunity recognition, creativity, anxiety, control, ıntroduction of change, rebellion/delinquency. According to Gartner (1988, p. 48), the question of 'who is an entrepreneur?' is wrong as it focuses on the traits and personality characteristics of entrepreneurs. It should not be ignored that some entrepreneurs may exist with different typologies.

1.2. Entrepreneurial Intention (EI)

In general, *intention* can be defined as the motivation of an individual to perform a conscious plan or movement (Conner & Armitage, 1998). According to cognitive theory, *intention* can be defined as a specific tendency which leads an individual to perform an action or a series of actions as it is the product of conscious thinking that directs behavior (Ajzen, 1991; Parker, 2004). In this context, *EI* can be referred to as the intention of an individual to create a new firm and/or a new job or new value driver in existing organizations (Wu & Wu, 2008). Zhao, Hills and Siebert (2005) define EI as an intention to start a new business, while Thompson's (2009) definition focuses on the belief belonging to an individual who aims to start a new business in the future.

Krueger, Reilly and Carsrud (2000) have proved that EI is a primary predictor of future entrepreneurial behavior. EI predicts that people choose to establish their own firms (Davidsson, 1995, p. 6). Therefore, it is necessary to understand and explain the EI of individuals and the entrepreneurial attitudes behind it in detail in order to understand the processes leading to the establishment and growth of new companies (Krueger, 2007, p. 124). Entrepreneurial intentions determine the form and direction of organizations at their inception. As a result, the future activities, such as survival, growth, development of these organizations will be the result of these intentions (Bird, 1988). In other words, understanding entrepreneurial intentions (EIs) of individuals implies understanding entrepreneurs' actual behaviors at the end of decision-making processes (Bird, 1988; Lee, Lim, & Pathak, 2011, p. 6; Shook, Priem, & Mcgee, 2003, p. 380). The results of these behaviors reveal significant outcomes at both micro and macro level.

From the micro-level perspective, understanding the entrepreneurial intention, determining the factors that affect it (both at the individual and at the firm level) and orientating these factors, will affect the future of the firms. From a macro-level perspective, reaching a further level of understanding of entrepreneurial intention will have a positive impact on the success of small and medium-sized enterprises (SMEs) and will consequently affect the economic growth and development of a country (Audretsch et al., 2001; Carree & Thurik, 2003; Quadrini, 2009; Reynolds et al., 2005; Schmitz, 1989; Wong et al., 2005). In order to better clarify and understand these significant outcomes at both micro and macro level, intentions towards entrepreneurship have to be measured.

Measuring the individual's intentions towards a behavior is the most reliable way to predict the likelihood of this behavior occurring in the future (Carsrud & Brännback, 2011, p. 10). Therefore, the first factors to focus on are those that trigger the occurrence of the subject's behavior when an evaluation of any behavior or the result of that behavior is requested. Intentions are considered the best indicators of planned behavior (Krueger et al., 2000, p. 411), particularly when that behavior is rare and entrepreneurial behavior is largely planned.

In this study, university students were identified as the target group to predict EI. According to Mueller and Thomas (2000, pp. 62−63), there are many important reasons for choosing university students as target samples in EI studies. First of all, today's university students are believed to represent a significant part of the pool of potential entrepreneurs in both developed and developing countries. This study has been set out to estimate the EI among students in Turkey (a developing country) and Portugal (a developed country). Therefore, the potential entrepreneur pool of university students in these two countries should not be neglected by policymakers, especially because the unemployment rates in the two countries are at a critical level. Secondly, in a global trading environment where trade borders between countries are almost absent, it is natural that global competition is increasing. In such an environment, the need for trained entrepreneurs has become more apparent. The quality and value of the established enterprise will become more relevant to how well the founder is trained because following the developments in the world and keeping up with these changes will be directly proportional to the training of the entrepreneur. Therefore, potential entrepreneurs are expected to be university students or graduates. Thirdly, when university students are selected as target samples, cross-culturally comparability increases if some important variables (work experience, age and education) are included in the study as a control variable. Fourth, and finally, in terms of practicality, student courses are generally available, accessible. Therefore, it is possible to provide control over entrepreneurship perceptions of university students through professors who provide entrepreneurship education at universities. In the light of all these reasons, university students were selected as the target group in predicting EI in this study.

1.2.1. Cross-Cultural EI Studies

In order to find the area where the current research belongs, it would be helpful to look at the cross-cultural EI studies. Therefore, some of these cross-cultural studies have been given below. However, only the recent ones have been mentioned as the EI literature is very broad.

Here, it would be appropriate to start with the work of Liñán and Chen (2009) because this study has guided many other cross-cultural EI studies, which have referenced and followed this study. This current/present study is also an example of the studies that followed them. Liñán and Chen (2009) argued that measurement tools should be standardized in order to compare different studies in the field of Entrepreneurial Intention. Therefore, based on TPB, they created an instrument − the Entrepreneurship Intention Questionnaire (EIQ) − as well as analysing its psychometric properties. This EI scale was tested on 519 final-year university students from two different countries: Spain and Taiwan. Structural equation techniques were used in order to overcome the limitations of previous research. In particular, the role of culture in explaining motivation characteristics was considered. The external variables such as cultural and social characteristics were discussed with the effect of the antecedents (SN, PBC and ATB) of the intention as well as the effect of the relative strength of the linkages between these cognitive structures. The role of culture in explaining motivation characteristics was particularly considered in this study. Additionally, the perceived SN role among the elements of the Ajzen's TPB model was discussed with a specific structural model. Finally they found that ATB and PBC were significantly related to EI while SN was not. The results also showed that EIQ features are satisfactory as there was strong support for the model. Insights were obtained on how individuals perceive entrepreneurship in different communities through their cultural values.

Liñán et al. (2011) based their study on the theory of planned behavior (TPB), Institutional Economic Theory (IET) and Social Capital Theory (SCT) to draw attention to the importance of environmental factors in explaining EI. They attempted to identify some environmental cognitive factors that could explain regional differences in the EI. In this study, Liñán et al. (2011) used structural equation techniques on the sample, which included 549 senior students from two Spanish regions (Catalonia and Andalusia). In conclusion, this study showed that valuation of entrepreneurship helps explain regional differences in EI. As expected, social valuation of the entrepreneur was higher in the more developed region (Catalonia), and it also positively influenced perceived subjective norms and behavioral control. On the other hand, In Andalusia, valuation of the entrepreneur in a closer environment was more important.

Küttim et al. (2014) conducted a cross-sectional study on university students by dividing 17 European countries into two groups according to their economic development level (efficiency-driven and innovation-driven economies); the sample consisted of 55,781 students from these countries. They based this study on the TPB to investigate the impact of entrepreneurship education at university on EI. Data analysis was conducted with SPSS 20.0 using frequencies and binary logistic regression. This study showed that courses and seminars are not necessarily in demand as they are already overprovided at universites, thus there is no more demand in entrepreneurship education, however networking and coaching are expected more by the students. In addition, results showed that participation in entrepreneurship education has a positive effect on entrepreneurship intentions.

Also, Zhang, Wang and Owen (2015) have used short-term risk-taking preference and psychological well-being as contextual determinants in their studies, while they have used three antecedents (PBC, SN and ATB) of TPB to investigate these determinants' relations with EI. They used the structural equation modelling technique to analyse data, which included data of 275 university students from the US. According to their findings, PBC and short-term risk-taking preference had a positive relationship with EI. On the other hand, there was no significant effect of ATB on EI, but it had a negative relationship with psychological well-being.

Ben Ali (2016) conducted his research on 283 final-year university students in the Kingdom of Saudi Arabia. The findings of the study, which was conducted by TPB to test whether it helps to explain university students' entrepreneurial intentions, reveal that TPB is a valuable tool in understanding EI. Hierarchical multiple regression analysis was used to analyse data. He found that the attitude towards becoming an entrepreneur (ATB), perceived behavioral control (PBC) and subjective norms (SNs) are positively associated with EI.

Another study within the scope of TPB was that of Nguyen (2017),who examined the EI among 372 senior university students in Vietnam. An exploratory factor analysis and multiple regressions were used to analyse data. The results confirmed that attitudes towards entrepreneurship (ATB, $\beta = 0.292$) and perceived behavior control (PBC, $\beta = 0.408$) were positively related to EI ($R^2 = 0.307$), while the subjective norm (SN) fails to have a significant impact on entrepreneurial intention.

Singh and Prasad (2018) studied EI within the scope of TPB. They included the role of social valuation in the prediction of EI by incorporating social valuation into the research model. The sample was composed of 480 business students from India. They used the Smart PLS 3.0 (Ringle, Wende, & Becker, 2015) in their study with the PLS-SEM approach and found that EI had a R^2 value of 76.2. This has revealed the fact that constructs in the model predict EI quite well. As a result, their model has been supported with meaningful results within 95 per cent confidence interval.

Lee-Ross (2017) based her work on Liñán and Chen's (2009) study to evaluate the entrepreneurial intentions of MBA students in Australia within the scope of TPB. The data set generated by the simple random sampling method consists of 249 students from an Australian university. In her study, Lee-Ross again identified the antecedents of TPB (except SN) as the determining variable in predicting EI.

Wu and Wu (2008) conducted a study in Tongji University, which is in Shangai. They achieved 150 university students' questionnaires to examine the relationship between Chinese university students' higher education status and entrepreneurial intentions. These studies were carried out in the context of TPB and empirical results supported the TPB as a valid model for predicting EI. The path analysis, which was part of their structural equation modelling approach in this study, shows that the entrepreneurial intentions of Chinese university students can be explained by a combination of personal attitudes (ATB) and perceived behavioral control (PBC). However, the subjective norms (SNs) did not contribute significantly to the estimation of EI among Chinese university students.

Some of the EI studies carried out in various parts of the world have been mentioned above. In addition, it is important to analyse the current situation by looking at the studies particularly in Turkey and Portugal. Some of the most recent of these studies are given below.

Gürel, Altınay and Daniele (2010) conducted their cross-cultural study in Turkey and the UK by applying their survey to 409 tourism students. They examined the relationship between socio-cultural background, entrepreneurial characteristics and EI. Results showed that there is a statistically significant relationship between innovation, risk-taking tendency, being from an entrepreneurial family and entrepreneurial intention (particularly innovativeness and propensity to take risks both in Turkey and the UK). On the other hand, they found that education does not play an important role in the estimation of their entrepreneurial intentions and the characteristics of the university students. With this study Gürel et al. (2010) also stated that culture plays a role when it comes to the possibility of starting a business rather than having an EI. These findings showed that entrepreneurial goals cannot be explained only by individual characteristics; the socio-cultural background also has a significant impact on EI.

In the context of TPB, Kalkan (2011) investigated the effects of demographic factors on EI. Using the questionnaire as the data collection tool, the author surveyed 134 students from Mehmet Akif Ersoy University. The data and information obtained were analysed with the SPSS 15 statistical package program. According to the research results, ATB and PBC had an impact on EI while SNs had no significant impact on EI. According to the findings of the research, the hypothesis that the EI differs according to whether there are entrepreneurs in the students' families is rejected.

Çelik, Ince and Bozyiğit (2014) investigated whether there is a relationship between family factors and EI. Using the questionnaire as the data collection tool, the authors surveyed 249 students from Mersin University Faculty of Economics and Administrative Sciences. The data and information obtained were analysed with the SPSS 21 statistical package program and Chi-square analysis was performed. According to the findings, a significant relationship was found between entrepreneurial personality status, the existence of an entrepreneur in the immediate environment, participation in their families' decision-making process and EI. However, there was no significant relationship between parents' educational status, family income level and EI.

Doğan and Yılmaz (2017) investigated the demographic characteristics and EI of university students within the scope of TPB. In addition to the TPB antecedents of intention (ATB, SN and PBC), personal and contextual factors such as the need for achievement, locus of control, perceived support, perceived obstacle were investigated through a proposed structural equation model. Using the questionnaire as the data collection tool, the authors surveyed 369 students from Eskisehir Osmangazi University. The data and information obtained were analysed with the LISREL 8.80 statistical package program. Findings once again showed that the model of planned behavior theory is appropriate for determining EI. According to the research results, ATB and PBC had a direct relationship with EI while SNs had no direct relationship with EI.

Fragoso, Rocha-Junior and Xavier (2019) investigated how personality traits, training and entrepreneurial education, social recognition, self-efficacy and entrepreneurial attitude affect EI. In addition they also included the effects of gender, country of origin and family background in the research model. In this study with a conceptual framework based on the TPB, authors applied their questionnaires to university students in Brazil and Portugal. The authors received 422 recovered questionnaires from undergraduate students in economics and management from four different universities. The results showed that personality traits, self-efficacy and entrepreneurial attitudes are strong predictors of EI. On the other hand, social recognition and the effects of the country of origin have no significant impact on EI, while the descriptive statistics suggest that Brazilian students have higher entrepreneurial intention than Portuguese students.

Díaz-Casero, Ferreira, Hernández Mogollón and Raposo (2012) evaluated the impact of the institutional environment on EI, using a comparative analysis of different attitudes among university students in Portugal and Spain. In particular, authors of this study aimed to examine the perceptions of desirability, feasibility and intention toward the creation of one’s own business and how those variables influence the EI. The results showed that the attitudes towards entrepreneurship (ATB) are different in both countries. Also the majority of students in Spain think that it is easier to create a business now than several decades ago as opposed to the students in Portugal. In addition, it was found that students in Spain had more EI than students in Portugal.

1.3. Leading EI Models

In the 1980s, EI studies mostly focused on personality variables, demographic features, background and social environment, which have an impact on EI (Gartner 1988; Kolvereid, 1996; Shapero & Sokol, 1982). Neverthless, the modelling of entrepreneurship mostly based on personality traits (e.g. need for achievement, locus of control) and demographic factors (e.g. age, gender, origin) does not demonstrate much understanding about how the entrepreneurial process takes place (Liñán et al., 2011, p. 197). According to Gartner (1988, p. 48), focusing on the personality characteristics of the entrepreneur or trying to define the entrepreneur is not useful in understanding entrepreneurship because an average personality profile of entrepreneurs cannot be determined.

In the 1990s, academicians and practitioners in the entrepreneurial field began to adopt the integration of theories from the area of social psychology (Liñán & Fayolle, 2015, p. 908). Later, the studies mostly focused on the prediction of EI rather than its realization (Van Gelderen et al., 2008). This period, which started with the social cognitive theory proposed by Bandura (1986), proposed a framework model for understanding or predicting human behavior. After that, studies focused mostly on understanding the entrepreneurship process and a number of models have been developed to explain EI (Davidsson, 1995, p, 4; Segal et al., 2005, pp. 44−47). The most well known of these are: (1) Bird's conceptual model of intentionality; (2) the Entrepreneurial Event Model (EEM); and (3) the Theory of Planned Behavior (TPB) (Shook et al., 2003, p. 383).

Bird's conceptual model of intentionality, which was first introduced by Bird in 1988, is thought to have drawn a road map for entrepreneur candidates, although it is not a commonly used model in predicting EI (Shook et al., 2003, p. 384). Bird (1988) defines EI as the cognitive state of the mind, which directs attention and experience towards the target behavior in order to determine the form and direction of the work at the beginning.

This model refers to the rational and intuitive thought based on the interaction of the personal context (personality traits, abilities and previous self-employment experience) and the social context (social, political, economic, and environmental conditions, such as government policy) in the entrepreneurial phenomenon (Yaman, 2018).

Personal and social contexts can have an impact on individuals for the process of starting a business. Therefore, different personal and social contexts will have different effects on individuals. This will differentiate the degree of entrepreneurial intention necessary for the process of starting a business. In other words, as Fayolle and Liñán (2014, p. 665) noted, Bird's conceptual model of intentionality contains different perspectives on the intention of an individual to become an entrepreneur.

Entrepreneurial event model (EEM) was first introduced by Shapero in 1975 and became one of the oldest models to predict entrepreneurial intentions. It was developed in 1983 with the contributions of Sokol. In 1993, after Krueger added the influence of external factors to this model, in the literature it also became referred to as the Krueger–Shapero model (Alferaih, 2017, p. 203; Sabuncu, 2017).

In this model, entrepreneurial intentions are based on three elements (Shapero & Sokol, 1982): (1) *perceived feasibility*; (2) *perceived desirability*; (3) *propensity to act*. According to Shapero, the *perceived feasibility* and *the perceived desirability* are the two main predictors in the EEM (Shook et al., 2003, p. 384). *Perceived feasibilty* refers to the personal capability of starting a business, while *perceived desirability* refers to the personal attraction of starting a business (Shapero & Sokol, 1982). In other words, intention requires a person to perceive entrepreneurship as a reliable career option, which is based on the perception of whether that option is feasible (*perceived feasibility*) and desirable (*perceived desirability)* (Krueger & Carsrud, 1993, p. 322; Krueger et al., 2000). Then the person evaluates this option (propensity to act) depending on this perception of reliability and decides whether to act (*propensity to act)* (Krueger et al., 2000). Overall, external factors indirectly affect this perception of desirability and feasibility. Fitzsimmons and Douglas (2011) with their cross-cultural study using the entrepreneurial event model, found that perceived feasibility, perceived desirability and propensity to act have a positive significant impact on entrepreneurial intention.

Although Bird's conceptual model of intentionality has made significant contributions to the field, the EEM together with the TPB are the two most encountered and empirically proven models in the EI literature. Schlaegel and Koenig (2014, p. 293) argued that although all determinants of these two models are predictors of EI, EEM and TPB are expected to be the two most widely used competing models in predicting EI, arguing that focusing on both theories provides well-articulated theoretical frameworks. On the other hand, we see that these two models overlap at many points. For example, Shapero's *perceived feasibility* and *the perceived desirability* are consistent with Ajzen's ATB and PBC, respectively (Van Gelderen et al., 2008). As a result, both models are explained in terms of intentions, willingness and skills. However the EEM focuses on the concept of starting a new business rather than the concept of entrepreneurship.

On the other hand, TPB is deeply rooted in the psychological and sociological theory of the field of entrepreneurship in order to understand the mechanisms in which individuals' entrepreneurial intentions are shaped. In this study, TPB is used because it presents the basic cognitive linkage between the antecedents of EI (attitude towards entrepreneurship, subjective norms and perceived behavioral control) and EI itself. Also, it has been extensively tested and validated by the extant literature (Kautonen, Van Gelderen & Tornikoski, 2013; Kautonen et al., 2015; Liñán & Chen, 2009).

Therefore, this study is written using the TPB approach. In the following part of the study, TPB with its antecedents will be explained in detail as well as supported by previous studies to re-evaluate it in terms of EI.

1.4. Theory of Planned Behavior (TPB)

Today, one of the most predominant and widely used models of EI literature is that of Azjen's (1991) Theory of Planned Behavior (TPB) (Krueger et al., 2000; Segal et al., 2005, p. 46). TPB was derived from the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975). TPB was built on the TRA by adding another variable (perceived behavioral control) to estimate the intention (Ajzen, 1985). This theory has yielded very good results in a wide range of areas. In the entrepreneurial context, it shows the individual's efforts to realize entrepreneurial behavior (Liñán et al., 2011, p. 199).

According to TPB (Ajzen, 1991), there are three antecedents of intention that precede the behavior: attitude toward the behavior (ATB); subjective norm (SN); and perceived behavioral control (PBC) (Figure 1).

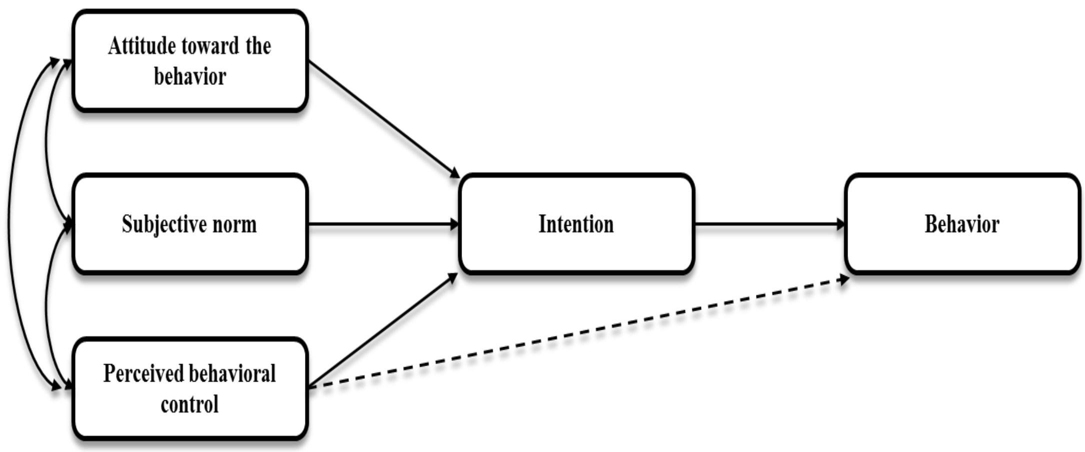

Figure 1: Core model of TPB (Ajzen, 1991: 182)

- *Attitude Toward Behavior (ATB)* refers to the individual's overall evaluation of the behavior. People decide to perform (or not) a behavior based on a positive, neutral or negative attitude.
- *Subjective Norm (SN)* refers to the perceived social pressure. In particular, it refers to the perception of reference people (such as family members, close friends, colleagues) and whether they will approve the decision to become an entrepreneur.
- *Perceived Behavioral Control (PBC)* refers to the perceived ease or difficulty that an individual will encounter when performing an action. In other words, it is a self-evaluation of someone's own abilities to perform entrepreneurial behavior.

In the entrepreneurial literature, Bandura's (1986) *self-efficacy* (SE) is taken into consideration being similar to the PBC because it also represents the individual's belief in his / her own capabilities to execute behavior (Ajzen, 1991). In some studies, an SE measure was used with PBC in an integrated model (Schlaegel & Koenig, 2014, p. 299). Also, positive correlations were found by many studies (Segal et al., 2005; Şahin et al., 2019) between SE and EI.

Within the framework of TPB, these three components (ATB, SN and PBC) determine the EI and this EI can be positive or negative. TPB argues that intention provides a connection between the three antecedents and subsequent behavior.

In cases where social pressure for behavior is supportive (SN), an individual's assessment of entering entrepreneurial behavior (ATB) will also be positive. This is because if there are social norms to support that behavior, an individual will surely be more likely to generate the intention to perform an entrepreneurial behavior. In general, if SN and ATB are positive, PBC is expected to also be positive. As a result, the intention of the individual to perform the behavior will be strong (Ajzen, 1991, p. 188). In addition, if a person has a strong belief that they have the skills to perform their entrepreneurial activities, it is more likely that they will turn their EI into certain entrepreneurial behaviors (Kautonen et al., 2013, p. 699). The stronger the 'intention' towards the behavior, the more likely that behavior is to occur. From this point of view, EI is also the best way to predict the behavior of setting up a business.

Ajzen (2005) revised the model of the TPB that he developed in 1991 in order to explain why people with similar attitudes (ATB), subjective norms (SNs) and perceptions of control (PBC) behave in a different way in some settings (Figure 2).

