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ADANA SCIENCE AND TECHNOLOGY UNIVERSITY
THE INSTITUTE OF SOCIAL SCIENCES
MANAGEMENT INFORMATION SYSTEMS DEPARTMENT

ANALYSIS OF PERSONAL FACTORS EFFECT ON ENTREPRENEURIAL INTENTION AMONG NASCENT ENTREPRENEURS

Özcan YAMAN

MASTER THESIS

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To The Social Science Institute Directorate of Adana Science and Technology University;

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APPROVAL

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ÖZET

BİREYSEL GİRİŞİMCİLERDE GİRİŞİMCİLİK EĞİLİMİ ÜZERİNE ETKİ EDEN KİŞİSEL FAKTÖRLERİN ANALİZİ

Özcan YAMAN

Yüksek Lisans Tezi, Yönetim Bilişim Sistemleri Anabilim Dalı
Danışman: Prof. Dr. Fatma Nur TUĞAL
Haziran 2018, 142 sayfa

Günümüzde girişimcilik; ülkelerin gelişmesinde, toplumların refahının artmasında ve yaşam standartlarının yükselmesinde önemli bir etkiye sahiptir. Bu bakımdan toplumu oluşturan bireylerin girişimcilik eğilimlerinin ve girişimcilik eğilimlerini etkileyen kişisel faktörlerin tespit edilmesi, toplumların girişimcilik potansiyelleri hakkında bilgi verebilir ve sonraki çalışmalar için yol gösterebilir.

Bu çalışmanın amacı; araştırma modelindeki girişimcilik eğilimi ile bu eğilimi etkileyen kişisel faktörler arasında anlamlı bir ilişki olup olmadığının belirlenmesi, araştırma modelinin bir bütün olarak analiz edilmesi ve girişimcilik alan yazınında bireysel girişimcilerin incelenerek alan yazına katkı sağlanmasıdır.

Bu çalışmada bireysel girişimcilerden veri toplamak üzere bir anket geliştirilmiştir. Gözden geçirme ve iyileştirme sonrası uygulanan anket sonucunda toplam 312 katılımcıdan elde edilen kullanılabilir veriler normal dağılım, aykırı değerler, yanlış veri girişi ve eksik veri açısından incelenerek değerlendirilmiş, anketin geçerlilik ve güvenilirliği sağlanmıştır. Modelin geliştirilmesi için yapısal eşitlik modeli kullanılmıştır. Bu bağlamda açıklayıcı ve doğrulayıcı faktör analizleri uygulanmıştır. Çalışma sonucunda, tüm üç faktörün girişimcilik eğilimi üzerine etkisi olduğu tespit edilmiştir. Bu çalışmanın bulguları girişimci kurum ve toplulukların faaliyetlerinde bireysel girişimcilerin girişimcilik eğilimlerini daha iyi anlamalarına katkı sağlaması beklenmektedir.

<u>Anahtar Kelimeler:</u> Girişimcilik, Bireysel Girişimciler, Girişimcilik Eğilimi, Yapısal Eşitlik Modeli (YEM)

ABSTRACT

ANALYSIS OF PERSONAL FACTORS EFFECT ON ENTREPRENEURIAL INTENTION AMONG NASCENT ENTREPRENEURS

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In recent years, entrepreneurship has made a significant contribution to the development of countries, job growth, increasing the wealth and life standards of societies. In this case, establishing the entrepreneurship intention of people and the factors influencing entrepreneurial intention would give us specified information about entrepreneurship potential of societies and it would be guide for the other researches.

The purpose of the study is to examine the influence of personal factors on entrepreneurial intention among nascent entrepreneurs. A printed form questionnaire was developed for this study for data collection from 312 usable nascent entrepreneurs. Collected data were screened concerning normality, outliers, missing data, and incorrect data entry, after then validity and reliability of the study were assured.

In this study, structural equation modeling (SEM) was used for developing the proposed structural model. In this context, exploratory and confirmatory factor analyses were applied, and the modified final model was estimated and evaluated. The results indicated that all three factors have significant relation with entrepreneurial intention. The findings of this study will contribute to institutions and entrepreneurship societies for better understanding the entrepreneurial intentions of nascent entrepreneurs in their entrepreneurship programs and activities.