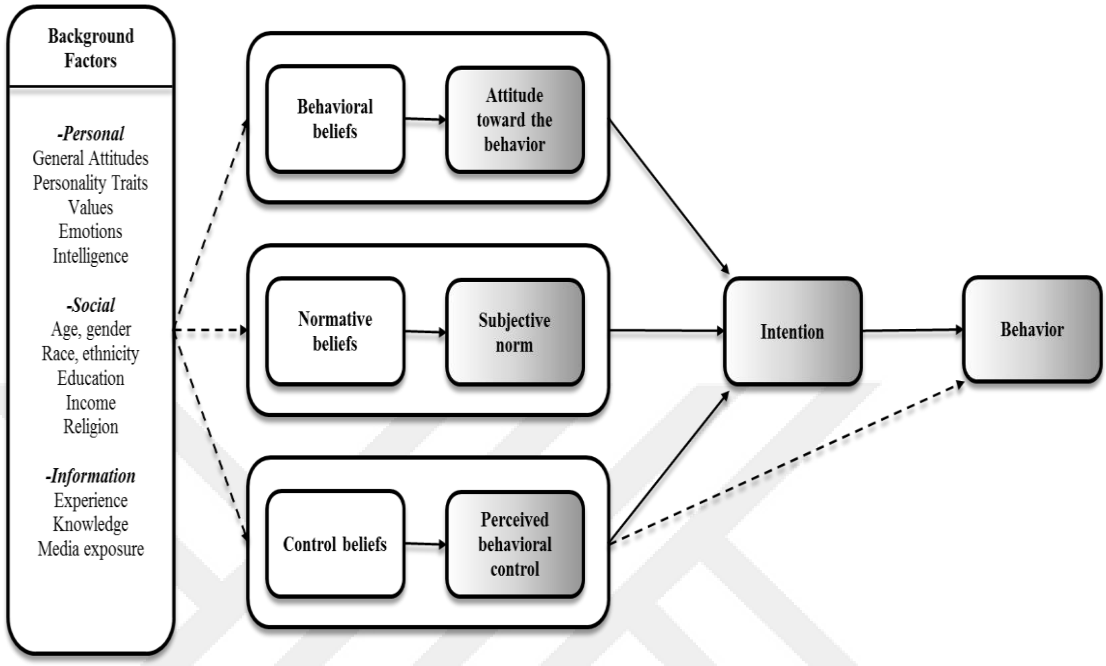

Figure 2: The role of background factors in the TPB

According to the revised TPB model, *control beliefs* influence the PBC, *normative beliefs* influence the SN, and *behavioral beliefs* are said to influence ATB. This revised TPB model also recognizes the potential importance of background factors (such as gender, education, income, need for achievement, locus of control etc.). With this revised and expanded TPB approach, Ajzen claimed these background factors have a significant impact on beliefs (Ajzen, 2005, p. 135).

There are many studies that use TPB as a framework in the EI literature, supporting its predictive validity. For example, in 2000, Krueger et al. compared the TPB and Shapiro’s entrepreneurial event model (SEE) to predict EI. They used a data set that was composed of 97 business students for regression analysis. As a result of their study, all paths in the model that predict EI within the scope of TPB were significant in the expected direction (R^2 of 0.350, $p < 0.0001$) for the overall model. However, they did not find a relationship between SN and EI. SN was found to correlate with ATB ($R^2 = 0.29$, $p < 0.004$).

In 2013, Kautonen et al. used longitudinal data from two surveys, one of which was applied in 2006 and the other in 2009, to provide evidence to support the predictive validity of TPB in EI literature. This two-wave survey collected data from 117 working-age individuals from Western Finland. Structural equation modelling (SEM) was used for analysing the data. This study was based on TPB and the results revealed the significance of the intention antecedents (ATB, SN and PBC) outlined in the TPB to estimate the entrepreneurial intention (EI). Once again, Kautonen et al. (2013) provided support for the predictive validity of the TPB in EI literature. ATB, SN and PBC were important determinants of subsequent entrepreneurial behavior. The authors also called on future studies to take larger, preferably cross-cultural samples to verify the preliminary findings presented in their article.

Similarly, Schlaegel and Koenig (2014) meta-analytically tested, compared and integrated the theory of planned behavior (TPB) and the entrepreneurial event model (EEM). They summarized the findings of 98 studies (123 samples, n = 114,007) and utilized meta-analytic structural equation modelling to examine the empirical fit of the competing theories and the integrated model. Findings suggested that the integrated model provides additional explanatory power and a fuller understanding of the process through which entrepreneurial intent develops.

Liñán and Fayolle (2015) reviewed 732 studies on entrepreneurial intention between the years 2004 and 2013 in order to get a clear picture of the subfields in the current studies on entrepreneurial intention. Citation analysis was used and 24 key articles were used within five main topic areas. In all of these categories, nearly 25 themes were identified and the literature gaps encountered in all these themes were determined, although the number and variety of publications were numerous. In their study, Liñán and Fayolle analysed and examined the core elements that cover the theoretical or methodological issues affecting EI within the first category. All categories were important; however, although the ‘core model’ that represented the first category did not have a practical applicability in the field of contributions, it was very important as it could determine the speed of entrepreneurial intention knowledge, which is required for development in this area (Liñán & Fayolle, 2015). All in all, according to Liñán and Fayolle (2015) the theoretical parts that constitute the core of the studies will increase the knowledge of EI. This increase in knowledge will naturally carry the literature a step further. Therefore, the detailed analysis of the theoretical parts in the studies is important in terms of improving the knowledge in this field.

The number of studies advocating the predicting power of TPB in EI literature is quite high and it is almost impossible to review them all. More related studies can be added to the above-mentioned studies as validation of TPB in the EI literature. However, most studies in this literature argue that the TPB presents the best theoretical framework for predicting EI, although the field of entrepreneurship has formed a broad research area with various approaches and various findings in the literature. In short, in this study, TPB was considered as the most suitable model in order to investigate the intention of entrepreneurship in the light of current literature.

Until now, the basic concepts of the study have been mentioned and the TPB, which forms the basis of this study, has been explained. In the cross-cultural literature, the EI studies conducted within the scope of TPB were also mentioned. In the next part of the study, some issues related to institutional environments (formal and informal environments) will be considered.

1.5. Institutional Enviroments

The national cultural perspective argues that cultural norms and values influence individual preferences as these cultural norms and values vary by country. As a result, '*theoretical frameworks and concepts cannot be easily applied to different cultural contexts without limitation*' (Schlägel & Sarstedt, 2016, p. 3). These differences between countries can affect the underlying theoretical foundations and the measurement tools when they are used to evaluate structures. Cross-cultural measurement tools can mislead researchers.

In this study, the tool developed by Liñán and Chen for measuring the cross-cultural scale (EIQ) has been used. In the literature, the robustness of the psychometric properties of this scale has been demonstrated many times by other cross-cultural studies (Do Paço et al., 2011; Yeşilay & Yavaş, 2017). On the other hand, in this study, EI among university students has been investigated in two different countries: Portugal and Turkey. These two countries, which are quite geographically remote, have different backgrounds both historically and economically. In addition, their people are mostly from different religions (Christianity and Islam) and have different cultural values. Accordingly, these differences (historical, economic, religious and cultural differences) affect social life in a strong sense. Accordingly, it is expected that EI among university students living in these countries will differ in their potential to exhibit different entrepreneurial behaviors, although entrepreneurship is an important matter for each country. Therefore, it is obvious that these two countries are different, and these cross-cultural differences can affect the theoretical foundations underlying hypothetical relations (i.e. the hypothesis of the study) (Schlägel & Sarstedt, 2016, p. 3). For this reason it is vital for the objectivity of the study to reveal similar and/or different aspects of the two countries.

To do that, the method of combining results from multiple international comparisons followed by Schlägel and Sarstedt (2016), based on the recommendations of Franke and Richey (2010), has been used to understand the national context's influence on the relationship between the three motivational antecedents of TPB (ATB, PBC and SN) and EI.

It is considered that the data from two countries with different characteristics in terms of formal institutions (rules, laws and regulations), as well as informal institutions (cultural norms and values) (Berry, Guillien, & Zhou, 2010). Cultural clusters of Western Europe (Portugal; n = 143), and the Near East (Turkey; n = 178) have been chosen in this study. The two countries' institutional environments also differ on multiple dimensions.

1.5.1. Formal institutional environment

The first step in examining institutional environment involves addressing countries' formal institutional environment. We know that both formal and/or informal institutional environments are often associated with economic and political factors (see, for example, Hayton, George, & Zahra, 2002; Hofstede, 1980a; Lee & Peterson, 2000). Furthermore, these factors to be addressed constitute the background of informal institutional environments to be examined later. Therefore, the formal institutional environment of the countries involved in this part of the study, will be evaluated in terms of EI by using some internationally validated indexes and ratings (Table 1).

Table 1: Country characteristics (formal institutional environment)

Characteristic	**PT**	**TR**	
Formal institutional environment			**Ranging / Ranking Criterion**
Corruption perception index	64.00	41.00	0, highly corrupt, to 100, very honest
Democracy index	7.84	4.88	1, an authoritarian regime, to 10, a full democracy
Ease of doing business rating	76.55/100; Rank: 34/190	74.33/100; Rank: 43/190	0, weak, to 100 strong ease of business (ranking each of them among 190 countries)
Freedom of the press index	16/199	163/199	ranking each of them among 199 countries
Freedom rating	1	5.5	1 representing the freest and 7 representing the least free
Global competitiveness rating	Rank: 34/140	Rank: 61/140	ranking each of them among 140 countries
Government effectiveness	1,33	0,07	-2.5, weak, to 2.5 strong governance performance
Political stability and absence of violence/terrorism index	1.08	-1.80	2.5, weak political stability, to 2.5, strong political stability
Rule of law	0.71	0.42	a low score indicates a weak performer

Notes: The freedom rating data are from Freedom House (2018). The democracy index data are from The Economist (2017). The freedom of the press index data is from Freedom House (2017). The corruption perception index data are from Transparency International (2018). The rule of law index data is from World Justice Project (2019). Effectiveness data and the political stability and absence of violence/terrorism index data are from The World Bank (2017). Global Competitiveness Rating data are from World Economic Forum (2018). Ease of Doing Business Rating data are from The World Bank (2018), PT=Portugal, TR=Turkey.

As can be understood from Table 1, Portugal presents better data according to many internationally recognized indexes, such as the Democracy Index (*The Economist*, 2017), the Corruption Perception Index (Transparency International, 2018) and the Rule of Law Index (World Justice Project, 2019) and so on. One of the most important ratings shown in Table 1, is the Global Competitiveness Rating (World Economic Forum, 2018) evaluating a country's competitiveness in an international context, ranking each of them among 140 countries. According to the World Economic Forum's the Global Competitiveness Report 2017−2018, Portugal (42) has risen by four places (the country ranked 46th in 2016) while Turkey (53rd) has risen by two places (the country ranked 55 in 2016). According to the same report, despite Turkey and Portuguese economies being evaluated into two separatd groups − *efficiency-driven economy* for Turkey and *innovation-driven economy* for Portugal − it can be said that both countries have shown improvement compared to the previous year. According to the report, the problems that these two countries' governments need to review are generally similar, as are most of the problematic factors for doing business (such as policy instability, access to financing, tax rates, inefficient government bureaucracy etc.). Before moving on to the informal institutional environments, we know that these environments are often associated with other economic factors, such as economic growth and the unemployment rate (see, for example, Hayton et al., 2002; Hofstede, 1980a; Lee & Peterson, 2000), that we need to consider these factors in more depth.

First of all, economic growth has tended to be somewhat higher in Turkey. Gross Domestic Product (GDP) annual growth rate in Turkey averaged 4.83 per cent from 1999 until 2018 (tradingeconomics.com-Turkish Statistical Institute) while GDP annual growth rate in Portugal averaged 1.32 per cent from 1996 until 2018 (tradingeconomics.com-Statistics Portugal).

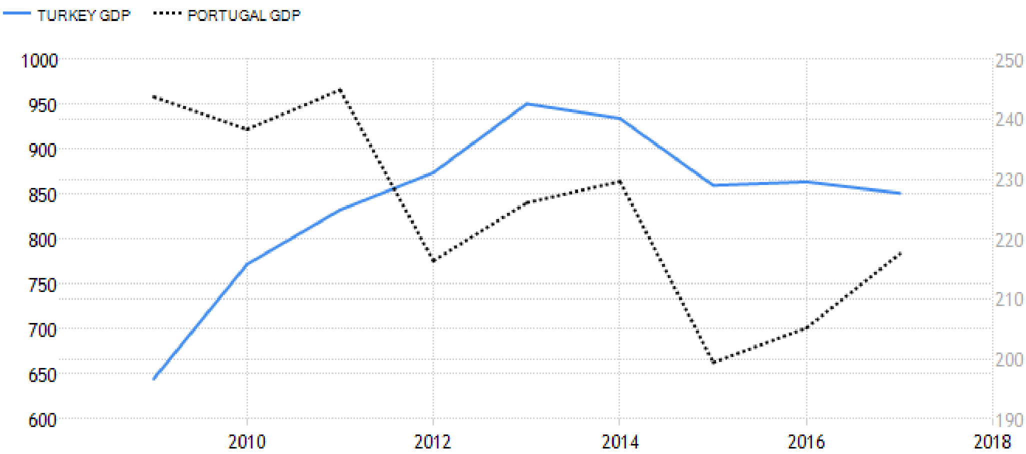

Figure 3: Comparison of GDP (PT *vs* TR), tradingeconomics.com

However, unemployment rate is high in Turkey, averaging 10.08 per cent from 2005 until 2018, while in Portugal it averaged 7.81 per cent from 1983 until 2018 (tradingeconomics.com).

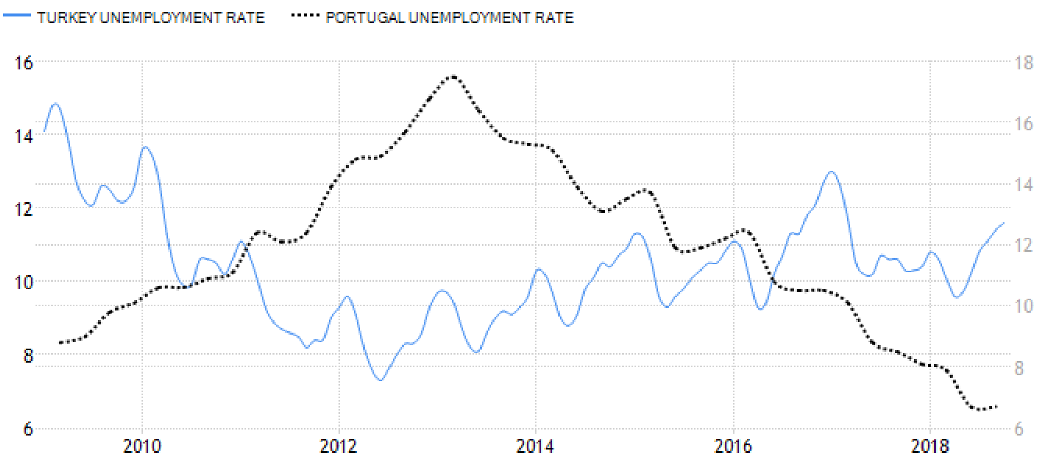

Figure 4: Comparison of unemployment rate (PT *vs* TR), tradingeconomics.com

These results show that Turkey's efficiency-driven economy appear less stable and serves as a sign of strong turbulence compared to Portugal's innovation-driven economy. As is known, this situation makes it difficult for university students to find a job after graduation in developing countries because it is difficult for employees to achieve the same salaries as in developed countries. On the other hand, '…*turbulent economies also offer opportunities for entrepreneurial activities, perhaps even to a larger extent than stable, developed economies*' (Iakovleva, 2007, as cited in

Iakovleva et al., 2011, p. 355). Therefore, it is expected that Turkish students' EI might be relatively higher than that of students in Portugal.

As shown in Figure 4, these two countries are currently in different economic segments and comparing the different infrastructures of the two countries requires in-depth research. This is beyond the scope of this study. As mentioned earlier, an/the institutional (formal/informal) environment was accepted as a proxy only and refers to the environment where the entrepreneur candidates (university students) lived. Thus, the influence of the economic, industrial and political situation might be considered as neutral for the purposes of this study.

1.5.2. Informal institutional environment

People take note of social environment when making decisions and they are influenced by the opinions of the people around them (family, friends, colleagues, etc.) and often make a decision in consultation with these people. At this point, answers to the following questions are sought: Are the factors in the emergence of EI universal? In an international context, is there a single application that is valid everywhere, or does the EI differ systematically? In the literature, the studies looking for the answers to these questions have proved that entrepreneurs or entrepreneur candidates are influenced by culture (Gürel et al., 2010). Empirical studies have shown how cultural aspects of a particular region can affect entrepreneurial intention (Liñán et al., 2011). Therefore, EI and accordingly entrepreneurial behaviors have emerged at different levels among countries (Huisman, 1985; Liñán et al., 2011; Thomas & Mueller, 2000).

Culture is a system of fundamental values specific to a particular group or community (Mueller & Thomas, 2000, p. 298), and it also motivates individuals in a society to engage in behaviors that are not common in other communities, while shaping the development of specific personality traits in each community. Hofstede (1980b, p. 43) defines *culture* as 'the collective mental programming of the people in an environment and claims it differs from others.

Although different studies have been carried out in order to determine and analyse cultural differences between countries or regions, the most well-known research on this subject is the study of data obtained between 1967 and 1973 among IBM employees and managers in 40 countries by Hofstede (1980a). Hofstede (1980a) firstly constructed four dimensions when analysing cultural differences among countries or regions: *power distance; uncertainty avoidance; individualism−collectivism in a country*; and *masculinity−femininity*. Subsequently, two more dimensions were added to Hofstede's model: *the short−long-term orientation of individuals* and *indulgence versus restraint* (Bond and Hofstede, 1989; Hofstede et al., 2010). Subsequent studies (Andrijauskienė & Dumčiuvienė, 2017; Guo et al., 2018) have accepted Hofstede's six cultural dimensions as reference for their studies, and some projects, such as Global Leadership and Organizational Behavior Effectiveness (GLOBE) have led to the expansion of these six dimensions (Carl, Gupta, & Javidan, 2004). On the other hand, Triandis and Suh (2002) argued that the most representative dimension is *individualism−collectivism*. Hofstede listed dimensions for 76 countries based on replication and extensions of the IBM study on different international populations and by different researchers in the 2010 edition of the book *Cultures and Organizations: Software of the Mind*. According to this book, Table 2 shows the scores of Turkey and Portugal in terms of Hofstede's culturel dimensions.

Table 2: Country characteristics (informal intitutional environment)

Characteristic	**PT**	**TR**
Informal institutional environment		
Individualism/collectivism	27	37
Long/short-term orientation	28	46
Masculinity/femininity	31	45
Power distance	63	66
Uncertainty avoidance	104	85
Indulgence/Restraint	33	49

Notes: The informal institutional environment is represented by Hofstede's (2010) six cultural value dimensions, PT=Portugal, TR=Turkey.

Individualism versus collectivism (IND) reflects the extent to which members of a cultural group prefer to act as individuals rather than in groups. According to Hofstede (2001), in *individualist* cultures, people tend to look after the individual himself/herself and his/her close family. It refers to 'the degree to which people in a society are integrated into groups' (Hofstede, 2011, p.11) In such cultures, individualism relates to societies where the ties between individuals break off and the interests of the individual dominate. People in these societies take their identities from individual achievements (Hofstede, 1980a; Pruett, Shinnar, Toney, Llopis, & Fox, 2009, p. 573). In contrast, in collectivist cultures, people expect to be a part of strong, harmonious groups. Thus, they believe that this integration continues to protect them throughout people's lifetime within an unquestioned loyalty (Hofstede, 2010, p. 92).

There are many studies in the literature that show that highly individualistic societies are the leading countries in entrepreneurial activities (Mitchell et al., 2000, p. 980; Mueller & Thomas, 2000; Shane, 1993; Wennekers, Uhlaner, & Thurik, 2002). Individualist countries' (such as the USA, the UK) lead entrepreneurial activities, such as individual freedom of action and independence, are highly valued in these societies (Mueller & Thomas, 2000, p. 60). This freedom increases individuals' levels of self-confidence (Geletkanycz, 1997) and it leads individual accomplishments (Pruett et al., 2009, p. 573). Therefore, entrepreneurial activities are expected to be supported and encouraged in individualistic societies (Mueller & Thomas, 2000, p. 60).

Uncertainty avoidance (UAV) reflects the extent to which members of a cultural group prefer structured situations over unstructured ones. In societies with low uncertainty avoidance, people are expected to be more comfortable when faced with an unrecognized situation (Geletkanycz, 1997) as they know the future is uncertain and it is impossible to know what will happen tomorrow (Hofstede, 2010, p. 189). In the entrepreneurial context, the literature shows that the nature of entrepreneurship needs an environment where uncertainty appears as an environmental factor (Shane, 1993) because there is *risk* where uncertainty exists. And as mentioned before, risk is one of the main components of entrepreneurship in finding opportunities (Şahin, 2015, p. 92).

Power distance (PD) reflects the extent to which the existence of unequal distribution of power in organizations and institutions among people is accepted (pluralist vs elitist society) (Hofstede, 2010, p. 61). It shows a polarization model between *interdependence* and *counterdependence*. According to Hofstede (2010, p. 61), in small-power-distance countries, there are interdependencies between the top of the hierarchy (e.g. the boss in a company) and people forming the lower layers of the hierarchy (e.g. the subordinates in a company). The emotional distance between them is relatively small. In contrast, in large-power-distance countries subordinates *prefer* to be seriously dependent on bosses or entirely reject such dependence (*counterdependence)*. In such cultures, strong hierarchies and control mechanisms stand out (Hofstede, 1980a). Also, Kanter (1983) pointed out the existence of bureaucracy and strict control mechanisms in large-power-distance countries. '*Power distance may influence venturing scripts by shaping an individual's perspective on the availability of opportunities to venture*' (as cited in Mitchell et al., 2000, p. 979). It is most likely that people who form the sublayer of the hierarchy can only consider entrepreneurship as an action by the upper layer. Therefore, creativity and innovations are advocated in these countries. Entrepreneurship activities are relatively higher in societies in small-power-distance countries (Hayton et al., 2002; Pruett et al., 2009, p. 573), as the exchange of entrepreneurial ideas is easier in these societies and the culture of negotiation can be mentioned.

Masculinity−femininity (MAS) reflects the extent to which tough values like assertiveness and competition prevail over softer ones like quality of life and modesty. This dimension picks out how roles between genders are emotionally determined. In literature this dimension is most controversial in the first five emerging dimensions (Hofstede, 2010, p. 144), and also in one of the two most prominent dimensions (one was individualism versus collectivism) of Hofstede's six dimensions when analysing cultural differences (Hofstede, 2010, p. 138). According to Hofstede (2010, p. 140), in *masculine* cultures, men tend to focus on ambitious, hard and material success, while women tend to focus on being more modest, tender, and concerned with the quality of life. In such cultures there is a distinct line between the men and women. In contrast, in *feminine* cultures both men and women focus on being more modest, tender and concerned with the quality of life. In such cultures, emotional gender roles overlap.

In general, researchers have assumed that they are facilitated by cultures that are high in masculinity (Hayton et al., 2002, p. 34) as in masculine cultures individuals tend to have a high need for success, and organizations are more willing to engage in competitive behavior (Kreiser, Marino, Dickson, & Weaver, 2010, p. 961; Pruett et al., 2009, p. 575). In this context, it is possible to say that entrepreneurial activities are relatively higher in the masculine societies as the entrepreneurs are the people who like to compete and ascribe importance to success.

Long−short-term orientation (LTO) reflects the extent to which values are focused towards the future or the past and present. Hofstede (2006) argued that LTO was positively correlated with future orientation within the Global Leadership and Organizational Behavior Effectiveness (GLOBE) cross-cultural research project. People want to make their plans over the long run because they believe they can achieve better results in the future than they can today (Calvelli, Cannavale, Parmentola, & Tutore, 2012, p. 6). Also, another important entrepreneurial term for companies is that Entrepreneurial Orientation (EO) can assist them in the process of detecting opportunities in the market. Several empirical studies (Wiklund, 1999; Zahra, 1991) found support for EO's positive impact on performance. For example, Wiklund (1999, p. 44) suggested that small businesses will benefit from investments if they make long-term investments rather than making only short-term ones in order to favour entrepreneurial orientation.

Indulgence versus restraint (IVR) reflects the extent to which a society promotes and rewards the performance of its members. Indulgence can be defined as a '*tendency to allow relatively free gratification of basic and natural human desires related to enjoying life and having fun*'. In contrast, restraint can be defined as '*a conviction that such gratification needs to be curbed and regulated by strict social norms*' (Hofstede, 2010, p. 281). Hofstede mentioned that this new dimension is not studied in the literature and he calls for future academic studies on this dimension (Hofstede, 2010, p. 281). In indulgent societies, individuals are expected to act more easily because there is an environment that supports entrepreneurship in such countries (House et al., 2004).

To sum up, national culture influences individual behavior and ultimately the innovative behavior of firms. When all these dimensions are considered together, it is known that entrepreneurs tend to exhibit certain levels of these dimensions. For example, Shane (1992) suggested that the national innovation rate is positively correlated with power distance and individualism in the sample of 33 countries.

In another study by Shane (1993), Hofstede's (1980) four dimensions were identified as measures of national culture and again in the sample of 33 countries. In this study it was found that the national innovation rate is positively correlated with individualism, and negatively correlated with uncertainty avoidance and power distance.

However, McGrath, MacMillan and Scheinberg (1992) looked at the question of whether entrepreneurs have a set of values that are cross-culturally changable, unlike non-entrepreneurs. With the data set they collected from 1217 entrepreneurs and 1206 non-entrepreneurs from 9 countries, they reached the following conclusion: High power distance (PDI +), high individuality (IND +) and high masculinity (MAS +), low in uncertainty avoidance (UAV -) in societies are met when high entrepreneurship scores intended.

However, Hofstede et al. (2004) found that individuals in such cultures, high power distance (PDI +), high in uncertainty avoidance (UAV +). low individuality (IND -), and low masculinity (MAS -), tend to be self-employed in enterprises where entrepreneurship is relatively unfavourable, because in these cultures, people are more 'dissatisfied' individuals and they try to get rid of this dissatisfaction (as cited in Liñán & Chen, 2009, p. 598). However, although there is an increase in the number of individuals who are self-employed in an unfavourable culture, the size of the firm causes them to live more as small businesses, on average. This leads to the idea that EI is greater in societies that are suitable for entrepreneurship (Liñán & Chen, 2009, p. 598) because in these societies people are more future-oriented and they set out with the goal of making more profit and growing in the future, taking risks when necessary. This leads to an increase in total entrepreneurial activities (Calvelli et al., 2012).

According to the TPB, shared values in a culture affect the antecedents of intention (Liñán & Chen, 2009, p. 598). In many studies, it is observed that some cultural dimensions have a positive effect on intent while some of them have a negative effect. These studies are commonly used for high power distance (PDI +), high individuality (IND +), high masculinity (MAS +), future-oriented (LTO +), tolerance (IVR +), and low in uncertainty avoidance (UAV -). It is seen that entrepreneurial activities are more supported in societies where these dimensions dominate in given directions. Accordingly, EI is affected positively in such cultures. SN, one of the motivational antecedents of intention, can reflect its strength more clearly than the other antecedents can here (Liñán & Chen, 2009, p. 598), because SN refers to perceived social pressure when starting a firm. That is, how much reference people support the subject behavior. As reported by Liñán and Chen (2009), SNs have a weaker role in explaining EI in individualistic societies while in collectivist societies it is stronger in explaining EI. In the literature, the general opinion is that individuals tend to be influenced by the opinions of others in collectivist societies (Begley & Tan, 2001).

1.5.3. Turkey and Portugal in the same pot

When we look at Tables 1 and 2 above, despite all these differences in the upper side (formal institutional enviroment's differences), considering Hofstede's cultural dimensions, these two countries are not considered to be very different cultures. In order to make the study more efficient (Liñán & Chen, 2009, p. 595), the potential impact of all these similarities and differences on EI will be discussed in a single pot among the university students in these two countries.

There are many studies (Eroğlu & Pıçak, 2011, p. 148; Hofstede, 1980b, pp. 51−53; 2010; Naktiyok, Karabey, & Gulluce, 2010) in the literature that view Turkey in general as a collectivistic (37) society with the scores high on power distance (66)[2].

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[2] Scores in parentheses are the values shown in Table 2.

In terms of masculinity−femininity, Turkey is on the feminine (45) side of the scale, and its uncertainty avoidance scores are also high (85). In addition, long-term orientation (46) and indulgence (49) scores do not correspond to any specific characteristics as the scores are close to the midpoint (50) of the scale.

Portugal is a collectivistic (27) society with high scores on power distance (63). In terms of masculinity−femininity, it is on the feminine (31) side of the scale and uncertainty avoidance (104) scores are also high. In addition, Portugal is a short-term-oriented (28) society with a culture of restraint (33).

From this perspective, we see that both national cultures have similar characteristics in terms of informal institutional environments. Both countries might be characterized as dependent and hierarchical. In both communities, hierarchical distance is accepted and superiors often inaccessible as both countries score *high on power distance*. Since both cultures have *collective* characteristics, the perception of ‘We’ comes before ‘I’. Thus, people often consider the interests of the whole society. Also, both countries are on the *feminine* side of the scale. This means that softer aspects of culture, such as equality and consensus are encouraged in both countries. Finally, *uncertainty avoidance scores are high*, which means that both Portuguese and Turkish society need laws and rules. However, Portugal’s LTO and IVR indexes compared to Turkey’s scores have more characteristic features (Figure 5).

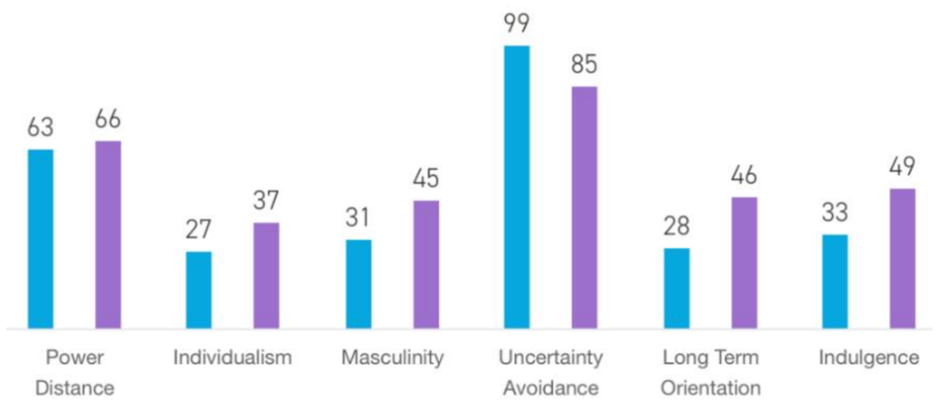

Figure 5: Comparison of Hofstede’s cultural dimensions

Notes: PT in blue color *vs* TR in purple color (*Source:* hofstede-insights.com)

In the literature there are very few studies (Frazier & Niehm, 2006) that estimate EI by looking at LTO and IVR indexes, which are acquired later in terms of EI. This study also contributes to the literature by filling this gap. When Turkey and Portugal are compared in terms of long-term orientation/short-term orientation, we see that *long-term orientation* is dominant in Turkish culture (46 vs. 28). With respect to *indulgence* (49 vs. 33), Turkey is the country where indulgence is dominant. When the LTO and IVR indexes are taken together, this would relatively imply more support for entrepreneurship in Turkey. *Power-distance* (63 for Portugal and 66 for Turkey) scores are broadly equivalent. Portugal scores substantially higher in *uncertainty avoidance* (99 vs. 85). However, Turkey scores substantially higher in *masculinity* (31 vs. 45) and *individualism* (27 vs. 37), which would imply that the Turkish culture is relatively more opposed to entrepreneurship.

1.6. Proposed Research Model

The research model that forms the basis of the study is given in Figure 6.

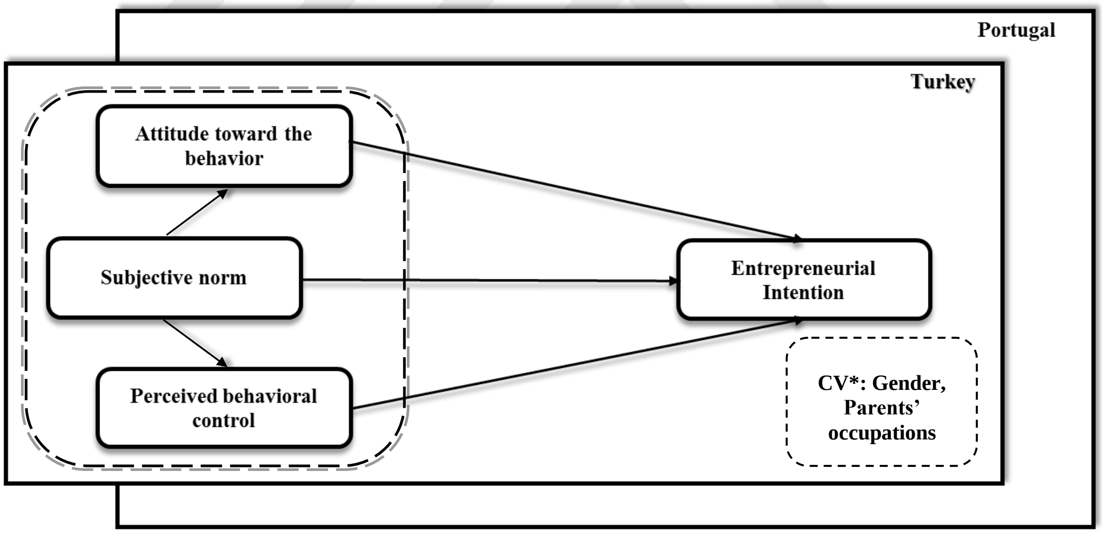

Figure 6: Proposed research model, CV*: Control Varibles

As is understood from the model, this studyinvestigates whether there is a relationship between TPB antecedents (PBC, ATB, SN) and EI among university students, as well as whether these relations differ according to country. I have chosen countries from Western Europe (Portugal; n = 148) and the Near East (Turkey; n = 178). The model of the study was developed to experiment in different countries based on the work of Liñán and Chen (2009).

In their study, Liñán and Chen (2009) have called for future studies to try the model they developed in Taiwan and Spain. Thus, there are a lot of studies in the literature examining entrepreneurial intention of university students. However, no study applied in Turkey and Portugal could be found in the literature. For this reason, it is expected that this study will contribute to the literature by researching the following hypotheses in two different countries:

H_1: Attitude toward entrepreneurial behavior positively influences entrepreneurial intention ($ATB \rightarrow EI^+$)

H_2: Perceived behavioral control positively influences entrepreneurial intention ($PBC \rightarrow EI^+$)

H_3: Subjective norm positively influences entrepreneurial intention ($SN \rightarrow EI^+$)

H_{3A}: Subjective norm positively influences attitude toward entrepreneurial behavior ($SN \rightarrow ATB^+$)

H_{3B}: Subjective norm positively influences perceived behavioral control ($SN \rightarrow PBC^+$)

H_4: The explained variance (R^2) of EI differs according to different countries

In order to address the hypotheses posited above, a structural equation modelling technique was used via Smart PLS 3.0 (Ringle et al., 2015) package program.

CHAPTER 2

METHODOLOGY

The previous chapter defined the variables of this research model and presented the basic background literature of the study, explaining the theory on which the study was based. In addition, the previous section showed the proposed research model based on the TPB, which attempts to explain entrepreneurial intention (EI), which is not adequately discussed in cross-cultural literature. This chapter describes the procedures used in this study design and implementation. The procedures are divided into: research design; population and sample; data collection process instrumentation; data analysing technique.

2.1. Research Design

In the literature, it has been proven in many cross-cultural studies that the antecedents of TPB affect the EI (see Chapter 1, e.g. Ben Ali, 2016; Díaz-Casero et al., 2012; Doğan & Yılmaz, 2017; Kalkan, 2011; Kautonen et al., 2013; Liñán & Chen, 2009; Nguyen, 2017; Schlaegel & Koenig, 2014). On the other hand, no specific study has been found in the literature comparing Turkey and Portugal, which are the two countries in which the study was conducted in terms of EI. Therefore, the main objective of this research is to produce information about the entrepreneurial intentions of students in universities in Turkey and Portugal in order to contribute to the cross-cultural literature within the context of EI. It can be said that this objective has been achieved with the structural model followed.

2.1.1. Structural equation modelling (SEM)

SEM is a multivariate statistical analysis technique used to determine the extent to which a model is supported by sample data. In the literature, SEM has been defined several times. Hoyle (1995, p. 1) defined SEM as '*a comprehensive statistical approach to testing hypotheses about relations among observed and latent variables*'. Schumacher and Lomax (2004, p. 2) stated that SEM is a technique which set the ways how the variable sets define the constructs and how these constructs are related to each other for the various theoretical models based on a particular theory and empirical research. This study examined the relationship between the participants' intention to become a business owner and TPB antecedents, in addition to testing the applicability of Ajzen’s TPB in terms of EI, in the Portuguese and Turkish contexts.

In many different disciplines, it is known that SEM has become one of the most popular statistical analysis techniques used in multivariate analyses (Hoyle & Panter, 1995; Kline, 2011, p. 13; Yuan, Bentler, & Chan, 2004, p. 422). Schumacher and Lomax (2004, pp. 7−8) argue that there are four main reasons for SEM to become a preferred method for quantitatively validating (or approving) theoretical models. The first is that, in contrast to the classical statistical methods, SEM allows the use of multiple variables to understand complex theories. Second, SEM techniques consider the measurement error clearly when analysing data statistically. The third is the ability to analyse the available data with the multilevel structural equation models. In the context of SEM, it is possible to ask whether certain parameters, such as factor loads and regression coefficients, are the same or different in various groups, such as different ethnicity or gender. For example, to test the same theory, data can be collected from both Turkish students and Portuguese students and can be tested with SEM. Finally, the use of SEM software programs is now easier and more understandable to the user because it contains features similar to other Windows-based software packages.

SEM does not have a single source, it is mainly a collection of techniques that combine path models and confirmatory factor models (Kline, 2011, p. 15). In the early twentieth century, Charles Spearman (1904) used the correlation coefficients to determine which elements were correlated or acting together. Since 1963, Karl Joreskog proved with confirmatory factor analysis (CFA) that a set of elements defined a structure, factor analysis has become a technique that has been used for over 50 years to create the measurement tools used in many academic disciplines. Sewell Wright (1918) who was a biologist, developed the path model that shows direct and indirect effects, which are still used today. Economists discovered the SEM after the 1950s and after that, SEM techniques were used more frequently. Finally, the early development of the SEM models was combined with the contributions of three researchers: Karl Joreskog (1973), Ward Keesling (1972) and David Wiley (1973). In fact, this approach was initially referred to as the JKW model as it represented the initials of the three researchers’ last names. With the development of the first software program LISREL in 1973, it was recognized as a Linear Structural Relations Model (LISREL).

2.1.2. CB-SEM vs PLS-SEM

Hair et al. (2017, p. 4) have argued that there are two types of SEM (see Table 3) Covariance-Based SEM (CB-SEM) and Partial Least Square SEM (also called as PLS Path Modelling).

Hair et al. (2017, p. 14) states that the researcher should make a decision by reviewing many points (e.g. sample size, distribution, model complexity, etc.) regarding which of these two methods should be chosen in the study. Because each approach (covariance-based or variance-based) is suitable for a different research context, researchers need to understand these points in order to implement the correct method.

First of all, in the literature, the probable effects of the TPB antecedents on EI have not been examined to a level that will constitute a strong background in the cross-cultural context. Although the aforementioned relationship of the variables of this study have been studied in different countries (see Ben Ali, 2016; Do Paço et al., 2011; Gürel et al., 2010; Küttim et al., 2014; Lee-Ross, 2017; Liñán & Chen, 2009; Nguyen, 2017; Wu & Wu, 2008; Zhang et al., 2015), these theoretical foundations have not been found in a cross-cultural context which includes a comparison of Turkey and Portugal in terms of EI. This adds an exploratory feature to the research. Additionally, in contrast to the classical covariance-based approaches (along with statistical package programs such as AMOS and LISREL), PLS presents a new component-based approach in SEM. Therefore, PLS-SEM was preferred as a second-generation technique in order to explain the effect of the antecedents of TPB on EI while examining the model. The philosophical distinction, which varies according to the purpose (exploring or confirmation) of the study between the two SEM approaches is shown in the table below.

Table 3: Organization of multivariate methods

	Primarily Exploratory	Primarily Confirmatory
First-generation Techniques	-Cluster analysis -Exploratory factor analysis -Multidimensional scaling	• Analysis of variance • Logistic regression • Multiple regression • Confirmatory factor analysis
Second-generation Techniques	- Partial least squares structural equation modeling (PLS-SEM)	• Covariance-based structural equation modeling (CB-SEM)

Source: Hair et al., 2017: 2

Additionally, data charactestics and model set-ups should be checked in order to decide whether to apply PLS-SEM. The detailed considerations are shown below in Table 4.

Table 4: Rules of thumb for choosing between PLS-SEM and CB-SEM

Use PLS-SEM when	This study's argument
• The goal is predicting key target constructs or identifying key "driver" constructs.	**X**
• Formatively measured constructs are part of the structural model. Note that formative measures can also be used with CB-SEM, but doing so requires construct specification modifications (e.g., the construct must include both formative and reflective indicators to meet identification requirements).	**No formative construct**
• The structural model is complex (many constructs and many indicators).	**X**

• The sample size is small and/or the data are nonnormally distributed	**X**
• The plan is to use latent variable scores in subsequent analyses.	**X**
Use CB-SEM when	
•The goal is theory testing, theory confirmation, or the comparison of alternative theories.	
•Error terms require additional specification, such as the covariation.	
•The structural model has circular relationships.	
• The research requires a global goodness-of-fit criterion	

Source: *Hair et al., 2017: 23*

The study's objective, as indicated previously (Chapter 1), is to predict EI, which is the key target construct of the proposed model.

In the proposed research model, there are three independent variables (ATB, SN, and PBC) and one dependent variable (EI). There are a total of 20 indicators belonging to these structures, six of which belong to PBC, three to SN, five to ATB and six to EI. When we look at the number of variables and indicators of these variables, the model might look simple, but in fact it should be expressed as a complex model because of its prediction arrows.

Additionally, this study's sample size is not big enough to apply CB-SEM. THE Turkish sample consists of 173 cases, the Portuguese sample consists of 148. It is argued that minimum sample size recommendations for CB-SEM range from 200 to 800, while minimum recommendations for PLS-SEM range from 30 to 100 cases (Urbach & Ahlemann, 2010, p. 13).

In the literature, the Kolmogorov−Smirnov test and the Shapiro−Wilk test are used to check whether the data are normally distributed. These tests were designed to test normality by comparing the data with a normal distribution with the same mean and standard deviation as in the sample (Sarstedt & Mooi, 2014, as cited in Hair et al., 2017, p. 61). Hair et al. (2017) suggest that the researcher needs to look at the skewness and kurtosis values just because the bootstrapping procedure via Smart PLS 3.0 (Ringle et al., 2015), which is the software package used in this study, is considered to provide quite a robust performance even if the data are not normally distributed. Therefore, kurtosis and skewness values were checked to see whether the data set was normally distributed (see Chapter 3). These values are expected to change between -1 and +1. Items exceeding these threshold values are a sign that the data set is not normally distributed. Accordingly, as can be seen in the next chapter of the study, both the Turkish data set and the Portugal data set have values outside of these values. Therefore, it can be said that the data set is not normally distributed for this study. As shown in the Table 4, PLS-SEM does not require the assumption of normal distribution (Chin, 1998; Ünsal, 2018), therefore it is more appropriate to use PLS-SEM for this study in which four latent variables are involved.

The literature also revealed that there are many advantages of PLS-SEM. For example, Urbach and Ahlemann (2010, p. 9) summarized the advantages of choosing PLS as follows:

• PLS makes fewer demands regarding sample size than other methods

• PLS does not require normal-distributed input data

• PLS can be applied to complex structural equation models with a large number of constructs

• PLS is able to handle both reflective and formative constructs

• PLS is better suited for theory development than for theory testing

• PLS is especially useful for prediction

For all these reasons, PLS-SEM was determined as the most appropriate SEM method in this study to explain the effects of the antecedents of TPB on EI while examining the model.

2.1.3. PLS-SEM procedure of the research

SEM starts with a specification of a model, which indicates a statistical statement about the relations among variables (Hoyle, 1995, p. 2). The specification of this study's model has already been shown in Chapter 1 (in section 1.6 Proposed Research Model). However, the visualization of the model studied in the PLS-SEM process is shown in Figure 7, together with the indicators that belong to the research model's constructs.

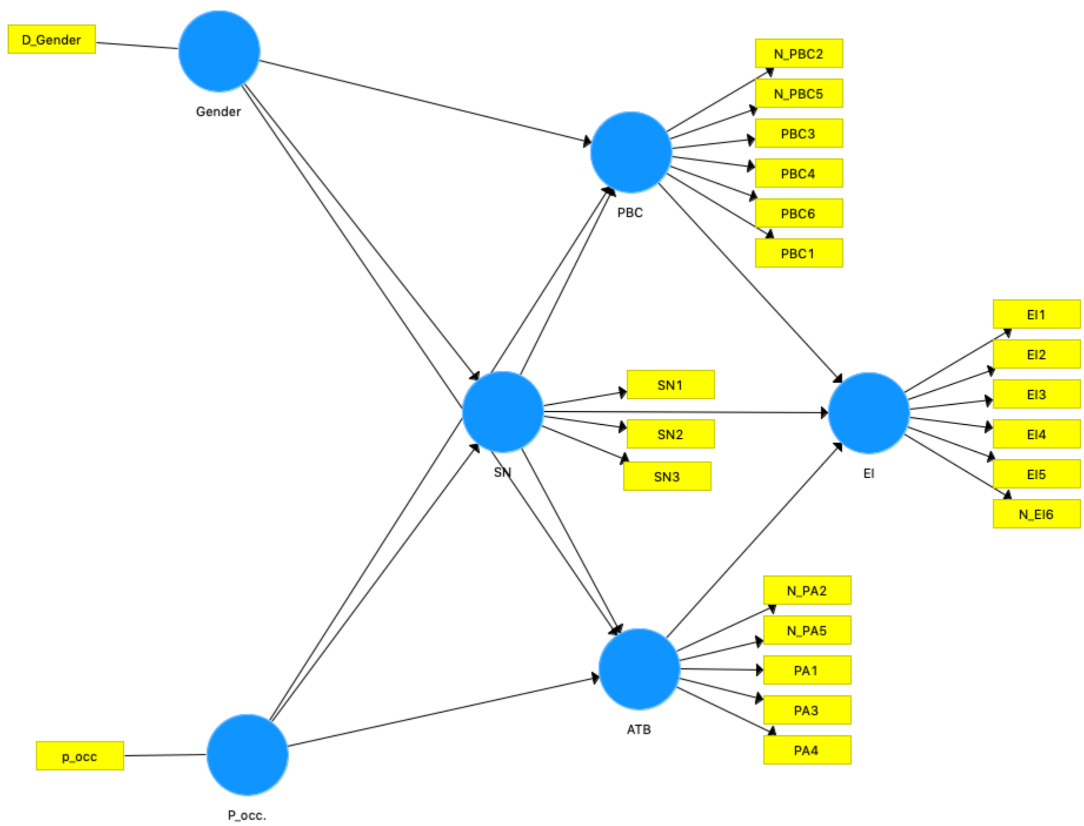

Figure 7: Visualization of research model by Smart PLS

In this analysis, there are two variable types: endogenous variables and exogenous variables. Endogenous variables (only EI here) are equal to dependent variables and exogenous variables (PBC, SN and ATB here) are equal to independent variables. In the first phase, the researcher identifies the constructs to be used in the model (see Chapter 1). This determines the variables as formative or reflective. Here, all the constructs which constitute the research model were designed, according to Hair et al. (2011), as reflective, directions to create a PLS-SEM model.