Keywords: Entrepreneurship, Nascent Entrepreneurs, Entrepreneurial Intention, Structural Equation Modeling (SEM)

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LIST OF ACRONYMS / ABBREVIATIONS

ABTU	Adana Bilim ve Teknoloji Üniversitesi Adana Science and Technology University
GEM	Global Entrepreneurship Monitor
IBM SPSS	***I***nternational ***B***usiness ***M***achines ***S***tatistical ***P***ackage for ***S***ocial ***S***cience
IBM AMOS	***I***nternational ***B***usiness ***M***achines ***A***nalysis of ***MO***ment ***S***tructures
KOSGEB	Küçük ve Orta Ölçekli Sanayi Geliştirme Başkanlığı Small and Medium Industry Development and Support Agency
PBC	Perceived Behavioral Control
PSED	Panel Study of Entrepreneurial Dynamics
SCT	Social Cognitive Theory
SEE	Shapiro's Model of Entrepreneurial Event
SEM	Structural Equation Modeling
SME	Small and Medium Enterprise
TEA	Total Entrepreneurial Activity
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
YÖK	Yükseköğretim Kurulu The Council of Higher Education

CHAPTER 1

INTRODUCTION

This study concerns with the influencing factors on entrepreneurial intention among the nascent entrepreneurs where the participants were the attendees of entrepreneurship course in Turkey. In this research nascent entrepreneurs refer to individuals who want to start a business or intend to do business after they finished the entrepreneurship course founded by government and want to get required financial capital according to their own business project approved by the government agency.

Over the past decade, most researchers have paid more attention to understanding the study of entrepreneurship creation and the entrepreneurship literature has grown remarkably (Audretsh, 2007; Bosma, 2013; Turker, 2009; Van Gelderen, 2008; Wilson, 2007; Urbano, 2009). Researchers and policy makers agree that the creation of entrepreneurship triggers economic growth and innovation as well as the social development (Bowen & De Clercq, 2008; Kristiansen & Indarti, 2004; Wennekers, Wennekers, Thurik, & Reynolds, 2005; Wilson, 2007).

The role of entrepreneurship in social development has been well understood recently (Scott, 2012). As the competition continues on a global scale, there is a rapid change in the technological, legal, political and cultural environment. In this framework, many companies in the world are faced with the challenge of activating their entrepreneurial potentials to survive and struggling with the difficult conditions of global competition.

High success among young generation entrepreneurs contributes to the development of entrepreneurship. Small business entrepreneurship plays important role when large enterprises perform inadequately due to the lack of adaptation in rapidly changing conditions.

Given the importance of entrepreneurs in the economic growth, it is related to have knowledge of the effects of factors on entrepreneurial intention in creation of new ventures among nascent entrepreneurs.

This Chapter presents an overview of the study. It identifies the purpose of the study, its importance, existing research gap, related research questions, methodology and the structure of the study with a definition list of a set of some selected terms used in this thesis.

1.1. Purpose of the Study

Nascent entrepreneurship has drawn an increasing attention in late years as a result of the advantages of new venture creation to all economies (Parker & Belghitar, 2006). Every year millions of individuals start nascent entrepreneurial activities in the founding of new ventures across the world (Gartner, Carter, & Reynolds, 2010; Kelley, Singer, & Herrington, 2012; Lichtenstein, Dooley, & Lumpkin, 2006; Xavier, Kelley, Kew, Herrington, & Vorderwulbecke, 2012).

The self-employment rate is booming around the world. In many cases, self-employment is mostly used as a measure of entrepreneurship in the modern world (Blanchflower, 2004; Diez & Ozdaglı, 2015; Ekelund, Johansson, Järvelin, & Lichtermann, 2005; Parker, 2009; Rees & Shah, 1986). In 2015, the rate of self-employed workers as a percentage of total employment was highest in Colombia at 51 percent (EOCD report, 2015). Currently the self-employment rates are highest in countries Greece, Turkey, and Mexico with rates higher than 30 percent. South Korea, Chile, Italy and Poland have self-employment rates above 20 percent. Meanwhile, the rate of self-employment is even higher in European Union (28 countries) with the rate of 16 percent. In recent years, Turkish government has been focusing on the entrepreneurship policies and training programs.

In modern world, entrepreneurship has an important role in the development of countries, job growth, increasing economic prosperity and life standards of societies. New firms contribute to the economy through the jobs they create and by enhancing productivity resulting in increased wealth and growth (Parker & Belghitar, 2006).

New ventures are considered to be very important for national and global economies because they are potential source of economic growth, innovation, employment opportunities and economic prosperity by contributing to the economy through the job creations (Bosma, 2013; Bowen & De Clercq, 2008; Gartner et al.,

2010; Liñán & Chen, 2009). Despite the importance of new ventures contribution to all economies, factors influencing on entrepreneurial intention among nascent entrepreneurs have received less attention (Fayolle & Liñán, 2014; Xavier et al., 2012).