PLS-SEM is generally carried out in a two-stage process, which includes (1) evaluation of measurement models and (2) evaluation of the structural model.

The first stage, a general measurement model, is developed showing the set of relationships thought to exist between exogenous and endogenous constructs. These relations are shown with the help of arrows based on hypotheses. Single-headed arrows indicate the cause-and-effect relationship according to theory, which is TPB in this research. It is necessary for the researcher to make a clear and conscious decision about the nature of the measurement models because the misidentification of the measurement models may have a serious negative impact on the overall quality of the research results that cannot be easily identified at a later stage (Urbach & Ahlemann, 2010, p. 16).

The validity of the measurement model used is then evaluated. Here, the researcher looks at the internal consistency reliability, convergent validity and discriminant validity findings and compares the theoretical measurement with the reality model and evaluates the structural model. To do that, the researcher should apply a pre-test or pilot test with the data collecting tool, which here is the questionnaire, on a controlled sample to get empirical feedback. In this way, the researcher also provides instrument development suggestions from this controlled sample in terms of one or more design perspectives, such as the format, content, intelligibility, terminology, ease of use or speed of completion of the survey (Urbach & Ahlemann, 2010, p. 17). Then, the data obtained from this control group are analysed by the researcher and the content is validated by looking at internal consistency reliability, convergent validity and discriminant validity findings, which are provided by running the PLS algorithm. The researcher then collects data from the large sample. Again, these validation steps are conducted to be sure as the result of this evaluation of the measurement model must be associated with the overall constructs' validity.

In the second stage, the researcher finally examines the validity of the structural model of the study after the validity of the measurement model has been established. According to Hair et al. (2017, p. 191) there are six steps which entail assessing: i) the structural model for collinearity issues; ii) the significance and relevance of the structural model relationships; iii) the level of R^2; iv) the f^2 effect size; v) the predictive relevance Q^2; and lastly vi) the q^2 effect size. Each step should give validation measurement results that are acceptable, providing threshold values. Thus, it is possible to proceed to the next step. In this case, parameter estimations can be interpreted on the theoretical basis of the structural equation. As a result, the hypotheses expressed by the structural model can be accepted as confirmed or rejected and the hypotheses results are interpreted. Unlike CB models, the established goodness-of-fit (GoF) indices are not available in the PLS-based models even if the first steps in the literature are taken (Hair et al., 2014, p. 169).

In the following section the other details of the methodological procedure will be discussed (population and sample, data collection process). After that, in light of the directions mentioned above, the PLS-SEM process of the study will be discussed in detail in the next chapter.

2.2. Population and Sample

The target population of the study is comprised of students who continue their education in the faculties of Mugla Sıtkı Kocman University in Turkey and of University of Lisboa in Portugal. Including all the faculties from these institutions to maximize generalizability would be a great benefit; however, due to time and access restrictions, this was not possible. Instead, the samples selected for this study, were collected from two faculties, namely the Fethiye Faculty of Business Administration in Muğla Sıtkı Koçman University in Turkey, and the ISEG Business Faculty, University of Lisboa in Portugal, to draw conclusions about the population. These universities were chosen for the collection of data, because they are known to attract students from all over the country. The institutions are also similar in the student population and the degrees offered. The reasons for the decision to include these universities were i) because they are known to attract students from all over the country; and ii) both institutions are similar in the student population and the degrees offered.

This research study was a cross-sectional study, which relied on convenience sampling for the collection of responses from participants. For each sample, the survey applied with the aim of achieving 400 students at the beginning. However, a total of 321 responses (173 from Turkey, 148 from Portugal) were achieved after the data scanning process, which included eliminating incomplete questionnaires.

When using PLS-SEM, there are many suggestions in the literature for the size of the sample for data analysis (Wong, 2013). Hair et al. (2011; 2014, p. 20; 2017, p. 22) propose at least ten times the maximum constructs that cause a single variable in the model. This proposal is known as the *ten times rule* developed by Barclay et al. (1995) and postulated by Chin (1998), in the literature. Sufficient confidence in research in social sciences is considered to be 5 per cent of the significance level; the minimum number of samples required is shown in Table 5.

Table 5: Sample size recommendation in PLS-SEM for a statistical power of 80%

Number of Independent Variables	**Significance Level 5%**			
	Minimum R^2			
	0.10	**0.25**	**0.50**	**0.75**
2	90	33	14	8
3	103	37	16	9
4	113	41	18	11
5	122	45	20	12
6	130	48	21	13
7	137	51	23	14

Source: Cohen, 1992, as cited in Hair et al., 2017: 22

For the proposed research model, there are three exogenous constructs (ATB, SN and PBC) to explain the single dependent construct EI. The maximum number of arrows pointing to a particular latent variable was three. The rule of thumb for PLS-SEM indicates that for three indicators, one would need 37 observations to achieve a statistical power of 80% (the commonly used level of statistical power) for detecting R^2 values of at least 0.25 (with a 5% probability of error). The calculation of 37 responses represented a starting point for determining an appropriate sample size with an adequate level of accuracy and statistical power. The Turkish sample was 173 and the Portuguese sample was 148, after some of the respondents had been eliminated, which still met the criteria for PLS-SEM analysis. Thus, it can be assumed that the sample sizes were large enough to implement the PLS-SEM for this study.

2.3. Data Collection Process

2.3.1. Data collection method

In this thesis, the relations between ATB, PBC, SN and EI are examined in a holistic perspective; primary data have been used. In order to obtain the primary data, the survey study has been preferred as an appropriate data collection method. The questionnaires prepared in paper-and-pencil format were collected by asking students to fill them in mostly in the classroom after the purpose of the study was explained and privacy was guaranteed.

The research tools, which are the questionnaires used in the research (presented in the appendix section) consist of two parts. First, there are 7-point Likert items based on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). In the second part, there is a section which provides participants' demographical information.

2.3.2. Pilot test procedure

The scale used (EIQ) had already been translated into both Turkish and Portuguese in previous studies and their reliability has been proven many times. For example, in the Turkish context, Yeşilay and Yavaş (2017) previously found that EIQ is a valid and reliable tool (0.80 to 0.94 in the case of Cronbach's alpha), while in the Portuguese context, Do Paço et al. (2011) tested the model of entrepreneurship intention within the scope of TPB using the EIQ and achieved reasonable thresholds in terms of validity and reliability (0.69 to 0.79 in the case of Cronbach's alpha, 0.66 to 0.78 in the case of composite reliability). Thus, the psychometric properties of the EIQ previously demonstrated its suitability for both samples. However, in a classroom setting, a pretest was carried out with 25 participants, in both the Turkish and Portuguese samples, in order to be sure about the appropriateness in terms of terminology and language of the questionnaire. Afterwards, the validity and reliability of the scales was ensured one more time and the survey was applied to the larger groups.

2.4. Instrumentation

For the creation of the scales, the literature was first examined. EIQ was used to measure university students' EI in the context of TPB, and this scale's validity and reliability has been proven many times in the international literature. This scale, originally developed by Liñán and Chen (2009), is rooted in Ajzen's (1991) TPB. Also, in the EI literature, there are many studies that have cross-checked this scale to predict the intention to start a business among university students (e.g. Lee-Ross, 2017; Yeşilay & Yavaş, 2017). Furthermore, most of these studies have reported that this scale's psychometric properties are enduring and they achieved similar results in their work (Do Paço et al., 2011; Nguyen, 2017).

Table 6 explains the constructs (ATB,SN, PBC, and EI) of this study's PLS approach and the survey items that belong to each construct.

Table 6: Study's constructs and items

Constructs	Item Codes	Item Content
ATB	PA1	Being an entrepreneur implies more advantages than disadvantages to me.
	PA2*	A career as an entrepreneur is totally attractive to me.
	PA3	If I had the opportunity and resources, I would love to start a business.
	PA4	Being an entrepreneur would give me great satisfaction
	PA5*	Amongst various options, I would be anything but an entrepreneur
PBC	PBC1	Starting a firm and keeping it viable would be easy for me
	PBC2*	I believe I would be completely able to start a business
	PBC3	I can control the creation process of a new firm
	PBC4	I know all about the practical details needed to start a business
	PBC5*	I know how to develop an entrepreneurial project
	PBC6	If I tried to start a business, I would have a high chance of being successful
SN	SN1	My friends would approve of my decision to start a business

	SN2	My immediate family would approve of my decision to start a business
	SN3	My colleagues would approve of my decision to start a business
EI	EI1	I am ready to do anything to be an entrepreneur
	EI2	My professional goal is to be an entrepreneur
	EI3	I will make every effort to start and run my own business
	EI4	I am determined to create a business venture in the future
	EI5	I don't have doubts about ever starting my own business
	EI6*	I have a strong intention of ever starting a business

***Notes:* *** Reverse coded in PT sample

Additionally, it is expected that some differences will arise between the two samples (see Table 7). Firstly, although the gender ratio of the participants was generally similar (53.6% female, 46.4% male in total), gender may have important effects on the EI. On the other hand, whether the mother or father of one participant is an entrepreneur is expected to affect the student’s EI. Particularly, Portuguese parents, in particular, are more likely to be entrepreneurs. Therefore, gender and parents’ occupation information will be included as control variables in the statistical analysis.

The participants were asked to identify themselves as male or female in the survey section with demographic information. Entrepreneurship has historically been a subject under the dominion of men. For this reason, entrepreneurial activities in societies with high masculinity are more (Liñán & Chen 2009; McGrath, MacMillan & Scheinberg, 1992). In addition, it is assumed that an individual who is known to have an entrepreneur mother and/or father, has more EI than others (Djankov, Qian, Roland, & Zhuravskaya, 2007, p. 5). Therefore, the participants were asked to give their parents’ occupations. At this point, as Ajzen (2005) suggested, background factors (e.g. gender and the occupations of parents) were required in order to investigate their potential impact on motivational factors. Due to the TPB that Ajzen revised in 2005, background factors that belong to individuals directly affects motivational factors (Figure 2). Therefore, the relationship between these two variables and TPB antecedents was also investigated in the model.

Two different surveys were conducted in both the Turkish and Portuguese languages. Therefore, the literature was first reviewed and studies that have previously used the EIQ scale translated into these two languages have been reviewed. As a result, the Turkish form of the questionnaire was created in the light of the work of Yeşilay and Yavaş (2017), while the Portuguese form of the questionnaire was created in the light of the work by Libombo (2016). The overlap of these scales with the original scale (EIQ) was approved by a sworn translator / interpreter in English. In order to check the appropriateness of the Portuguese version of the questionnaire, the first form of the questionnaire was given by taking the opinions of a native Portuguese graduate from the Department of Business Administration.

2.5. Data Analysing Technique

In this study, IBM SPSS Version 22.0 (IBM Corp, 2013), which is a statistical package program, was used to provide descriptive statistics of respondents, the while PLS-Smart 3.0 (Ringle et al., 2015) statistical package program was used in the PLS-SEM to provide descriptive statistics of the data set, to make measurements and to calculate structural parameters.

Through these package programs, the demographic information about the respondents and the data set characteristics will be discussed, and the analyses of the measurement and structural models will be demonstrated in the next chapter.

CHAPTER 3

ANALYSIS AND RESULTS

3.1. Descriptive Statistics

3.1.1. Descriptive statistics for respondents

In Turkey, a paper form survey was given to 205 students at Fethiye Business Faculty, Mugla Sıtkı Kocman University between October 2018 and January 2019. There were 189 responses received. This yielded a 92% response rate. After eliminating 16 of the responses, which were not completed or were with outliers, this reduced the completed response number to 173, a rate of 84%, which is good response rate (Baruch, 1999, p. 429; Baruch & Holtom, 2008, p. 1139). In Portugal, a paper form survey was given to 183 students at ISEG, University of Lisboa between June 2018 and September 2018. There were 159 responses received. This yielded an 87% response rate, which was beyond what was expected. After eliminating six responses, which were from respondents who know Portuguese, but in fact are not from Portugal (mostly from Brazil), and five responses which were not completed, this dropped the completed response number to 148, a rate of 81%, which is also a good response rate. The reason for having good response rates for each sample might be due to the application of the surveys in the classroom settings, which ensured equivalence and consistency in terms of the survey formats and the data collection procedures. Bachelor students were asked to complete the paper-and-pencil questionnaire individually during a lecture. Study participation was voluntary and all the questionnaires were completed anonymously. For each sample, the very limited incomplete responses included only demographic information and thus they were not removed for descriptive analysis.

In order to present the profile in detail, various demographic questions were asked to the sample group participating in the research. According to the results obtained, 52.6 per cent of the Turkish sample was composed of females and 47.4 per cent were male. The sample from Portugal was composed of 54.7 per cent female and 45.3 per cent male. It was observed that the gender was almost equally distributed in both samples. In total, 53.6 per cent of the students participating in the research were female and 46.4 percent were male. Additional demographic information about the respondents is shown in Table 7.

Table 7: Descriptive statistics for students

		Portugal		Turkey		Total	
Variables	**Groups**	**f**	**%**	**f**	**%**	**f**	**%**
Gender	Female	81	54,7	91	52,6	172	53,6
	Male	67	45,3	82	47,4	149	46,4
	Total	148	100,0	173	100	321	100,0
Age	18-20 year	34	23	81	46,9	115	35,8
	21-23 year	80	54,1	83	48	163	50,7
	24-26 year	21	14,2	6	3,5	27	8,4
	26<	12	8,3	-	-	20	6,2
	Total	147	99,3	170	98,4	317	98,8
Household	1,00	4	2,7	5	2,9	9	2,8
	2,00	10	6,8	6	3,5	16	5,0
	3,00	50	33,8	27	15,6	77	24,0
	4,00	55	37,2	66	38,2	121	37,7
	5,00	17	11,5	38	22,0	55	17,1
	6,00	2	1,4	10	5,8	12	3,7
	7,00 and more	1	,7	6	3,5	8	2,5
	Total	139	93,9	159	91,9	298	92,8

Occupations of parents	**Father**	Employee	82	55,4	75	43,4	157	48,9
		Self-employed (Entrepreneur)	39	26,4	38	22,0	77	24,0
		Retired	18	12,2	47	27,2	65	20,2
		Unemployed	4	2,7	8	4,6	12	3,7
		Total	143	96,6	168	97,1	311	96,9
	Mother	Employee	104	70,3	54	31,2	158	49,2
		Self-employed (Entrepreneur)	22	14,9	12	6,9	34	10,6
		Retired	11	7,4	14	8,1	25	7,8
		Unemployed	8	5,4	91	52,6	99	30,8
		Total	145	98,0	171	98,8	316	98,4

Notes: PT = Portugal, TR = Turkey

As can be seen in Table 7, a large proportion of participants (86.5%) are in the 18−23 age range, whereas the mean age of the participants was determined as 21.4858. As the main aim of the study is to estimate the entrepreneurial intentions of university students, it is desired to reach 22 as the average age level of the participants because the most common age group for newly started enterprises was identified as the age range 25−34 or 35−44 (GEM, 2018−2019 Global Report, p. 22). Thus, it is expected that people who are able to establish a real business in the 25−35 age group will have a certain EI from the age of 20 years old because entrepreneurial intention is a prerequisite for entrepreneurial behavior, as detailed in the first chapter.

Although descriptive statistics are more focused on gender and age, it is expected that more information about students can help to understand their background better. When we look at the occupations of the students' parents in the Portuguese sample, the rate of the father or the mother being an entrepreneur is 26.4 per cent and 14.9 per cent, respectively. In the Turkish sample, we see that the rate of the father or the mother being an entrepreneur is 22.0 per cent and 6.9 per cent, respectively. One of the most remarkable results regarding the parents was that the unemployment rate for mothers was 52.6 per cent in Turkey 4.6 per cent in Portugal. Additionally, the mean household number of the total participants was determined as 3.8926.

3.1.2. Descriptive Statistics for Data Set (Variables)

After finishing using the IBM SPSS Version 22.0 (IBM Corp, 2013) for the descriptive statistics for respondents, the data was transfered into Smart PLS 3.0 (Ringle et al., 2015). Having run the program, the data set characteristics are displayed in Table 8.

Table 8: Descriptive statistics for data set (full version)

	Items	Mis-sing	Mean	Median	Min.	Max.	SD	Excess Kurtosis	Skew-ness
PT	**PBC1**	0.000	3.919	4.000	1.000	7.000	1.388	-0.461	-0.083
	PBC2*	0.000	4.973	5.000	1.000	7.000	1.551	-0.802	-0.350
	PBC3	2.000	4.014	4.000	1.000	7.000	1.539	-0.484	0.227
	PBC4	1.000	3.551	3.000	1.000	7.000	1.746	-0.889	0.200
	PBC5*	0.000	4.676	5.000	1.000	7.000	1.476	-0.295	-0.304
	PBC6	1.000	4.218	4.000	1.000	7.000	1.209	0.198	0.202
	PA1	0.000	4.554	5.000	1.000	7.000	1.327	-0.308	-0.118
	PA2*	0.000	5.095	5.000	1.000	7.000	1.600	-0.321	-0.737
	PA3	0.000	5.149	6.000	1.000	7.000	1.722	-0.475	-0.730
	PA4	0.000	5.095	5.000	1.000	7.000	1.557	-0.089	-0.734
	PA5*	0.000	4.216	4.000	1.000	7.000	1.699	-0.828	-0.051
	EI1	0.000	3.135	3.000	1.000	7.000	1.719	-0.739	0.474
	EI2	0.000	3.426	3.000	1.000	7.000	1.736	-0.704	0.341
	EI3	0.000	3.892	4.000	1.000	7.000	1.736	-0.850	-0.035
	EI4	0.000	4.054	4.000	1.000	7.000	1.751	-0.771	-0.167
	EI5	0.000	3.662	4.000	1.000	7.000	1.792	-0.910	0.092
	EI6*	0.000	4.088	4.000	1.000	7.000	1.808	-0.862	0.089
	SN1	0.000	5.574	6.000	1.000	7.000	1.466	0.089	-0.960
	SN2	0.000	5.926	6.000	2.000	7.000	1.175	0.940	-1.143
	SN3	0.000	5.676	6.000	3.000	7.000	1.175	-0.621	-0.580
TR	**PBC1**	0.000	4.295	4.000	1.000	7.000	1.737	-0.808	-0.048
	PBC2	0.000	4.052	4.000	1.000	7.000	1.885	-1.052	-0.008

	PBC3	0.000	4.451	5.000	1.000	7.000	1.722	-0.881	-0.201
	PBC4	0.000	3.665	4.000	1.000	7.000	1.741	-0.769	0.181
	PBC5	1.000	3.698	4.000	1.000	7.000	1.733	-0.639	0.069
	PBC6	1.000	4.442	5.000	1.000	7.000	1.736	-0.650	-0.305
	PA1	0.000	5.191	5.000	1.000	7.000	1.635	-0.277	-0.639
	PA2	0.000	5.324	6.000	1.000	7.000	1.562	0.002	-0.780
	PA3	0.000	5.884	7.000	1.000	7.000	1.505	1.596	-1.444
	PA4	0.000	5.312	6.000	1.000	7.000	1.640	0.162	-0.853
	PA5	3.000	4.294	4.000	1.000	7.000	1.811	-0.796	-0.146
	EI1	0.000	4.075	4.000	1.000	7.000	1.862	-1.039	-0.035
	EI2	0.000	3.717	4.000	1.000	7.000	1.934	-1.145	0.126
	EI3	1.000	4.750	5.000	1.000	7.000	1.887	-0.963	-0.420
	EI4	0.000	4.538	5.000	1.000	7.000	1.925	-0.975	-0.296
	EI5	1.000	4.198	4.000	1.000	7.000	1.993	-1.143	-0.107
	EI6	1.000	5.029	5.000	1.000	7.000	1.806	-0.486	-0.671
	SN1	0.000	5.850	7.000	1.000	7.000	1.652	1.426	-1.504
	SN2	0.000	5.717	6.000	1.000	7.000	1.571	0.882	-1.236
	SN3	1.000	5.209	5.000	1.000	7.000	1.799	-0.232	-0.813

Notes: *Reverse coded in PT questionnaire, PT = Portugal, TR = Turkey

Here, kurtosis and skewness values were checked to see if the data set is normally distributed. These values are expected to change between -1 and +1. Items exceeding these threshold values imply that the data set is not normally distributed. Accordingly, both the Turkish and the Portuguese data sets have values outside of these values. Therefore, it can be said that the data sets re not normally distributed for this study. As PLS-SEM does not require the assumption of normal distribution (Chin, 1998; Ünsal, 2018;), the next stage is to evaluate the measurement model, which is begun by presenting some of its properties and definitions adopted.

3.2. Evaluation of Measurement Model

Following the validation guidelines of Hair et al. (2017, p.105), the PLS-SEM measurement and the assessment of the quality of the structural models include focusing on: i) internal consistency; ii) convergent validity; and iii) discriminant validity for the model's predictive abilities in order to compare the theoretical measurement with the actual model. In other words, the empirical measures of the model help the researcher to determine how well the theory fits the data.

Before starting to evaluate the measurement models, it is firstly necessary to examine whether the model is composed of reflective or formative constructs because making this distinction requires the application of different procedures at this stage. All the structures in this research model are designed as reflective (see Figures 1 and 2) based on the work of Hair et al. (2013).

The analysis started by presenting the accepted definitions with algorithmic options and parameter settings. This step adopted the path weighting scheme in the PLS algorithm. Data were standardized with a maximum number of 300 iterations and the stop criterion of 10^-7. The following section shows each criterion addressed for the evaluation of the reflective measurement model of the study after running the algorithm.

3.2.1. Internal Consistency Reliability

The examination of the measurement model is usually initiated by checking whether the internal consistency requirement is provided. For this reason, Cronbach's alpha values are generally considered. The Cronbach's alpha value indicates that each indicator in the scale has an equal load on its construct. However, Cronbach's alpha values are sensitive to the number of indicators in the construct and are therefore considered more conservative (Hair et al., 2014, p. 101; 2017, p. 211; Urbach & Ahlemann, 2010, p. 18). To overcome this limitation, researchers now also examine composite reliability (CR) values. CR, which is another measure of internal consistency reliability, takes into account the different outer loadings of the indicators and gives better reliability estimates than Cronbach's alpha (Henseler, Ringle, & Sinkovics, 2009). Therefore, it is more reasonable to use both in studies (Hair et al., 2017).

In order to determine the internal consistency reliability of the PLS structural equation model by the evaluation of the Cronbach's alpha and CR results, first of all, the *reliability indicator* should be considered. If a factor load is less than 0.40, it must be removed directly from the model (Hair et. al., 2017; Hulland, 1999). While all factors' outer loadings in Turkish data were reasonable, SN3 and PBC5, which were less than 0.40 in in the Portuguese (PT) data, were removed from the PT model after considering the potential content change. The PT model was run again and factors' outer loadings occurring after modification are given in Table 9.

Table 9: Factors' outer loadings

	PT				TR			
	ATB	**EI**	**PBC**	**SN**	**ATB**	**EI**	**PBC**	**SN**
EI1		0.795				0.785		
EI2		0.842				0.824		
EI3		0.922				0.894		
EI4		0.899				0.885		
EI5		0.859				0.858		
EI6*		0.501				0.782		
PA1	0.534				0.809			
PA2*	0.686				0.840			
PA3	0.849				0.772			
PA4	0.873				0.879			
PA5*	0.779				0.657			
PBC1			0.699				0.745	
PBC2*			0.640				0.903	
PBC3			0.826				0.883	
PBC4			0.717				0.834	
PBC5*	Has been removed						0.811	
PBC6			0.717				0.813	
SN1				0.896				0.861
SN2				0.931				0.877
SN3	Has been removed							0.679

Notes: *Reverse coded in PT questionnaire, PT = Portugal, TR = Turkey

As can be seen from Table 9, all factor loads are greater than 0.40. Ideally, outer loads are expected to be greater than 0.708. Because the square of the outer load also gives the value of the Average Variance Extracted (AVE) (this will be discussed in the next section), it is also desired to be greater than an AVE value of 0.50 (Bagozzi

& Yi, 1988). However, it is common for social sciences to find values in the range of 0.40 and 0.70, and these values are checked to see whether the square of their outer loads are greater than 0.50. If the value is greater than 0.50, it can be kept in the model.

In this direction, most of the factor loads were above the threshold value of 0.70 (see Table 9). Several of them were in the range of 0.40 and 0.70, however they were kept in the model as they did not cause any disruption in the CR, Cronbach's alpha and AVE values.

In the social sciences, Cronbach's alpha and CR values of between .70 and .90 are usually desirable (Urbach & Ahlemann, 2010, p. 18). Cronbach's alpha and CR values were within acceptable limits in the 95% confidence interval in both samples (see Table 10). At this stage, the measurement model was found to meet the internal consistency.

3.2.2. Convergent Validity (Individual indicator reliability and AVE)

At this stage, it is checked whether the measurement model provides the convergent validity requirement. Convergent validity refers to the degree to which a measure shows a positive correlation with alternative measures of the same construct (Hair et al., 2014, p. 102; 2017, p. 112; Urbach & Ahlemann, 2010, p. 19). Therefore, indicators of a particular reflective construct are expected to combine or share a high rate of variance among themselves. In order to check whether convergent validity is provided, individual indicator reliability (outer loadings) and AVE values are taken into consideration.

Factor loads have already been reviewed in the previous title. According to the rule of thumb, all factor loads are in the desired value range (see Table 9 above). Accordingly, in order to achieve the convergent validity requirement, the AVE value is also calculated, which is above the recommended value of 0.50 (Fornell & Larcker, 1981, p. 46) in both samples (Table 10).

Table 10: Cronbach's alpha, composite reliability (CR), average variance extracted (AVE) values

	PT			TR		
	Cronbach's Alpha	**CR**	**AVE**	**Cronbach's Alpha**	**CR**	**AVE**
ATB	0.804	0.865	0.569	0.851	0.895	0.632
EI	0.891	0.920	0.665	0.915	0.934	0.704
PBC	0.768	0.844	0.522	0.911	0.931	0.694
SN	0.804	0.910	0.835	0.747	0.850	0.656

Notes: CR = Composite Reliability, AVE = Average Variance Extracted, PT = Portugal, TR = Turkey

When the outer loads and AVE values were reviewed together, the desired values were obtained and it was found that the model provided the convergent validity requirement.

3.2.3. Discriminant Validity

The provision of the discriminant validity requirement means that each construct in the model is really different from other constructs, according to empirical standards. This means that a construct is unique and captures phenomena not represented by other constructs in the model (Hair et al., 2017).

In general, researchers traditionally have developed two approaches to control discriminant validity (Hair et al., 2012; 2014, p. 105; Urbach & Ahlemann, 2010, p. 19):

1. Cross-loadings

2. Fornell−Larcker Criterion

Here, it has been checked whether the model meets the Fornell−Larcker (FL) criterion because this has been used more recently in the literature (Fornell & Cha, 1994; Hulland, 1999; Peng & Lai, 2012). The Fornell−Larcker results are given in Table 11.

Table 11: Fornell-Larcker Criterion results

	PT				TR			
	ATB	**EI**	**PBC**	**SN**	**ATB**	**EI**	**PBC**	**SN**
ATB	**0.754**				**0.795**			
EI	0.723	**0.815**			0.705	**0.839**		
PBC	0.450	0.588	**0.722**		0.524	0.628	**0.833**	
SN	0.093	0.070	0.051	**0.914**	0.290	0.159	0.114	**0.810**

Note: The diagonal factors (bold) are the square root of the AVE. Off-diagonal factors are the correlations among the study constructs (latent variables).

As can be seen in Table 11, the square root of the AVE value of each construct (shown in bold) has achieved the desired outcome of being greater than its correlation with other constructs. As Fornell and Larcker (1981) stated, the variance between the indicators of each construct (shared with each other) should be greater than the variance with the indicators of other constructs. In other words, the logic of the Fornell−Larcker method is based on the idea that a latent variable shares more variance with its assigned indicators than any other construct in the model (Hair et al., 2017, p. 116; Urbach & Ahlemann, 2010, p. 19). As can be seen from Table 11, the square root of AVE values (bold values) is larger than the other shared variances of the constructs.

According to Henseler, Ringle and Sarstedt (2015, p. 118), although the use of the Fornell−Larcker criterion is one of the most common methods used to assess the discriminant validity of a PLS model, there is almost no systematic review of its efficacy. They argued that the heterotrait-monotrait ratio (HTMT), which they developed, can get rid of the deficiencies of the Fornell−Larcker criterion. According to Henseler, Hubona and Ray (2016, p. 11) '*the HTMT is an estimate for the factor correlation (more precisely, an upper boundary)*'. According to Henseler et al. (2015, p. 127) there are two ways of using HTMT to assess discriminant validity: (1) as a criterion; or (2) as a statistical test. In this study, HTMT was used as a criterion just like the FL. The outputs from the HTMT analysis are shown in Table 12.

Table 12: HTMT results

	PT				TR			
	ATB	**EI**	**PBC**	**SN**	**ATB**	**EI**	**PBC**	**SN**
ATB	**1**				**1**			
EI	0.830	**1**			0.795	**1**		
PBC	0.549	0.714	**1**		0.594	0.682	**1**	
SN	0.104	0.097	0.124	**1**	0.340	0.196	0.138	**1**

Notes: The diagonal factors (bold) are the *upper boundary* of the HTMT. Off-diagonal factors are the calculations using the formula as in Henseler et al. (2015).

Accordingly, the discriminant validity of this study's model was checked once again with the HTMT threshold value for reflective models. To clearly distinguish between the two latent variables, HTMT must be much smaller than 1, specifically smaller than 0.85 (more warranted) (Henseler et al., 2015). According to the table above, when using $HTMT_{.85}$ as the threshold, all comparisons showed that discriminant validity has been established in this study's model.

3.3. Evaluation of Structural Model

The measurement model of the study was confirmed in the previous section. The next step is to evaluate the structural model results. The systematic process was followed in this section for the evaluation of the structural model suggested by Hair et al. (2017). The systematic process is shown in Figure 8.

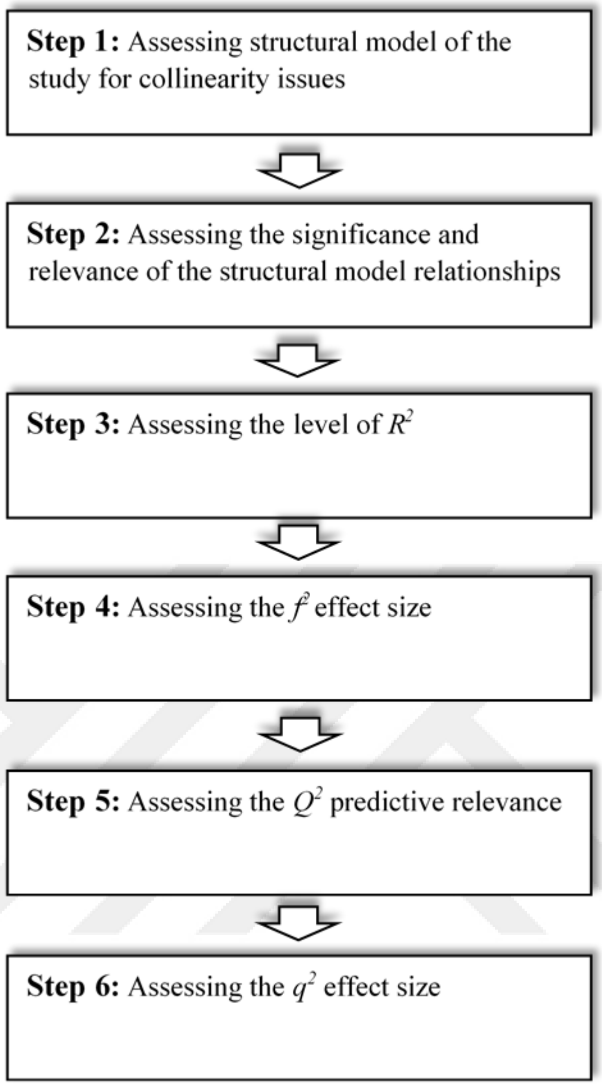

Figure 8: Structural model assessment procedure (Hair et al., 2017: 191)

There are six steps, which involve the assessment of the following: the structural model for collinearity issues (Step 1); the significance and relevance of the structural model relationships (Step 2); the level of R^2 (Step 3); the f^2 effect size (Step 4); the predictive relevance Q^2 (Step 5); and lastly the q^2 effect size (Step 6). Each step should give reasonable validation measurement results that provide threshold values. After that the researcher can go through the next steps.

3.3.1. Step 1: Assessing structural model for collinearity issues

In the evaluation of the model, it should be determined whether the level of collinearity in the model is acceptable. To investigate the level of collinearity, Smart

PLS provides two relevant measurements: (1) computing tolerance (TOL) or (2) variance inflation factor (VIF), which is the reciprocal of tolerance. Both pairing statistics carry the same information but reporting of VIF values is more widely used in the literature and can be said to be a standard practice (Hair et al., 2017, p. 144). For this reason, the inner values of VIF are examined in this study and shown in Table 13.

Table 13: Inner -VIF values

	PT				**TR**			
	ATB	**EI**	**PBC**	**SN**	**ATB**	**EI**	**PBC**	**SN**
ATB		1.325				1.488		
EI								
PBC		1.312				1.380		
SN	1.000	1.017	1.000		1.013	1.095	1.013	

Notes: The columns are the all combinations of endogenous constructs. The rows are the corresponding exogenous (predictor) constructs, PT = Portugal, TR = Turkey.

According to Hair et al. (2017, p. 210), a VIF value should be less than 5 to detect no collinearity problem between variables. As can be seen in Table 13, none of the constructs used in the study have a VIF value above 5. Therefore, there are no multiple linearity problems in the model. It is possible to continue examining the reported results with Step 2.

3.3.2. Step 2: Assessing the significance and relevance of the structural model relationships

In this step, hypotheses are based on the TPB in the EI context, in other words, structural model relationships (i.e. the path coefficients) of the study are evaluated. These values are expected to be different from 0 to be meaningful and almost always significant results are obtained. Path coefficients (hypothesized relationships) represent the relationships between constructs. The path coefficients' magnitudes are usually used to indicate the strength of the relationship between the two structures in the model. Therefore, the path coefficients gain values between -1 and +1. If this value is close to + 1, it can be said that this relationship has a strong positive relationship (and vice versa for negative values), which is usually statistically significant (i.e. different from zero in the population). If the path coefficient is closer to 0, this means the relationship is statistically weak (Hair et al., 2017, p. 195). These path coefficients were obtained after running the PLS algorithm.

As is known, whether a path coefficient is ultimately important depends on the standard error (Hair et al., 2017, p. 195). In order to decide the path coefficients, resampling techniques such as boostrapping or jack-knifing should be used (Urbach & Ahlemann, 2010, p. 21). The Smart PLS program is already capable of showing results after applying the boostrapping procedure. The algorithmic options of the boostrapping procedure and parameter settings included selecting 5000 subsamples and bias-corrected and accelerated (BCa) boostrap as a confidence interval method at 0,05 significance level. Figures 9 and 10 show the bootstrapping results for the basic model with their associated *t*-values.

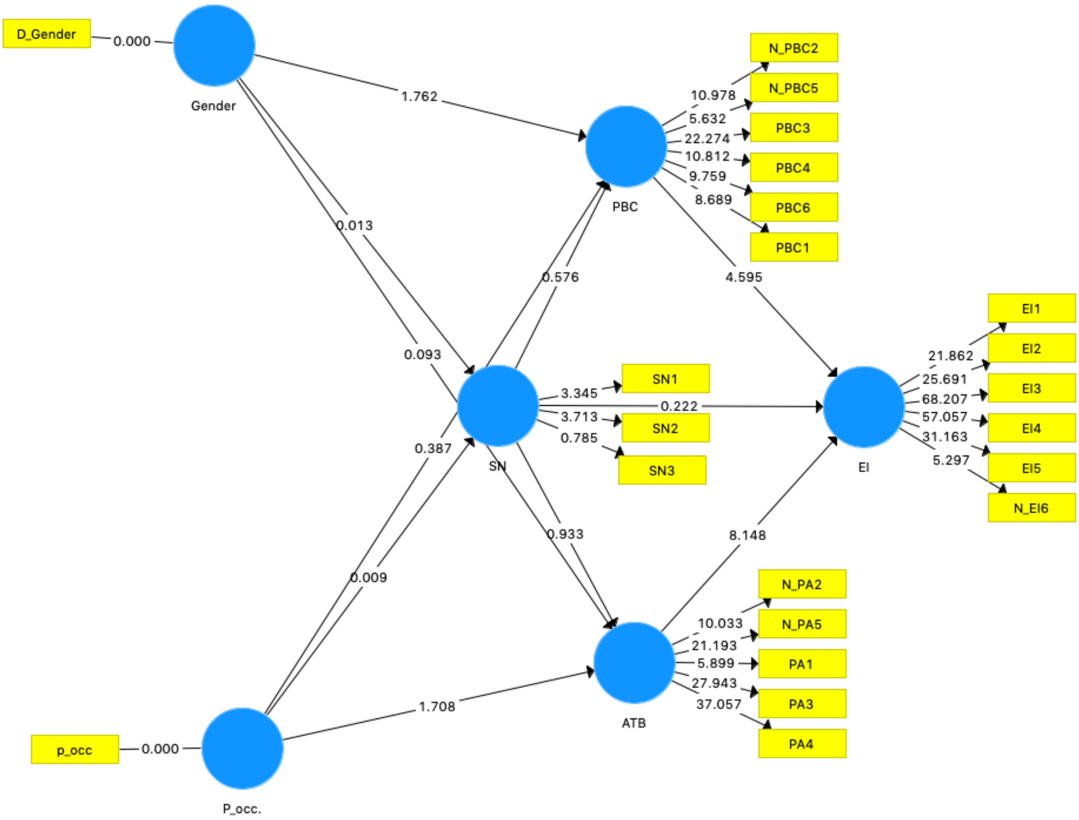

Figure 9: Bootstrapping results in the modeling window of Portuguese sample

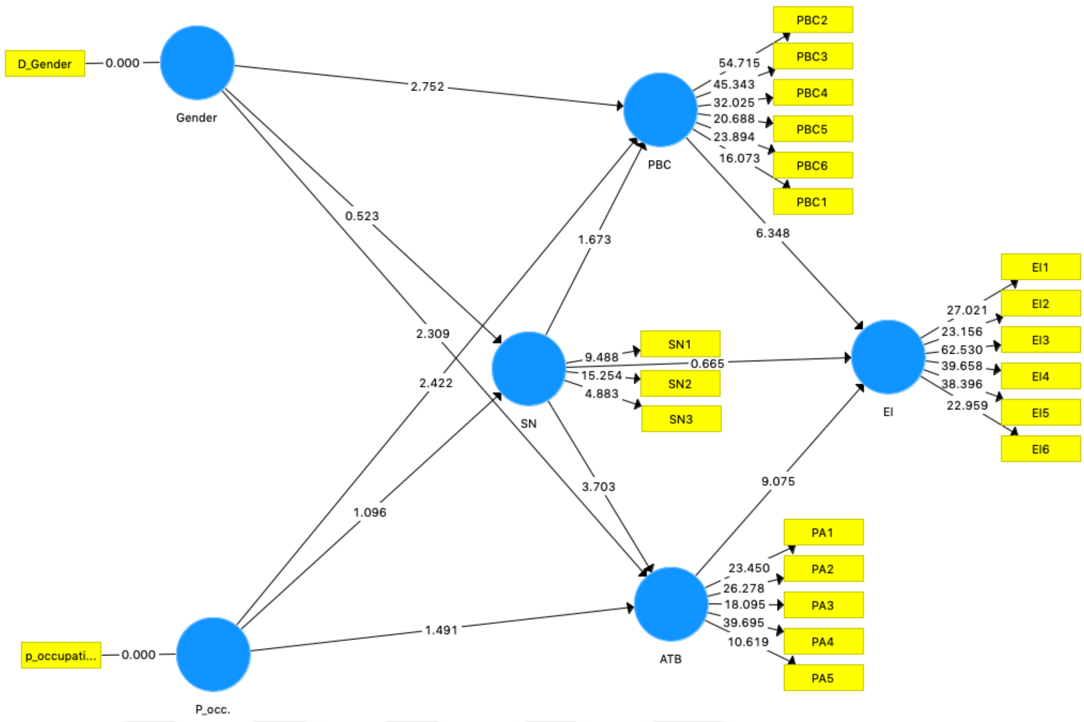

Figure 10: Bootstrapping results in the modeling window of Turkish sample

If the empirical t value is greater than the critical value (corresponding to 1.96 in two-tailed tests), it means that the coefficient is statistically significant at a certain level of confidence (i.e. 95%, significance level = 5%). P values were also calculated by this procedure to evaluate significance level and confidence intervals were used to test whether the model's path coefficient is significantly different from zero. Table 14 shows the path coefficients, the t values and their significance level, p values, and the bias-corrected confidence intervals.

Table 14: Model path coefficients

Countries		Paths	Sample Mean (M)	Standard Deviation (STDEV)	Path Coefficients (β)	t Values	p Values	95% Confidence Intervals	Significance[a] (p < 0.05)?
PT		ATB → EI	0.561	0.069	0.564**	8.148	0.000	[0.407, 0.682]	Yes
		PBC → EI	0.328	0.070	0.322**	4.595	0.000	[0.183, 0.459]	Yes
		SN → EI	-0.007	0.065	0.014	0.222	0.824	[-0.087, 0.165]	**No**
		SN → ATB	0.074	0.137	0.128	0.933	0.351	[-0.152, 0.337]	**No**
		SN → PBC	0.049	0.137	0.079	0.576	0.565	[-0.212, 0.283]	**No**
	Control Variables	Gender → ATB	0.007	0.086	0.008	0.093	0.926	[-0.163, 0.177]	**No**
		Gender → PBC	0.148	0.084	0.148	1.762	0.078	[-0.017, 0.310]	**No**
		Gender → SN	-0.016	0.098	0.001	0.013	0.990	[-0.175, 0.198]	**No**
		P_occ. → ATB	0.132	0.079	0.135	1.708	0.088	[-0.021, 0.285]	**No**
		P_occ. → PBC	-0.036	0.086	-0.033	0.387	0.699	[-0.201, 0.133]	**No**
		P_occ. → SN	-0.046	0.104	-0.001	0.009	0.993	[-0.171, 0.223]	**No**

TR		ATB → EI	0.529	0.058	0.529**	9.075	0.000	[0.400, 0.632]	**Yes**
		PBC → EI	0.358	0.056	0.354**	6.348	0.000	[0.239, 0.458]	**Yes**
		SN → EI	-0.035	0.054	-0.036	0.665	0.506	[-0.147, 0.065]	**No**
		SN → ATB	0.317	0.084	0.310**	3.703	0.000	[0.113, 0.454]	**Yes**
		SN→ PBC	0.148	0.085	0.142	1.673	0.094	[-0.051, 0.284]	**No**
	Control Variables	Gender → ATB	0.162	0.071	0.163	2.309	0.021	[0.025, 0.298]	**Yes**
		Gender → PBC	0.210	0.077	0.212	2.752	0.006	[0.058, 0.359]	**Yes**
		Gender → SN	-0.036	0.081	-0.042	0.523	0.601	[-0.214, 0.108]	**No**
		P_occ. → ATB	0.113	0.073	0.109	1.491	0.136	[-0.037, 0.247]	**No**
		P_occ. → PBC	0.180	0.073	0.176	2.422	0.015	[0.029, 0.314]	**Yes**
		P_occ. → SN	-0.101	0.092	-0.101	1.096	0.273	[-0.274, 0.088]	**No**

Notes: * p<0.05, **p<0.01, PT = Portugal, TR = Turkey

In the Portuguese context, Table 14 shows that the relative importance of the exogenous constructs predicting the dependent construct EI showed that ATB had the strongest effect (relationship) on EI (0.564), followed by PBC (0.322). SN (0.014) had no effect on EI. Assuming a 1% significance level, the results show that ATB → EI *(β = 0.564, p = 0.000)*, PBC → EI *(β = 0.322, p = 0.000)* relationships in the structural model are *significant* while *SN → EI (β = 0.014, p = 0.824), SN → ATB (β = 0.128, p = 0.351), SN → PBC (β = 0.079, p = 0.565)* relationships are *not significant*. Therefore, H1 and H2 are confimed whereas H3, $H3_A$, $H3_B$ are not confirmed for the Portuguese context. Table 14 also reveals that gender or parents' occupations has no significant impact on the findings in the Portuguese context.

In the Turkish context, Table 14 shows that the relative importance of the exogenous constructs predicting the dependent construct EI showed that ATB had the strongest effect (relationship) on EI (0.529), followed by PBC (0.354). SN (-0.036) had no effect on EI. Assuming a 1% significance level, the results show that ATB → EI *(β = 0.529, p = 0.000)*, PBC → EI *(β = 0.354, p = 0.000)*, and SN → ATB *(β = 0.310, p = 0.000)* relationships in the structural model are significant except *SN →EI (β=-0.036, p = 0.506) and SN → PBC* (*β = 0.142, p = 0.094*) relationships. Therefore H1, H2 and $H3_A$ are confimed whereas H3, $H3_B$ are not confirmed for the Turkish context. It has also been found that *gender (being male)* has relatively few significant effects on ATB (β = 0.163, p = 0.021) and PBC (β = 0.212, p = 0.006). Having a father/mother who is an entrepreneur also has a significant effect on PBC (β = 0.176, p = 0.015). Although these effects are small, their signs of coefficients are as expected.

These results suggest that the practitioners should concentrate on ATB- and PBC-driven activities for both countries to maximize entrepreneurial intention among university students who are the best candidates as actual entrepreneurs.

Table 15 (i.e. significance testing results of the total effects) shows the corresponding results for the effects of exogenous constructs (i.e. ATB, SN and PBC) on the target construct (EI). The results show that, in parallel with the effects shown in the above table, the overall effects are the same, with a confidence interval of at least 95%.

Table 15: Significance testing results of the total effects

Countries	Paths		Sample Mean (M)	Standard Deviation (STDEV)	Path Coefficients	*t* Values	*p* Values	5% Confidence Intervals	Significance[a] ($p < 0.05$)?
PT	ATB → EI		0.561	0.069	**0.564****	8.148	0.000	[0.407, 0.682]	**Yes**
	PBC → EI		0.328	0.070	**0.322****	4.595	0.000	[0.183, 0.459]	**Yes**
	SN → EI		0.051	0.150	0.112	0.749	0.454	[-0.178, 0.352]	No
	SN → ATB		0.074	0.137	0.128	0.933	0.351	[-0.152, 0.337]	No
	SN → PBC		0.049	0.137	0.079	0.576	0.565	[-0.212, 0.283]	No
	Control Variables	Gender → ATB	0.008	0.086	0.008	0.094	0.925	[-0.163, 0.177]	No
		Gender → EI	0.055	0.068	0.052	0.765	0.444	[-0.082, 0.183]	No
		Gender → PBC	0.149	0.084	0.148	1.762	0.078	[-0.019, 0.307]	No
		Gender → SN	-0.016	0.098	0.001	0.013	0.990	[-0.175, 0.198]	No
		P_occ. → ATB	0.135	0.079	0.135	1.702	0.089	[-0.022, 0.287]	No
		P_occ. → EI	0.067	0.067	0.065	0.977	0.329	[-0.073, 0.188]	No
		P_occ. → PBC	-0.033	0.087	-0.034	0.384	0.701	[-0.206, 0.135]	No

		P_occ. → SN	-0.046	0.104	-0.001	0.009	0.993	[-0.171**,** 0.223]	No
TR	ATB → EI		0.529	0.058	**0.529****	9.075	0.000	[0.400, 0.632]	**Yes**
	PBC → EI		0.358	0.056	**0.354****	6.348	0.000	[0.239, 0.458]	**Yes**
	SN→ EI		0.185	0.087	0.178	2.042	0.041	[-0.046, 0.322]	No
	SN → ATB		0.317	0.084	**0.310****	3.703	0.000	[0.113, 0.454]	**Yes**
	SN → PBC		0.148	0.085	0.142	1.673	0.094	[-0.051, 0.284]	No
	Control Variables	Gender → ATB	0.151	0.073	**0.150***	2.041	0.041	[0.001, 0.288]	**Yes**
		Gender → EI	0.154	0.057	**0.154****	2.678	0.007	[0.039, 0.263]	**Yes**
		Gender → PBC	0.205	0.076	**0.206****	2.692	0.007	[0.055, 0.351]	**Yes**
		Gender → SN	-0.036	0.081	-0.042	0.523	0.601	[-0.214, 0.108]	No
		P_occ. → ATB	0.079	0.082	0.078	0.949	0.343	[-0.085, 0.234]	No
		P_occ. → EI	0.105	0.063	0.102	1.611	0.107	[-0.027, 0.222]	No
		P_occ. → PBC	0.163	0.076	**0.162***	2.140	0.032	[0.010, 0.305]	**Yes**
		P_occ. → SN	-0.101	0.092	-0.101	1.096	0.273	[-0.274, 0.088]	No

Notes: *$p<0.05$, **$p<0.01$, PT = Portugal, TR = Turkey

3.3.3. Step 3: Assessing the level of R^2 (Coefficient of Determination)

In this step, R^2 values are evaluated as an essential criterion for a PLS model. R^2, which indicates the predictive power of the structural model, is the amount of variance of the endogenous structures, which is disclosed by exogenous constructs (depending on itself). In other words, R^2 evaluates the relationship of a latent variable's explained variance to its total variance (Urbach & Ahlemann, 2010, p. 21).

R^2 takes values in the range of 0−1 and higher values (close to 1) represent higher predictive power. For R^2, it is difficult to determine a threshold value, as this threshold may vary depending on the discipline of the study and the complexity of the established structural model. According to Hair et al. (2017, p. 199), if the endogenous constructs' R^2 have values of 0.25, 0.50, and 0.75, they are classified as *weak*, *moderate*, and *substantial*, respectively.

Table 16: The level of R^2

	PT	**TR**
	R^2	R^2
ATB	*0.035*	0.124
EI	*0.602*	0.589
PBC	*0.027*	0.091

Notes: PT = Portugal, TR = Turkey

According to the Table 16, values can be considered moderate which is enough for EI because of the main aim of this study to predict EI in these two countries.

3.3.4. Step 4: Assess the level of f^2

F square (f^2) represents a change in R^2 and it is used to assess whether there is a significant impact on endogenous structures (dependent variable) by removing an (independent variable) exogenous construct from the model. According to Cohen (1988), if the exogenous latent variables' f^2 have values of 0.02, 0.15 and 0.35 they represent *small*, *medium*, and *large* effects, respectively (as cited in Urbach & Ahlemann, 2010, p. 21).

Table 17: f square (**f** ^{2}) results

	PT				**TR**			
	ATB	**EI**	**PBC**	**SN**	**ATB**	**EI**	**PBC**	**SN**
ATB		0.604				0.459		
PBC		0.199				0.222		
SN	0.017	0.001	0.006		0.108	0.003	0.022	

Notes: PT = Portugal, TR = Turkey

Table 17 presents a summary of the f square effects sizes for both samples. In the Portuguese sample, f^{2} findings showed that ATB has a large effect size of 0.604 on EI, and PBC has a medium effect size of 0.199. In contrast, SN has almost no effect on EI (0.001). Similarly, SN has only a small effect on ATB (0.017) and almost no effect on PBC (0.006). Similarly, in the Turkish sample f^{2} findings showed that ATB has a large effect size of 0.459 on EI and PBC has a medium effect size of 0.222. On the contrary, SN has no effect on EI (0.003). SN has a medium effect size of 0.108 on ATB, however it has almost no effect on PBC (0.022).

To prove $\boldsymbol{f^{2}}$effects, we can also look again here at the path coefficients to explain the relative importance of the exogenous driver constructs for the EI.

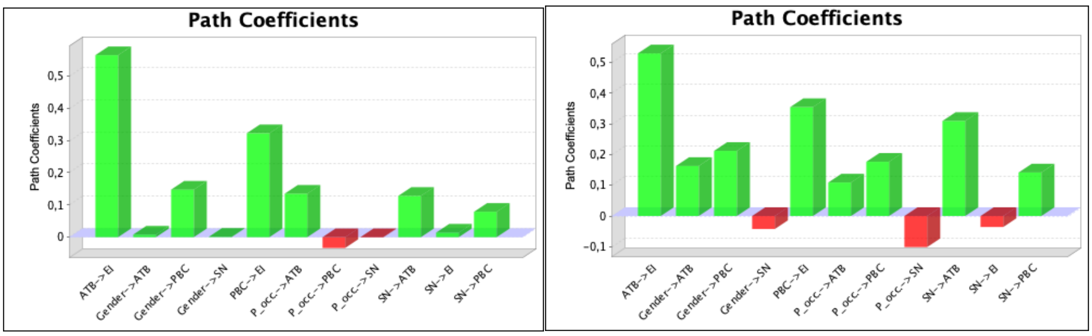

Figure 11: Visualization of path coefficients (PT *vs.* TR)

According to the visualization of path coefficients above (Figure 11), in the PT sample, looking at the relative importance of the exogenous driver constructs for the EI, one finds that the ATB is the most important motivational factor, followed by PBC. In contrast, SN has very little bearing on the EI. On the other hand, in Turkey, looking at the relative importance of the exogenous driver constructs for the EI, one finds that the ATB is most important, followed by PBC. In contrast, SN has very little bearing on the EI.

Similarly, when the total effects in both samples are checked again to evaluate how strongly each of the constructs (ATB, SN and PBC) ultimately influenced the key target variable (EI), Table 18 once again shows the results of the total effects to show the possible effect size. In the Portuguese sample, we can see that among the three exogenous driver constructs, ATB has the strongest total effect on EI (0.564), followed by PBC (0.322). In the Turkish sample, with regard to EI, we can see that among the three exogenous driver constructs, PA has the strongest total effect on EI (0.529), followed by PBC (0.354).

Table 18: Total effects

	PT				**TR**			
	ATB	**EI**	**PBC**	**SN**	**ATB**	**EI**	**PBC**	**SN**
ATB		0.564				0.529		
PBC		0.322				0.354		
SN	0.128	0.112	0.079		0.310	0.178	0.142	

Notes: PT = Portugal, TR = Turkey

All in all, Table 17, Figure 11 and Table 18 show the effects of the relative importance of the exogenous driver constructs in this study's model for the EI. Therefore, it is advisable for both countries' practitioners to focus on ATB and PBC that positively influence the EI.

3.3.5. Step 5: Assessing the predictive relevance Q^2 and the q^2 effect sizes (blindfolding procedure)

While R^2 values show the predictive power of the model, Q^2 is an indication of the model's out-of-sample predictive power (Hair et al., 2017, p.202). A non-parametric

Stone−Geisser test should be performed to assess the predictive significance of the structural model in this step (Urbach & Ahlemann, 2010, p. 21). For this, a blindfolding procedure should be followed using Smart PLS 3.0 (Ringle et al., 2015), just like bootstrapping. Therefore, the Q^2 value is calculated by following the blindfolding procedure in the Smart PLS program. The fact that Q^2 value of an endogenous construct in reflective form is greater than zero ($Q^2 > 0$) indicates the path model's out-of-sample predictive power for a particular dependent construct in the model. Table 19 shows the Q^2 values of the endogenous constructs of the model.

Table 19: Blindfolding outputs-construct crossvalidated redundancy

	PT			**TR**		
	SSO	*SSE*	*Q^2 (=1-SSE/SSO)*	*SSO*	*SSE*	*Q^2 (=1-SSE/SSO)*
ATB	740.000	731.025	0.012	865.0000	806.6438	0.0675
EI	888.000	564.000	0.365	1,038.0000	640.9684	0.3825
PBC	888.000	882.824	0.006	1,038.0000	978.5733	0.0573
SN	444.000	450.544	-0.015	519.0000	519.6313	-0.0012

Notes: PT = Portugal, TR = Turkey

In the table, SSO shows the *sum of the squared observations*, SSE the *sum of the squared prediction errors*, and the last column (i.e., 1 – SSE/SSO) the final value Q^2, which we interpret to judge the model's predictive relevance regarding each endogenous construct. Q^2 values larger than 0 suggest that the model has predictive relevance for a certain endogenous construct. In contrast, values of 0 and below indicate a lack of predictive relevance (Hair et al., 2017, p. 207). In addition, changes in a structural model can be evaluated by comparing Q^2 values. As can be seen, the Q^2 value of the endogenous constructs (especially EI) is considerably above zero. These results provide clear support for the model's predictive relevance regarding the endogenous latent variable (EI). Thus, it is obvious that by looking at the results mentioned in the table above, this model has a predictive relevance only for EI.

3.3.6. Step 6: Effect size q^2

The final assessment addresses the q^2 effect sizes. The predictive relevance's (Q^2) relative impact can be assessed and compared by the means of q^2 (Hair et al., 2017, p. 207; Urbach & Ahlemann, 2010, p. 21). These must be computed manually because the SmartPLS software does not provide them. To compute the q^2 value of a selected endogenous latent variable, we need the Q^2 (*included*) and Q^2 *(excluded)* values for the formula of $\boldsymbol{q^2 = [Q^2_{(included)} - Q^2_{(excluded)}] / [1 - Q^2_{(included)}]}$.

The Q^2 included results from the previous blindfolding estimation and these are available in Table 19. The Q^2 excluded value is obtained from a model re-estimation after deleting a specific predecessor of that endogenous latent variable. Separately computed q^2 values for each sample are shown in Table 20 with respect to all the relationships in the model.

Table 20: q^2 effect sizes

	PT		**TR**	
	EI	**q2 Effect size**	**EI**	**q2 Effect size**
ATB	0.403	**large predictive relevance**	0.316	**medium predictive relevance**
PBC	0.132	**small predictive relevance**	0.154	**medium predictive relevance**
SN				

Notes: The endogenous constructs appear in the first row, whereas the predictor constructs are in the first column, PT = Portugal, TR = Turkey.

According to the rule of thumb, if the exogenous latent variables' q^2 have values of 0.02, 0.15, and 0.35, they respectively represent *small*, *medium*, *and large* predictive relevance for a certain endogous construct (Hair et al., 2017, p. 208). Therefore, in thePortuguese sample, we see that ATB has large predictive relevance (q^2 = 0.403) for EI, and PBC has small predictive relevance (q^2 = 0.132) for EI. On the other hand, in the Turkish sample, ATB has medium (almost large) predictive relevance (q^2 = 0.316) for EI, and PBC has medium predictive relevance (q^2 = 0.154) for EI. These calculations were done using these steps:

For the Portuguese sample, the endogenous latent variable of EI has an original Q^2 value of 0.365 (Q^2_{included}). When ATB is deleted from the path model and the model is re-estimated, the Q^2 of EI drops to 0.218 (Q^2_{excluded}). Thus,

- $q^2_{ATB \to EI}$ = 0.365 - 0.218 / 0.365 = 0.403

When PBC is deleted from the path model and the model is re-estimated, the Q^2 of EI drops to 0.317 (Q^2_{excluded}).

- $q^2_{PBC \to EI}$ = 0.365 - 0.317 / 0.365 = 0.132

When SN is deleted from the path model and the model is re-estimated, the Q^2 of EI was equal to 0.365 (Q^2_{excluded}).

- $q^2_{SN \to EI}$ =…= 0 (not mentioned in the table above)

When PBC is deleted from the path model and the model is re-estimated, the Q^2 of ATB was equal to 0.012 (Q^2_{excluded}). When ATB is deleted from the path model and the model is re-estimated, the Q^2 of PBC was equal to 0.006 (Q^2_{excluded}).

For the Turkish sample, the endogenous latent variable EI has an original Q^2 value of 0.383 (Q^2_{included}). When PBC is deleted from the path model and the model is re-estimated, the Q^2 of EI drops to 0.328 (Q^2_{excluded}).

- $q^2_{PBC \to EI}$ = 0.383 - 0.324 / 0.383 = 0.154

When ATB is deleted from the path model and the model is re-estimated, the Q^2 of EI drops to 0.263 (Q^2_{excluded}).

- $q^2_{ATB \to EI}$ = 0.383 - 0.262 / 0.383 = 0.316

When SN is deleted from the path model and the model is re-estimated, the Q^2 of EI was equal to 0.383 (Q^2_{excluded}).

- $q^2_{SN \to EI}$ =…= 0 (not mentioned in the table above)

When PBC is deleted from the path model and the model is re-estimated, the Q^2 of ATB was equal to 0.0675 (Q^2_{excluded}). When ATB is deleted from the path model and the model is re-estimated, the Q^2 of PBC was equal to 0.0573 (Q^2_{excluded}).

CHAPTER 4

DISCUSSION

In this chapter, the hypotheses developed within the scope of the study will be evaluated.

4.1. Evaluations of Proposed Hypotheses

The results of the hypotheses tested are summarized in Table 21. As may be seen, ATB and PBC, the two antecedents of TPB, had a positive effect on EI in both samples. However, there was no significant finding that SN, another antecedent of the TPB, had a significant effect on EI.

Table 21: Evaluations of proposed hypotheses

Hypotheses	Descriptions	PT	TR
H_1	Attitude toward entrepreneurial behavior positively influences entrepreneurial intention ($ATB \rightarrow EI^+$)	Supported	Supported
H_2	Perceived behavioral control positively influences entrepreneurial intention ($PBC \rightarrow EI^+$)	Supported	Supported
H_3	Subjective norm positively influences entrepreneurial intention ($SN \rightarrow EI^+$)	Rejected	Rejected
H_{3A}	Subjective norm positively influences attitude toward entrepreneurial behavior ($SN \rightarrow ATB^+$)	Rejected	Supported
H_{3B}	Subjective norm positively influences perceived behavioral control ($SN \rightarrow PBC^+$)	Rejected	Rejected
H_4	The explained variance (R^2) of EI differs according to different countries	Supported	

Notes: PT = Portugal, TR = Turkey

Hypothesis 1: According to the research findings, it was determined that the relationship between ATB and EI was meaningful (ATB → EI, β = 0.564 for PT sample and β = 0.529 for TR sample, $p < .01$). Therefore, H_1 is supported in both samples. ATB refers '*to the degree in which a person has a positive or negative evaluation of that behavior*' (Ajzen, 1991, p. 188). In this context, the personal attitude towards entrepreneurship can be expressed as indicating the degree to which an individual is evaluating the behavior of starting a new business in a positive or negative way. It was expected that how strong and positive the individuals' attitudes towards entrepreneurship were, the greater the EI. In parallel with other studies in the literature (Nguyen, 2017; Bahadır, 2018; Doğan & Yılmaz, 2017; Do Paço et al., 2011; Johns & Mattsson, 2005; Kalkan, 2011; Lee-Ross, 2017; Liñán & Chen, 2009; Liñán et al., 2011; Schlaegel & Koenig, 2014), it has been revealed in this study that the ATB among university students in both countries has a positive effect on EI.

Policymakers and practitioners should consider their future action regarding how students' attitudes towards entrepreneurship can be positively influenced. One of the most important tools to do this with is education with training. Although the content of courses and training is being discussed, providing entrepreneurial education and training will be very useful in overcoming the obstacles that university students think they may encounter in the process of business creation (Do Paço et al., 2011, p. 33).

Hypothesis 2: Another important result obtained from this study revealed that the relationship between PBC and EI (PBC → EI, $\beta = 0.322$ for PT sample, $\beta = 0.354$ for TR sample, $p < .01$) was significant. Regarding the connection between PBC and EI, the results confirm an influence exists that supports H_2 for both samples. PBC refers to *the perception of ease or difficulty in fulfilling a certain behavior* (Ajzen, 1991, p. 183). In this context, PBC towards entrepreneurship can be expressed as individuals' evaluation process of how entrepreneurial behavior can be implemented. Findings in both samples showed us that the individual's EI was greater if the entrepreneurial behavior in question was an easy and feasible process. In parallel with other studies in the literature (Bahadır, 2018; Doğan & Yılmaz, 2017; Kalkan, 2011; Lee-Ross, 2017; Liñán, 2008; Liñán et al., 2011; Nguyen, 2017; Solesvik, Westhead, Kolvereid, & Matlay, 2012), it was found that the PBC among university students in both countries has a positive effect on EI.

Hypothesis 3: At the end of the study, there was no evidence that SN influenced EI in either sample ($\beta = 0.014$, $p > .05$ for PT sample, $\beta = -0.036$, $p > .05$ for TR sample). The H_3 hypothesis was therefore rejected. SN refers to '*perceived social pressure in order to perform or not the behavior in question*' (Ajzen, 1991, p. 188, Armigate & Conner, 2001, p. 488). It reflects the expectations of the people (family, relatives, close friends, etc.) who are important to an individual. In the light of the cultural dimensions of Hofstede, it was determined that both countries had collectivist characteristics and that the subjective norms in both countries were considered to have a significant impact on entrepreneurial intentions. However, in this study, the importance of SN in predicting EI revealed controversial results, which can be found in studies conducted in countries with collectivist characteristics. In the literature, as an example of collectivist societies, Asian societies (China, Taiwan etc.) are usually shown as strong. For example, Yang (2013), in his study conducted in China, which is seen as a collectivist country in the literature, concludes that the effect of ATB and SN on participants' EI is much more than PBC. On the other hand, similar to the output of this study, Wu and Wu (2008), in their study in Shanghai, also found that ATB and PBC reveal important findings in predicting the EI of the Chinese students, but they did not find any evidence of the predictive power of SN on EI.

In cross-cultural literature, although there are studies showing that SN affects EI (Kolvereid, 1996; Yang; 2013), there are a number of studies based on SEM, which have failed to show that SN has an effect on EI (Autio, Keeley, Klofsten, Parker, & Hay, 2001; Doğan & Yılmaz, 2017; Kalkan, 2011; Krueger et al., 2000; Lee-Ross, 2017; Nguyen, 2017). Liñán and Chen (2009, p. 609) have argued that some studies have been done with linear regression models, so they can detect the relationship between SN and EI (see Ben Ali, 2016). Furthermore, Armigate and Conner (2001, p. 488) considered that SN should empirically attract more attention as SN has been evaluated as a weaker predictor of EI than the other antecedents of TPB.

There are many reasons why the SN and EI relationship does not produce significant results. Armigate and Conner (2001, p. 488) stated that SN was insufficient because of its construct nature in predicting the EI and was directly removed in the analysis stage in many studies. However, as Lee-Ross (2017) argued, cultural differences can be pointed to as the main reason why the SN and EI relationship does not produce significant results. In other words, the characteristics of samples taken from two different countries will affect the power of relations between antecedents of TPB and EI. For example, the proximity to students' workforce and work experience will differ in these sample countries, and these differences can play a role in EI, collectively (p. 1186). As previously discussed (see Chapter 1), while many reports and indexes revealed that Turkey and Portugal are two different countries, Hofstede’s cultural dimensions have not revealed very different results for them. For example, it is assumed that both Portugal and Turkey are collectivist and feminine societies (Hofstede, 1980b; 2010). This can be attributed to the fact that the SN and EI relationship did not reveal significant results in the two countries that have substantial cultural similarities. Here, further studies from culturally different countries can be conducted in order to take into account the different backgrounds of students in EI formations.

Hypothesis 3_A−3_B: In the Portuguese sample, SN and ATB (β = *0.128*, p > .05), SN and PBC (β = 0.079, p >.05) relations were investigated first and it was observed that neither hypothesis was supported. This was a clear indication that the support they expect to see from the immediate surroundings of students in Portugal does not affect their attitude towards entrepreneurship or the perception of entrepreneurial behavior.

In the Turkish sample, the SN and ATB (β = 0.310, p <.05) and SN and PBC (β = 0.142, p >.05) relationships were investigated and it was observed that $H3_A$ is supported while $H3_B$ is not. Suprisingly, the effect of SN on ATB (β = 0.310, p <.05) was significant. Considering the effect of ATB on EI, it can be said that the SN has slightly influenced EI in the Turkish sample (Krueger et al., 2000), but it has not been found that the SN has a direct effect on EI (β = -0.036, p >.05). Therefore, the mediating effect of SN on the Turkish sample could not be reported (Barron & Kenny, 1986).

With this result, we can say that the support that Turkish students hope to get from the close environment can change their perceptions about entrepreneurship. That is, if Turkish students think that a ‘reference person’ would confirm and support their decision regarding entrepreneurship, they will show much more interest in it (Liñán & Chen, 2009, p. 609). As a result, hypothesis $H3_A$ is supported in the Turkish sample while $H3_B$ is not.

Hypothesis 4: Before starting the study, Turkey and Portugal were thought to have different cultural settings. Although the official industrial environment is quite different when the informal industrial environment in these countries (using the cultural dimensions of Hofstede) is compared, it has emerged that both cultures have more common features. Therefore, in these two culturally similar samples, although R^2 values were very close results ($R^2 = 0.589$ for Turkey, $R^2 = 0.602$ for Portugal), the values were statistically different. Thus, H_4 has been supported. Liñán and Chen (2009, p. 610) explained this situation as follows: '*The internal cognitive mechanisms would be the same for all people. That is, the "lenses" through which each of us "see" reality may differ in a cultural or social manner, but our way of "elaborating" on what we have "seen" would be similar*.' As a result, Portuguese and Turkish students are likely to encounter different entrepreneurship activities in their own countries, but the manner in which these entrepreneurial activities are evaluated is similar.

CHAPTER 5

CONSLUSION

The study was designed to predict the EI of university students in different cultures with the EIQ scale developed by Liñán and Chen (2009). In general, the study addressed the TPB in order to explain the EI among the samples of Portuguese and Turkish business students. This study has provided empirical evidence to support the TPB as well as the effects of the motivational antecedents of TPB on EI, and the applicability of the model in cross-cultural sampling was tested once again.

In the first chapter, a literature review was carried out on the concepts subject to investigation. Later, the relationship between these concepts was explained and research hypotheses were formed.

In the second part, information on quantitative research, which was composed of samples from Portugal and Turkey, as provided and the research method presented. The survey was conducted with 321 business students studying in two different universities from two different countries: University of Lisboa (Lisboa, Portugal) and Mugla Sıtkı Kocman University (Mugla, Turkey). It is important that the research sample represents the group in question in a particular region. These two universities were preferred to carry out the study as they are relatively rooted universities in their regions and also recognized for attracting students from all over the country in their respective regions. In addition, it is a sample of business students because they have a high probability of being unemployed immediately after their graduation, although the education they receive can encourage them to become an entrepreneur and the employment rate of students has decreased in recent years (Balkaya, 2017). The study of the data obtained from the survey revealed that the participants were almost equally distributed (in total, 53.6 per cent of the students participating in the research were female and 46.4 per cent were male) in both samples in terms of gender, and the majority of them were between the ages of 18 and 23 (86.5 per cent of total respondents), whereas the mean age of the participants was determined as 21.4858 years. Additionally, in the Portuguese sample, a minority of the parents were entrepreneurs (26.4 per cent of fathers, 14.9 per cent of mothers) and in the Turkish sample, too, a minority of the parents (22.0 per cent of fathers, 6.9 per cent of mothers) were entrepreneurs.

The third chapter summarizes the results obtained from statistical analyses on the measurement and structural model. During the evaluation phase of the measurement model, all factor loads were loaded cleanly into the constructs. In parallel to other studies in the literature (e.g. Do Paço et al., 2011; Lee-Ross, 2017; Yeşilay & Yavaş, 2017), the scale applied in the study (EIQ) has proven once again that its psychometric properties are strong enough and reliable and it is a valid scale for cross-cultural studies by providing the discriminant validity. During the examination phase of the structural model, it was observed that R^2, one of the most important evaluation criteria, had satisfactory results. In the Portuguese sample, EI was 60 per cent (R^2=0.602) and in the Turkish sample, EI was almost 59 per cent (R^2=0.589). Moreover, the output of the study can be considered as a better result than many studies in the literature (see Liñán & Chen, 2009; Nguyen, 2017; Yeşilay & Yavaş, 2017).

The fourth chapter summarized the study's overall results as well as evaluating the hypothesis of the study in terms of EI in the light of the analysis results.

In this last chapter, the evaluation of the limitations of the research and then, implications and recommendations are made for researchers and policymakers.

5.1. Limitations of the Study

This study has certain limitations in data preparation, collection and realization stages.

First of all, this study's sample is entirely composed of university students. In current literature, selecting university students as sample units in a study mostly involves similar limitations. The implementation of the survey in Portugal and Turkey to small samples leaves the work open to discussion on the principle of 'generalizability' as it may not be generalized for non-student populations. However, this study's primary goal was to better understand the entrepreneurial intentions of university students and the motivational factors that affect their EIs. This study was not a simulation using students to predict the behavior of other non-student communities because, in this study, university students are seen as people who will shape their career plans in the near future.

As another constraint, time and the corresponding small sample size can be demonstrated. Especially in Portugal, surveys were conducted over three months covering the summer term (June–September, 2018). Thus, most universities had a break for education at that time and most of the students were on summer holidays during the data collection process. That is why it was not easy to reach Portuguese students. Therefore, at the end of three months, only 143 surveys were conducted in Portugal. In parallel with the Portuguese data set, 178 surveys were conducted in Turkey. As a result, the small sample due to time constraint may be considered one of the limitations of the study. Moreover, this intercultural study could only be applied in two countries due to time constraints. It was not possible to involve other countries in the study.

Moreover, adopting a one-time research design is the second constraint of the study. We cannot be sure that the intentions of the students are durable and clear (Segal et al., 2005, p. 53) because university students can change their intentions during their education or after graduation (Lee-Ross, 2017).

Additionally, this study only evaluated TPB antecedents in terms of encouraging entrepreneurial intention among university students. It is known that there are many issues that will lead individuals to entrepreneurship, such as socio-cultural factors and personal characteristics (i.e. the Big Five: neuroticism; extraversion–introversion: openness to experience; conscientiousness; agreeableness) (Şahin et al., 2019). In addition, in this cross-cultural study, it was known that students had socio-culturally different backgrounds, but these backgrounds' differences have not been fully explored as they exceeded the scope of the research. In the literature, it is the effects of these factors on EI that are mostly discussed (Ozaralli & Rivenburgh, 2016; Türker & Selçuk, 2009), therefore, the literature base to be utilized in this field is large. However, as in our study, the relatively limited number of studies dealing with the motivational factors affecting EI in cross-cultural contexts can be shown as another limitation of the study.

Another limitation of the study is that the international indexes included to compare countries are limited. The fact that all international indexes are not aggregated in a single pot is why accessing internationally accepted indexes was not so easy.

Finally, in this study, the questionnaire was used as a data collection tool. Commonly the questions and the desired rating expressions from them are included in the questionnaires. This was the case in this study. As a result, the reasons underlying the answers or expressions given in return are not investigated in detail. This is a general limitation of studies conducted using a survey.

Although this analysis suffers from a number of limitations, it can be said that despite these limitations mentioned here, the research has made significant contributions to the relevant literature. This study suggests a series of future implications and recommendations for academics and policymakers to help reinforce the results mentioned above.

5.2. Implications and Recommendations

5.2.1. Theoretical implications and recommendations for future research

Since EI is a relatively new concept in the related literature, new researches are needed in this field. Particularly in the new global world, where commercial boundaries have almost disappeared between countries, it is of great importance to demonstrate EI through cross-cultural studies. Thus, this study aimed to respond to the call in the works of Liñán and Chen (2009) in order to contribute to cross-cultural studies of EI by testing the EIQ in an international context. In this sense, it can be said that this study contributed to the cross-cultural EI literature in the scope of TPB by comparing two countries that have not been compared before. Future research should also contribute to cross-cultural EI studies with more countries. In particular, cross-cultural studies require a better understanding of the implications of TPB antecedents on students' intentions. In this study, only EI as output was discussedFuture studies, should investigate in more depth what kind of changes in the students' motivational factors (ATB, PBC and SN) will lead to EI and will contribute to the development of students' behaviors.

The effects of social structure and culture on individual EI are among the topics that can be addressed in future research. It is known that there are many other issues that lead individuals to entrepreneurship: socio-cultural factors, personal characteristics (Kor, Mahoney, & Michael, 2007; Şahin et al., 2019). In this cross-cultural study, it is known that students come from socio-culturally different environments, but these factors could not be investigated because they exceed the scope of the research. Students' demographic variables can be included in research models as moderator variables, such as the income level of the individuals, the level of economic development of the countries. Future studies may explore these differences and incorporate them into the study model.

Additionally, the survey as a data collection tool was preferred in this study (mentioned above). This was one of the constraints of this study when we assume that EI is the best predictor of entrepreneurial behavior. Understanding behavior requires deeper research. Therefore, future EI studies could include qualitative interviews and/or focus group sessions so that they can provide rich explanatory information in the field of EI (Segal et al., 2005, p. 53). Also, EI-related longitudinal and semi-experimental researches are recommended (Lee-Ross, 2017; Şahin et al., 2019). Future studies can observe individuals' intentions and the behaviors expected at the end of these intentions through longitudinal and semi-experimental studies in order to identify changes in the process.

Since the focus of the present thesis is to predict the EI of the students in the context of the TBP, the other potential predictors were not examined. For example, researchers may explore the effect of public policies and the incentives of entrepreneurship on EI, in addition to socio-cultural and personal factors. New research in this direction is important to strengthen public policies on entrepreneurship (Lee-Ross, 2017).

Moreover, in parallel with the literature (Lee-Ross, 2017; Liñán & Chen, 2009), this study revealed that the predictive power of SN requires more research in cross-cultural studies due to its weak correlation with EI. The findings of the present research indicated that SN does not have a significant effect on EI in either of the samples. This is in line with several studies (Autio et al., 2001; Conner & Armitage, 1998; Doğan & Yılmaz, 2017; Kalkan, 2011; Krueger et al., 2000; Lee-Ross, 2017; Nguyen, 2017), which show that SN has the weakest relationship with intention/actual behavior. Future studies may focus on the structure of the SN, or focus more on research in the different samples.

Furthermore, the selection of the two countries as a sample in this study required an understanding of the backgrounds of these two countries. However, these backgrounds, including institutional (formal/informal) environments, were intended only to provide the reader with some idea about the target countries where the samples were selected. These institutional environments were not assigned as variables to the study model. At this point, it is recommended for future cross-culturally investigated studies to consider the role of the context as the moderator of the relationship between the variables identified by the model (Lee-Ross, 2017).

It can also be suggested that researchers who want to work in the field of entrepreneurship in their studies should include the concept of ‘knowledge of the entrepreneurial institutional framework (entrepreneurial knowledge)’ (Liñán et al., 2011, p. 209) as well as the role of entrepreneurial education (Küttim et al., 2014; Liñán et al., 2011).

5.2.2. Practical implications and recommendations for policy makers

As Ali Sabanci who is one of the Turkey's leading businessmen pointed out, the future of a country depends on the success of young entrepreneurs. Therefore, it is necessary to encourage young people to choose entrepreneurship as a career path, to raise their awareness and to increase the number of entrepreneurial role models (GEM, Global Report 2010, p. 32).

In this study, the effect of two TPB antecedents − ATB and PBC − on motivating EI among young people (i.e., university students), was once again demonstrated. According to Liñán et al. (2011), the number of entrepreneurship courses to increase ATB and PBC for university students should be increased, but the content should be reviewed. Only lessons equipped with theoretical knowledge can affect the EI of the students but only to a certain extent. In fact, Carrier (2005) argued that only a training consisting of the production of a work plan could have a negative impact on desirability. A broader entrepreneurship course will strengthen the situation (Liñán et al., 2011, p. 208). To make this possible, a bridge should be built between universities and companies (preferably entrepreneurial, new and innovative international companies). Thus, perceptions of entrepreneurship (ATB) and the decisions to establish an entrepreneurial company within the possibilities (PBC) and as a result, the EI of university students, will be realized in a more realistic framework. Küttim et al. (2014) argued that courses and seminars are not necessarily demanded any more as these courses are already overprovided at universites. Students today expect more networking and coaching. Although entrepreneurship education has a positive effect on EI, the adoption of entrepreneurship action as a slightly more predictable activity among students will increase the motivational factors (ATB and PBC) and will lead them to have more EI.

Also, when we discuss that the entrepreneurship courses are consistent with the national context in which they are offered (Lee et al., 2011), it is important to investigate the cultural differences that exist among students of different nationalities (Giacomin, Janssen, & Pruett, 2010, p. 220).

5.3. Summary

The results of the present study suggest that personal attitudes towards entrepreneurship (ATB) followed by perceived behavior control (PBC) are the most important determinants of individuals' EI. For this reason, it is important to develop and implement social and economic strategies that will serve the positive attitudes of individuals toward entrepreneurship (ATB) and make the entrepreneurial behavior perceived easier (PBC). Conversely, social norms (SNs) is not an important determinant of individuals' EI.

The main contribution of this research is that it presents empirical evidence on the factors affecting entrepreneurial intentions within the framework of the theory of planned behavior (TPB). Another contribution of this study to current policymakers, academics, related institutions and organizations is that it emphasizes the factors that must be considered in order to motivate individuals to become entrepreneurs.

REFERENCES

Ajzen, I. (1985). From intentions to action: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.). *Action Control: From Cognitions to Behaviors* (pp. 11-39). New York: Springer.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.

Ajzen, I. (2005). *Attitudes, personality and behavior* (2nd ed.). Poland: Open University Press.

Alferaih, A. (2017). Developing a conceptual model to measure talent's turnover intention in tourism organisations of Saudi Arabia. *International Journal of Organizational Analysis*, *25*(1), 2-23.

Andrijauskienė, M., & Dumčiuvienė, D. (2017, October). *Hofstede's Cultural Dimensions and National Innovation Level.* In DIEM: Dubrovnik International Economic Meeting (Vol. 3, No. 1, pp. 189- 205). Sveučilište u Dubrovniku.

Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. *British Journal of Social Psychology, 40*, 471-499.

Audretsch, D. B., Carree, M. A., & Thurik, A. R. (2001). "Does entrepreneurship reduce unemployment?" Discussion Paper, Tinbergen Institute, Erasmus University, Rotterdam.

Autio, E., Keeley, R. H., Klofsten, M., Parker, G. G. C., & Hay, M. (2001). Entrepreneurial intent among students in Scandinavia and in the USA. *Enterprise and Innovation Management Studies*, *2*(2), 145-160.

Bagozzi, R. P., & Yi, Y. 1988. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16,* 74.

Bahadır, Ö. (2018). *Planlı davranış teorisi çerçevesinde girişimcilik niyetini etkileyen faktörlerin belirlenmesi*. (Published master's thesis). Bülent Ecevit Üniversitesi, Zonguldak, Türkiye.

Balkaya, E. (2017). *Üniversite son sınıf öğrencilerinde işsizlik kaygısı ve girişimcilik niyeti ilişkisi: TRA1 bölgesi örneği*. (Published master's thesis). Atatürk Üniversitesi, Erzurum, Türkiye.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Baptista, R. & Thurik, A. R. (2007). The relationship between entrepreneurship and unemployment; Is Portugal an outlier? *Technological Forecasting and Social Change, 74*(1), 75-89.

Barron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51*: 1173–1182.

Baruch, Y. (1999). Response rates in academic studies: A comparative analysis. *Human Relations, 52*, 421-434.

Baruch, Y. & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations, 61*(8), 1139–1160.

Begley, T. M. & Tan, W. L. (2001). The socio-cultural environment for entrepreneurship: A comparison between East-Asia and Anglo-Saxon countries. *Journal of International Business Studies, 32*(3), 537– 553.

Ben Ali, T. (2016). Explaining the ıntent to start a business among Saudi Arabian university students. *International Review of Management and Marketing, 6*(2), 345-353.

Berry, H., Guillien, M. F., & Zhou, N. (2010). An institutional approach to crossnational distance. *Journal of International Business Studies, 41*(9), 1460-1480.

Bird, B. (1988). Implementing Entrepreneurial Ideas; The Case for Intention Case Western Reserve University.

Boyd, N. G. & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice, 18*(4), 63-77.

Bruton, G. D., Ahlstrom, D., & Oblój, K. (2008). Entrepreneurship in emerging economies: Where are we today and where should the research go in the future. *Entrepreneurship Theory and Practice, 32*(1), 1–14.

Calvelli, A., Cannavale, C., Parmentola, A., & Tutore, I. (2012). ‘As is’ and ‘should be’. Does the difference between practices and values affect early-stage entrepreneurial activities? Submission to IACCM 2012, at Naples, Italy, 1-18.

Carree, M. A. & Thurik, R. (2003).‘The ımpact of entrepreneurship on economic growth’. In D. B. Audretsch & Z. J. Acs (Eds.). *Handbook of Entrepreneurship Research*, Boston/Dordrecht: Kluwer Academic Publishers (pp. 437–471).

Carrier, C. (2005). Pedagogical challenges in entrepreneurship education. In P. Kyrö & C. Carrier (Eds.), *The dynamics of learning entrepreneurship in a cross-cultural university context* (pp. 136 158). Hämmeenlinna: University of Tampere.

Carsrud, A., & Brännback, M. 2011. Entrepreneurial motivations: What do we still need to know? *Journal of Small Business Management, 49*: 9-26.

Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In *Modern Methods for Business Research*, George A. Marcoulides (Ed., pp. 295-336), Lawrence Erlbaum Associates, New York.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum.

Conner, M. & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology, 28*, 1429-1464.

Çelik, A., İnce, M., & Bozyiğit, S. (2014). Üniversite öğrencilerinin girişimcilik niyetlerini etkileyen ailesel faktörleri belirlemeye yönelik bir çalışma. *Niğde Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 7*(3): 113-124.

Davidsson, P. (1995). *Determinants of entrepreneurial intentions.* RENT IX Conference. Piacenza Italy, 23-24, 1-31.

Díaz-Casero, J. C., Ferreira, J., Hernández Mogollón, R., & Raposo, M. (2012). Influence of institutional environment on entrepreneurial intention: a comparative study of two countries' university students. *International Entrepreneurship and Management Journal, 8*, 55–74.

Djankov, S., Qian, Y., Roland, G., & Zhuravskaya, E. (2007). What makes a successful entrepreneur? Evidence from Brazil. Working Paper 0104, Center for Economic and Financial Research, 1-20.

Do Paço, A. M. F., Ferreira, J. M., Raposo, M., Rodrigues, R. G., & Dinis, A. (2011). Behaviours and entrepreneurial intention: Empirical findings about secondary students. *Journal of International Entrepreneurship, 9*(1), 20–38.

Doğan R. & Yılmaz V. (2017). Üniversite öğrencilerinin girişimcilik niyetlerinin betimlenmesine yönelik bir yapısal eşitlik modeli önerisi. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 19*(2): 655-675.

Eroğlu, O. & Picak, M. (2011). Entrepreneurship, national culture and Turkey. *International Journal of Business and Social Science, 2*(16): 146-151.

Fayolle, A. & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research, 67*(5), 663–666.

Fayolle, A., Gailly B., & Lassas-Clerc, N. (2006), Assessing the impact of entrepreneurship education programmes: a new methodology. *Journal of European Industrial Training, 30*(9), 701-720.

Ferreira, M., Reis, N., & Pinto, C. (2017). Schumpeter's (1934) ınfluence on entrepreneurship (and management) research. *REGEPE-Revista de Empreendedorismo e Gestão de Pequenas Empresas, 6*(1), 04-39.

Filion, L. J. (2011) Defining the entrepreneur. In: Dana, L.-P. (Ed.) *World Encyclopedia of Entrepreneurship*. Cheltenham, UK and Northampton, MA, USA, Edward Elgar: 41-52.

Fishbein, M. & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

Fitzsimmons, J. R. & Douglas, E. J. (2011). Interaction between feasibility and desirability in the formation of entrepreneurial intentions. *Journal of Business Venturing, 26*(4), 431–440.

Fornell, C. & Cha, J. (1994). Partial least squares. In R. P. Bagozzi (Ed., pp. 52-78) *Advanced Methods of Marketing Research*. Cambridge, MA: Blackwell.

Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18* (February), 39-50.

Fragoso, D., Rocha-Junior W., & Xavier A. (2019). Determinant factors of entrepreneurial intention among university students in Brazil and Portugal. *Journal of Small Business & Entrepreneurship*. DOI: 10.1080/08276331.2018.1551459

Franke, G. R. & Richey, R. G. (2010). Improving generalizations from multi country comparisons in international business research. *Journal of International Business Studies, 41*(8), 1275-1293.

Frazier, B. J. & Niehm, L. S. (2006), "*Predicting the entrepreneurial intentions of non-business majors: a preliminary investigation*", paper presented at the USASBE/SBI Conference, Tucson, AZ, January, pp. 14-17.

Freedom House. (2017). *The freedom of the press*. https://freedomhouse.org/sites/default/files/FOTP_2017_booklet_FINAL_April28.pdf

Freedom House. (2018). *Freedom in the world 2018.* https://freedomhouse.org/sites/default/files/FH_FITW_Report_2018_Final_SinglePage.pdf

Gartner, W. B. (1988). Who is an Entrepreneur is the wrong question. *American Journal of Small Business, 12,* 11-31.

Geletkanycz, M. A. (1997). The salience of 'culture's consequences': The effects of cultural values on top executive commitment to the status quo. *Strategic Management Journal. 18*, 615-634.

GEM, 2010 Global Report, https://www.gemconsortium.org/report/gem-2010-global-report

GEM, 2018-2019 Global Report, https://www.gemconsortium.org/report

Giacomin, O., Janssen, F., & Pruett, M. (2010). Entrepreneurial intentions, motivations and barriers: differences among American, Asian and European students. *International Entrepreneurial Management Journal, 7*, 219–238.

Guo, Q., Liu, Z., Li, X., & Qiao, X. (2018). Indulgence and Long Term Orientation Influence Prosocial Behavior at National Level. *Front. Psychology, 9*, 1-10. doi: 10.3389/fpsyg.2018.01798

Gürel, E., Altinay, L., & Daniele, R. (2010). Tourism students' entrepreneurial intentions. *Annals of Tourism Research, 37*(3), 646–669.

Gürol, Y. & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education Training, 48*(1), 25-38.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014*). A primer on partial least squares structural equation modeling*. Sage, Thousand Oaks, CA.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Tousand Oaks, CA: Sage.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice, 19*(2), 139–151.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: rigorous applications, better results and higher acceptance. *Long Range Planning, 46*(1/2), 1-12.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A., (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science, 40*(3), 414-433.

Harbi, S. & Anderson, A. R. (2010). Institutions and the shaping of different forms of entrepreneurship. *The Journal of Socio-Economics, 10*(3), 436-44.

Hayton, J. C., George, G., & Zahra, S. (2002). National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship Theory and Practice, 26*(4), 33–52.

Henseler, J., Hubona, G. S., & Pauline, A. R. (2016). Using PLS Path Modeling in new technology research: updated guidelines. *Industrial Management and Data Systems, 116*(1), 2-20.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*, 115-135.

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing, 20*, 277–320.

Hofstede, G. (1980a). *Culture's consequences: International differences in work-related values.* Beverly Hills, CA: Sage Publications.

Hofstede, G. (1980b). Motivation leadership and organization: Do American theories apply abroad? *Organizational Dynamics (Summe*r), 42-63.

Hofstede, G. (1991). *Cultures and Organizations: Software of the Mind*. London, UK: McGraw-Hill.

Hofstede, G. (2006). What did GLOBE really measure? Researchers' minds versus respondents' minds. *Journal of International Business Studies, 37,* 882-96.

Hofstede, G. (2010). The GLOBE debate: Back to relevance. *Journal of International Business Studies, 41,* 1339-46.

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, *2*(1), 8.

Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.

Hofstede, G., Noorderhaven, N., Thurik, A. R., Uhlaner, L. M., Wennekers, A. R. M., & Wildeman, R. E. (2004). Culture's role in entrepreneurship: Self-employment out of dissatisfaction. In Brown, T. E. & Ulijn, J. M. (Eds., pp. 162–203). *Innovation, entrepreneurship and culture.* Cheltenham: Edward Elgar.

Carl, D., Gupta, V., & Javidan, M. (2004). Power distance. In R. House, P. Hanges, M. Javidan, P. Dorfman, V. & Gupta, V. (Eds.), *Culture, leadership, and organizations: The Globe study of 62 societies* (pp. 513-563). Thousand Oaks, CA: Sage.

Hoyle, R. & Panter, A. (1995). Writing about structural equation models. In R. Hoyle (Ed., pp. 100-119), *Structural equation modeling: Concepts, issues, and applications*. Thousand Oaks, CA: Sage.

Hoyle, R. (1995). The structural equation modelling approach: Basic concepts and fundamental issues. In R. Hoyle (Ed., pp. 1-13), *Structural equation modeling: Concepts, issues, and applications*. Thousand Oaks, CA: Sage.

Huisman, D. (985). Entrepreneurship: Economic and cultural influences on the entrepreneurial climate. *European Research 13*(4): 10-17.

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies. *Strategic Management Journal, 20*(February), 195–204.

Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education and Training, 53*(5), 353-370.

IBM Corp. Released. (2013). *IBM SPSS Statistics for Windows, Version 22.0*. Armonk, NY: IBM Corp.

Johns, N. & Mattsson, J. (2005). Destination development through entrepreneurship: A comparison of two cases. *Tourism Management, 26*(4), 605–616.

Joreskog, K. G., (1963). *Statistical estimation in factor analysis: A new technique and its foundation*. Stockholm: Almqvist and Wiksell.

Joreskog, K.G., (1973). Analysis of Covariance Structures. In Krishnaiah, P. R. (Ed.) *Multivariate Analysis-III,* New York: Academic Press.

Kalkan, A. (2011). Kişisel tutum, öznel norm ve algılanan davranış kontrolünün girişimcilik niyeti üzerindeki etkisi: Üniversite öğrencileri üzerine bir uygulama. *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 14*, 189-206.

Kautonen, T., Van Gelderen, M., & Fink, M. (2015). Robustness of the theory of planned behaviour in predicting entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, *39*(3), 655-674.

Kautonen, T., Van Gelderen, M., & Tornikoski, E. T. (2013). Predicting entrepreneurial behaviour: a test of the theory of planned behaviour. *Applied Economics*, *45*(6), 697-707.

Keesling, J.W. (1972). *Maximum likelihood approaches to causal analysis*. (Published Ph.D. Dissertation). University of Chicago, Chicago.

Khuong, M. N. & An, N. H. (2016). The factors affecting entrepreneurial ıntention of the students of vietnam national university: A mediation analysis of perception toward entrepreneurship. *Journal of Economics, Business and Management, 4*(2), 104-111.

Klepper, S. (1996). Entry, exit, growth, and innovation over the product life cycle. *American Economic Review, 86*(3), 562 – 583.

Kline, R. B. (2011). Convergence of structural equation modeling and multilevel modeling. In M. Williams (Ed.). *Handbook of methodological innovation*. Thousand Oaks, CA: Sage.

Kolvereid, L. (1996). Prediction of employment status choice intentions. *Entrepreneurship Theory and Practice, 21*, 47–57.

Kor, Y. Y., Mahoney, J. T., & Michael, S. C. (2007). Resources, capabilities, and entrepreneurial perceptions. *Journal of Management Studies, 44*, 1187-1212.

Kreiser, P.M., Marino, D.L., Dickson, P., & Weaver, K.M. (2010). Cultural influences on entrepreneurial orientation: The impact of national culture on risk taking and proactiveness in SMEs. *Entrepreneurship Theory and Practice, 34*(5), 959–983.

Krueger, N. (2000). The cognitive infrastructure of opportunity emergence. *Entrepreneurship Theory and Practice, 24*(3), 5–24.

Krueger, N. J. & Carsrud, A. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship and Regional Development, 5,* 315-330.

Krueger, N. R. (2007). What lies beneath? The experiential essence of entrepreneurial thinking. *Entrepreneurship Theory and Practice 31*(1), 123–138.

Krueger, N., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing 15*(5-6), 411-432.

Küttim, M., Kallaste, M., Venesaar, U., & Kiis, A. (2014) Entrepreneurship education at university level and students' entrepreneurial intentions. *Social and Behavioral Sciences, 110*, 658-668.

Landström, H. (2005), *Pioneers in entrepreneurship and small business research*, New York: Springer.

Lee S. M. & Peterson, S. J. (2000). Culture, entrepreneurial orientation and global competitiveness. *Journal of World Business, 35,* 401-416.

Lee, S. M., Lim, S. B., & Pathak, R. D. (2011). Culture and entrepreneurial orientation: A multi-country study. *International Entrepreneurship and Management Journal.* Doi: :10.1007/s11365-009-0117-4.

Lee-Ross, D. (2017). An examination of the entrepreneurial intent of MBA students in Australia using the entrepreneurial intention questionnaire. *Journal of Management Development, 36*(9), 1180-1190.

Libombo, D. B. (2016). *Entrepreneurship promotion in Mozambique: the role of higher education institutions*. (Published PhD dissertation), Universidade Da

Beira Interior, Covilhã, Portugal. https://ubibliorum.ubi.pt/bitstream/10400.6/4204/1/Dambusse%20Libombo%20_tese_16.3.2016.pdf

Liñán, F. & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice, 33*(3), 593–617.

Liñán, F. & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal, 11*(4), 907–933.

Liñán, F. (2008). Skill and value perceptions: How do they affect entrepreneurial intentions? *International Entrepreneurship and Management Journal, 4*(3), 257–272.

Liñán, F., Rodríguez-Cohard, J., & Rueda-Cantuche, J. (2011). Factors affecting entrepreneurial intention levels: A role for education. *International Entrepreneurship and Management Journal, 7*(2), 195–218.

Littunen, H. (2000). Entrepreneurship and the characteristics of the entrepreneurial personality. *International Journal of Entrepreneurial Behavior and Research, 6*(6), 295-310.

Mcgrath, R. G., MacMillan, I. C., & Scheinberg, S. (1992). Elitists, risk-takers, and rugged individualists: An exploratory analysis of cultural-differences between entrepreneurs and non entrepreneurs. *Journal of Business Venturing, 7*(2), 115–135.

Mitchell, R. K., Smith, B., Seawright, K. W., & Morse, E. A. (2000). Cross-cultural cognitions and the venture creation decision. *Academy of Management Journal, 43*(5), 974–993.

Mueller, S. L. & Thomas, A. S. (2000). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing, 16*, 51-75.

Nabi, G. & Liñan, F. 2011. Graduate entrepreneurship in the developing world: Intentions, education and development. *Education Training, 53*(5): 325–334.

Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning and Education, 16*(2), 277–299.

Naktiyok, A., Karabey, C. N., & Gulluce, A. C. (2010). Entrepreneurial self-efficacy and entrepreneurial intention: the Turkish case. *International Entrepreneurship and Management Journal, 6*, 419-435.

Nguyen, N. (2017). Entrepreneurial intention of international business students in Vietnam: a survey of the country joining the Trans-Pacific Partnership. *Journal of Innovation and Entrepreneurship, 6*, 7.

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), 1-32.

Parker, S. C. (2004). *The economics of self-employment and entrepreneurship*. New York: Cambridge University Press.

Peng, D. X., & Lai, F. (2012). Using partial least squares in operations management research: a practical guideline and summary of past research. *Journal of Operations Management, 30*(6), 467 480.

Pruett, M., Shinnar, R.S., Toney, B., Llopis, F., & Fox, J. (2009). Explaining entrepreneurial intention of university students: A cross-cultural study. *International Journal of Entrepreneurial Behaviour and Research, 15*(6), 571–954.

Quadrini, V. (2009). Entrepreneurship in macroeconomics. *Annual Finance, 5*, 295–311.

Reynolds, P., Bosma N., Autio E., Hunt S., De Bono, N., Servais, I. Lopez-Garcia, P., & Chin, N. (2005). Global Entrepreneurship Monitor: Data Collection Design and Implementation 1998–2003. *Small Business Economics, 24,* 205–231.

Ringle, C. M., Wende, S., & Becker, J. M. (2015). *SmartPLS 3*. Bönningstedt: SmartPLS. Retrieved from http://www.smartpls.com

Sabuncu, G. (2017). *Anadolu Üniversitesi İşletme Fakültesi öğrencilerinin girişimcilik niyetleri ve çevresel tutumlarını ölçmeye yönelik bir araştırma.* (Published master's thesis). Anadolu Üniversitesi, Eskişehir, Türkiye.

Say, B. J. (1803). *Traité d'économie politique*. Paris: Deterville.

Schlaegel, C. & Koenig, M. (2014). Determinants of entrepreneurial intent: a meta-analytic test and integration of competing models. *Enterpreneurship Theory and Practice, 38*, 291-332.

Schlägel, C. & Sarstedt, M. (2016). Assessing the measurement invariance of the four-dimensional cultural intelligence scale across countries: A composite model approach. *European Management Journal, 34* (6), 633-649.

Schmitz, Jr., J. A. (1989). Imitation, entrepreneurship, and long-run growth. *Journal of Political Economy, 97*, 721-739.

Schumacher, R. E. & Lomax, R. G. (2004). A beginner's guide to structural equation modeling (2nd ed.). Lawrence Erlbaum Associates, Inc.; Mahwah: New Jersey.

Schumpeter, J. A. (1934). *The Theory of Economic Development.* Harvard University Press, Cambridge, MA.

Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behavior & Research, 11*(1), 42-57.

Shane, S (1992). Why do some societies invent more than others? *Journal of Business Venturing, 7*, 29-46.

Shane, S. (1993). Cultural influences on national differences in rate of innovation. *Journal of Business Venturing, 8*(1): 59-74.

Shapero, A. & Sokol, L. (1982). Social dimensions of entrepreneurship. In Kent, C. A, Sexton, D. L., & Vesper, K. H. (Eds.), *Encyclopedia of entrepreneurship* (pp. 72–90). Englewood Cliffs: Prentice Hall.

Shook, C. L., Priem, R. L., & Mcgee, J. E. (2003). Venture creation and the enterprising individual: a review and synthesis. *Journal of Management, 29*(3), 379-399.

Sinclair, V. G. & Wallston, K. A. (2004). The development and psychometric evaluation of the brief resilient coping scale. *Assessment, 11*, 94-101.

Singh, I. & Prasad, T. (2018). Application of PLS-SEM in modeling the significance of social valuation in the determination of entrepreneurial intention of business management students. *The IUP Journal of Entrepreneurship Development*, 8(3).

Solesvik, M. Z., Westhead, P., Kolvereid, L., & Matlay, H. (2012). Student intentions to become selfemployed: The Ukrainian context. *Journal of Small Business and Enterprise Development, 19*(3), 441–460.

Spearman, C. (1904). General intelligence, objectively determired and measured. *American Journal of Psychology, 15*, 201-293.

Statistics Portugal. Retrieved from https://ine.pt/xportal/xmain?xpgid=ine_main&xpid=INE

Stevenson, H. H. & J. C. Jarillo (1990). A paradigm of entrepreneurship: Entrepreneurial management. *Strategic Management Journal, 11*, 17-27.

Şahin, T. K. (2015). *Kültürün girişimcilik niyeti üzerine etkileri: Bulgaristan Türkleri ve Türkiye'deki Bulgaristan göçmenleri üzerine karşılaştırmalı bir araştırma*. (Published Ph. D. Dissertation), Muğla Sıtkı Koçman Universitesi, Muğla, Türkiye.

Şahin, F., Karadağ, H., & Tuncer, B. (2019). Big five personality traits, entrepreneurial self-efficacy and entrepreneurial intention: A configurational approach. *International Journal of Entrepreneurial Behaviour and Research*. p. 1-25. Doi:

The Economist. (2017). Intelligence Unit's Democracy Index, 2017, https://pages.eiu.com/rs/753-RIQ-438/images/Democracy_Index_2017.pdf

The Organisation for Economic Co-operation and Development (OECD). (2018). Economic Outlook 104 Database, November 2018, https://stats.oecd.org/index.aspx?DataSetCode=EO

The Organisation for Economic Co-operation and Development (OECD). (2018). Economic Surveys: Turkey 2018 http://www.oecd.org/eco/surveys/Turkey-2018-OECD-economic-survey-overview.pdf

The Organisation for Economic Co-operation and Development (OECD). (2019). Economic Surveys: Portugal 2019 https://www.oecd.org/economy/surveys/Portugal-2019-economic-survey-overview.pdf

The World Bank. (2018). *Ease of doing business rating*. Retrieved from http://www.doingbusiness.org/en/rankings

The World Bank. (2017). *The political stability and absence of violence/terrorism index.* Retrieved from http://info.worldbank.org/governance/wgi/index.aspx#home

Thomas, A. S. & Mueller, S. L. (2000). A case for comparative entrepreneurship: Assessing the relevance of culture. *Journal of International Business Studies, 31*(2), 287–302.

Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship: Theory and Practice, 33*(3), 669–694.

Tradingeconomics.com. Retrieved from https://tradingeconomics.com/

Transparency International, corruption perception index, 2018, https://www.transparency.org/cpi2018

Triandis, H. C. & Suh, E. M. (2002). Cultural influences on personality. *Annual Review of Psychology, 53*, 133– 60.

Turkish statistical institute. Retrieved from http://www.turkstat.gov.tr/PreTablo.do?%20alt_i

Türker, D. & Selçuk, S. S. (2009). Which factors affect entrepreneurial intention of university students? *Journal of European Industrial Training, 33*(2), 142-159.

Urbach, N. & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *Journal of Information Technology Theory and Application, 11*(2), 5-40.

Ünsal, M. N. (2018). *A marketing approach to servqual measuring service quality impact on customer behaviours based on structural equation modeling*. (Publeshed master's thesis). Galatasaray Üniversitesi, İstanbul, Türkiye.

Van Gelderen, M., Brand, M., Van Praag, M., Bodewes, W., Poutsma, E., & Van Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International, 13*(6), 538–559.

Wennekers S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics, 13*, 27–55.

Wennekers, A. R. M., Uhlaner, L. M., & Thurik, A. R. (2002). Entrepreneurship and its conditions: A macro perspective. *International Journal of Entrepreurship Education, 1*, 25–64.

Wiklund, J. (1999). The sustainability of the entrepreneurial orientation: Performance relationship. *Entrepreneurship Theory and Practice, 24*(1), 37 – 48.

Wiley, D. E. (1973). The identification problem for structural equation models with unmeasured variables. In Goldberger, A. S. & Duncan O. D. (Eds., pp. 69-83). *Structural equation models in the social sciences*. New York: Academic Press.

Wong, K. K. K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM). *Techniques Using SmartPLS. Mark. Bull. 24*, 1–32.

Wong, P. K., Ho, Y. P., & Autio, E. (2005). Entrepreneurship, innovation, and economic growth: Evidence from GEM data. *Small Business Economics, 24*(3), 335–350.

World Economic Forum. (2017). The Global Competitiveness Report 2017-2018. Geneva, Switzerland. ISBN-13: 978-1-944835-11-8.

World Economic Forum. (2018). *The Global Competitiveness Report 2018*. Geneva, Switzerland. ISBN-13: 978-92-95044-76-0.

World Justice Project. (2019). *The rule of law index*. Washington, DC. IBSN (online version):978-0-9964094-1-4.

Wright, S. (1918). On the nature of size factors. *Genetics, 3*, 367-374.

Wu, S. & Wu, L. (2008). The impact of higher education on entrepreneurial intentions of university students in China. *Journal of Small Business and Enterprise Development, 15*(4), 752–774.

Yaman, Ö. (2018). *Bireysel girişimcilerde girişimcilik eğilimi üzerine etki eden kişisel faktörlerin analizi.* (Published master's thesis). Adana Bilim ve Teknoloji Üniversitesi, Adana, Türkiye.

Yang, J. (2013). The Theory of Planned Behavior and Prediction of Entrepreneurial Intention Among Chinese Undergraduates. *Social Behavior and Personality 41*(3): 367–376.

Yeşilay, R. B. & Yavaş, V. (2017). öğrencilerin girişimcilik niyetinin planlanmış davranış teorisi çerçevesinde incelenmesi: Sivil havacılık alanında öğrenim gören önlisans öğrencileri üzerine bir araştırma. *Girişimcilik ve İnovasyon Yönetimi Dergisi, 6*(1), 145-172.

Yuan, K. H., Bentler, P. M., & Chan, W. (2004). Structural equation modeling with heavy tailed distributions. *Psychometrika, 69*, 21–436.

Zahra, S. (1991). Predictors and financial outcomes of corporate entrepreneurship: an explorative study. *Journal of Business Venturing, 6,* 259 – 285.

Zarefard, M. & Cho, S. E., (2017). Relationship between entrepreneurs' managerial competencies and innovative start-up intentions in university students: An Iranian case. *International Journal of Entrepreneurship, 21*(3).

Zhang, P., Wang, D. D., & Owen, C. L. (2015). A study of entrepreneurial intention of university students. *Entrepreneurship Research Journal, 5(1)*, 61-82.

Zhao, F. (2005) "Exploring the synergy between entrepreneurship and innovation", *International Journal of Entrepreneurial Behavior & Research, 11*(1), 25-41.

Zhao, H., Hills, G. E., & Siebert, S. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, *90*(6), 1265–1272.

APPENDICES

APPENDIX 1- Turkish Form of Applied Questionnaire

ANKET

Sayın Katılımcı,

Bu araştırma, Türkiye ve Portekiz'deki girişimcilerin ve girişimci adaylarının, tutum ve davranışlarının karşılaştırılmasına yönelik bir çalışmanın parçasını oluşturmaktadır. Üniversite öğrencilerinin işletme faaliyetlerinin eğitimi, deneyim ve değerlendirilmesi ile ilgili hususları içerir. Sunulan tüm bilgilerin gizlilik içinde ele alınacağını ve kaynakların gizliliğinin korunacağını garanti ediyoruz. İş birliği konusundaki nezaketiniz bu çalışmanın hedeflerine ulaşmasında büyük önem taşıyor. Doğru ya da yanlış cevap olmadığından tüm sorulara dürüstçe cevap vermeniz önemlidir.

İşbirliğiniz için teşekkürler.

Aşağıda bireyleri gerek iş yaşamında gerekse gündelik yaşamda tanımlayan bir takım ifadeler yer almaktadır. Aşağıdaki ifadelerin her biri için **kendinize en uygun olan seçeneği seçerek** cevap veriniz. Lütfen, aşağıda yer alan ifadelere cevap verirken, katılma derecenizi gösteren ölçeğe bakarak size uygun olan kutucuğa **"X"** işaretini koyunuz.

No	**Anket Sorusu**	Doğru Değil						Tamamen Doğru
		1	2	3	4	5	6	7
BÖLÜM I								
1	Bir iş kurmak ve çalışmasını sağlamak benim için kolay olurdu.							
2	Aktif bir iş kurmak için hazırım.							
3	Yeni bir iş kurma sürecini kontrol edebilirim.							
4	Yeni bir iş kurmak için gerekli olan pratik detayları biliyorum.							
5	Girişimci bir projenin nasıl geliştirileceğini biliyorum.							
6	Yeni bir iş kurmaya girişseydim, başarı olasılığım yüksek olurdu.							
BÖLÜM II								
1	Girişimci olmak bana dezavantajdan çok avantaj sağlar.							
2	Benim için girişimci olmak parlak bir kariyerdir.							
3	Fırsat ve kaynaklara sahip olsaydım, yeni bir iş kurmak isterdim.							
4	Girişimci olmak beraberinde benim için büyük memnuniyet getirecektir.							
5	Çok farklı seçeneklerim olsa da girişimci olmayı tercih ederim.							
BÖLÜM III								
1	Girişimci olmak için her şeyi yapmaya hazırım.							
2	Kariyer hedefim girişimci olmaktır.							
3	Kendi işimi kurmak ve sürdürmek için her türlü çabayı göstereceğim.							
4	Gelecekte iş kurmak için kararlıyım.							
5	İş kurmak için çok ciddi fikirlerim var.							
6	Günün birinde iş kurmak için gerekli azme sahibim.							
BÖLÜM IV								
	Bir firma oluşturmaya karar verirsem, yakın çevremdeki … bu kararı onaylar. (1'den 7'ye kadar onaylama derecelerini belirtiniz.)							
1	Ailem							
2	Arkadaşlarım							
3	Meslektaşlarım / Sınıf Arkadaşlarım							

BÖLÜM V					
1. Cinsiyet: ( ) Kadın ( ) Erkek					
2. Yaş (yıl):…………………………………………………					
3. Eğitim Seviyeniz: ( ) Ortaöğretim ( ) Lisans ( ) Yüksek Lisans ( ) Doktora					
4. Doğum Yeriniz:……………………………………………………					
5. Evinizde yaşayan insanların sayısı (siz dahil):………………………………………………					
6. Aile öğrenim düzeyi:	**Baba** ( )İlkokul/Ortaokul	( )Lise	( ) Lisans	( ) Lisansüstü	( ) Diğer
	Anne ( )İlkokul/Ortaokul	( )Lise	( ) Lisans	( ) Lisansüstü	( ) Diğer
7. Meslekleri:	**Baba** ( ) Çalışan	( ) Kendi işinin sahibi	( ) Emekli	( ) İşsiz	
	Anne ( ) Çalışan	( ) Kendi işinin sahibi	( ) Emekli	( ) İşsiz	
8. Brütçe konuşursak, evinizdeki toplam aylık gelir nedir? (evdeki her bir kişinin tüm gelirlerini ekleyerek hesaplayınız.)	() 2000 TL’ye kadar () 2.000 TL’den 4.500 TL’ye kadar () 4.500 TL’den 6.000 TL'ye kadar () 6.000 TL’den 7.500 TL’ye kadar () 7.500 TL’den – 9.000 TL’ye kadar () 9.000 TL’nin üstünde				

☺ **Teşekkürler!**

APPENDIX 2- Portuguese Form of Applied Questionnaire

QUESTIONÁRIO

Exmo(a) estudante,

Esta pesquisa faz parte de um estudo sobre a comparação de atitudes empreendedoras e comportamento na Turquia e Portugal. Nele constam aspectos referentes à formação, experiência e valorização da actividade empresarial por parte de estudantes universitários. Garantimos que toda informação fornecida será tratada com total sigilo e o anonimato das fontes será preservado. Sua gentileza em colaborar é de fundamental importância para que os objetivos deste estudo sejam alcançados. É importante que responda a todas as questões com sinceridade dado que não existem respostas certas ou erradas.

Muıto obrıgada pela sua colaboração.

Indique o seu nível de concordância com as seguintes afirmações, de 1 (completamente falso) a 7 (completamente verdadeiro).

Escala de resposta
1 = completamente falso.
2 = quase completamente falso.
3 = em certa medida é falso.
4 = nem falso, nem verdadeiro.
5 = em certa medida é verdadeiro.
6= quase completamente verdadeiro
7= completamente verdadeiro.

No	Alternativas	completamente falso						completamente verdadeiro
		1	2	3	4	5	6	7
BLOCO I								
1	Para mim seria fácil iniciar uma empresa e mantê-la em funcionamento							
2	Creio que não seria capaz de criar uma empresa viável							
3	Estou preparado para seguir todos os passos para a criação de uma nova empresa							
4	Conheço os detalhes práticos necessários para iniciar uma empresa							
5	Para mim seria muito difícil desenvolver um projecto empresarial							
6	Se eu tentasse criar uma empresa teria grande probabilidade de sucesso							
BLOCO II								
1	Ser um empreendedor implica mais vantagens do que desvantagens para mim							
2	Para mim a carreira de empreendedor é pouco interessante							
3	Se eu tivesse oportunidades e recursos, gostaria muito de criar uma empresa							
4	Para mim tornar-me empresário dar-me-ia grandes satisfações							
5	Preferia ter outra profissão, que não a de empresário							
BLOCO III								
1	Estou disposto a fazer qualquer coisa para ser empresário							
2	Meu objectivo profissional é tornar-me um empresário							
3	Farei todos os esforços para iniciar e gerir a minha própria empresa							
4	Estou determinado a criar uma empresa no futuro							

5	Tenho ideias e planos muito sérios em criar/gerir uma empresa							
6	Tenho muitas dúvidas sobre a possibilidade de vir a criar uma empresa algum dia							
BLOCO IV								
	Se você decidir criar uma empresa, as pessoas em seu ambiente próximo aprovariam essa decisão? Indique "1 = desaprovariam totalmente a 7 = aprovariam totalmente".							
1	Em seus familiares mais próximos.							
2	Entre seus amigos.							
3	Entre seus colegas de curso/trabalho.							

BLOCO V	
1. Gênero: ( ) Feminino ( ) Masculino	
2. Idade (anos):…………………………………………………	
3. Nível de Educação: ( ) Ensino Secundário ( ) Licenciatura ( ) Mestrado ( ) Doutoramento	
4. Naturalidade:……………………………………………………	
5. Nº de pessoas que vivem em sua casa (incluindo você):…………………………………	
6.Nível de estudos dos seus pais:	**Pai** ( ) Secundário ( ) Formação profissional ( ) Superior ( ) Outros
	Mãe ( ) Secundário ( ) Formação profissional ( ) Superior ( ) Outros
7.Quais são suas ocupações atuais?	**Pai** ( ) Empregado ( ) Empresário ( ) Aposentado ( ) Desempregado
	Mãe ( ) Empregado ( ) Empresário ( ) Aposentado ( ) Desempregado
8. Grosseiramente falando, qual é a renda mensal total em sua casa? (somando todas as receitas de qualquer pessoa do agregado familiar)	( ) Até € 1.500,00 ( ) De € 1.500,00 até € 3.000,00 ( ) De € 3.000,00 até € 6.000,00 ( ) De € 6.000,00 até € 12.000,00 ( ) Acima de € 12.000,00

☺ **Obrigada!**

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Tuncer, B. & Şahin, F. (2018). *Big Five Personality Traits and Entrepreneurial Intention: The Moderating Role of Social Valuation*. International Conference of Applied Business and Management, Porto, Portugal.