When considered the important role that nascent entrepreneurs are vital in the national and global economies because they are the potential source of economic growth, innovation, and employment opportunities, the specific objective of this thesis is to analyze the impact of various determinants on individual entrepreneurial intention among nascent entrepreneurs. Another purpose of this thesis is to evaluate the influence of personal factors on entrepreneurial intention among nascent entrepreneurs in Adana, Turkey.

Based on the Ajzen's (1991) theory of planned behavior (TPB), this thesis identifies the effects of personal factors on individual entrepreneurial intention among nascent entrepreneurs. Personal attitude, self-efficacy, and internal locus of control are considered in the personal factors.

The findings of this study will contribute to the policy makers, institutions and entrepreneurship societies to better understanding the entrepreneurship intentions of nascent entrepreneurs in their entrepreneurship programs and activities.

1.2. Importance of the Study

Every year millions of individuals commence nascent entrepreneurial activities across the world (Kelley et al., 2012; Xavier et al., 2012). The inception of nascent entrepreneurial activities is the first step in the founding of new ventures (Gartner et al., 2010; Lichtenstein et al., 2006).

In today's world, the importance given to the entrepreneurship has been increased. The problem of increasing the unemployment rate, the changing economic structure as the new economy grows stronger, and the general acceptance of entrepreneurial developments in economics and business are considered highly important reasons for attractiveness of entrepreneurship in the world (Karp, 2006; Kickul & Gundry, 2002). The entrepreneur owns all responsibilities for the success or failure of the entrepreneurial activity, but the consequences of this concern affect the whole society.

The social aspect of entrepreneurship in the increasingly competitive conditions supports success of the entrepreneurship. Today, the process of change is accelerated considerably. The pace of change is not only in technology, but also in economic and social areas. Keeping up with this rapid changes and increasing social welfare in the world is only possible by providing the necessary fundamentals for entrepreneurship (Scott, 2012).

Entrepreneurship might be very vital function for preventing unemployment, contributing to the development of science and technology and raising social welfare and quality of life (Beugelsdijk, 2007; Davidsson, Delmar, & Wiklund, 2006; Ekelund et al., 2005; Grundstén, 2004; Henley, 2007; Kickul & Gundry, 2002; Kotler, Keller, Ancarani, & Costabile, 2014; Urbano & Alvarez, 2014) . Therefore, entrepreneurship has become an expanding area of interest around the world for both academicians and policy makers in recent years. Many of the governments and universities of European, Asian and Latin American countries have been arranging programs to encourage entrepreneurship. The European Union presently supports policies that stimulate entrepreneurship in the direction of Europe 2020 strategy plan (The Entrepreneurship 2020 Action Plan, 2017). The European Commission declared the entrepreneurship action plan to support more entrepreneurs to create and develop and new ventures by aiming to level the regional economic development of the member countries of the European Union and also to step up their international competitiveness.

Over the past decades, many authors (Baughn, Cao, Le, Lim, Neupert, 2006; Beugelsdjik, 2007; Davidsson & Wiklund, 2001; Krueger, Reilly, & Carsrud, 2000; Moore, 1986; Souitaris, Zerbinati, & Al-Laham, 2007; Timmons, 1989) viewed entrepreneurship from different perspectives, such as entrepreneurial process, entrepreneurial framework, entrepreneurial behavior, entrepreneurial culture, entrepreneurial education as well as the relationships between them. Despite the fact that many studies gained momentum on entrepreneurship, a model that could fully explain the entrepreneurial behavior has not been developed yet. Some external and internal factors were identified with influence upon perception, learning, motivation, and attitude on entrepreneurial behavior.

Turkey is considered as a growing economy which introduces tremendous opportunities to nascent entrepreneurs in all over the country. A strong domestic market with a various industry field in a growing economy, a comparatively strong economic environment and unexplored neighboring country markets are encouraging entrepreneurship in Turkey. Growing economy and regulative tax reforms are also other attractive benefits for individual nascent entrepreneurs to create new ventures in Turkey.

To have a young population, the opening of new business areas and the expansion of new business models based on entrepreneurial activity in Turkey are creating opportunities for nascent entrepreneurs.

Turkish government behaves very supportive to emancipate entrepreneurial potential, eliminate current barriers and provide funds to reform the entrepreneurship culture in Turkey. Turkish government has been supporting the entrepreneurial climate through progressive government policies, entrepreneurial programs and entrepreneurial courses by providing funds for start-ups and nascent entrepreneurs.

Given the important role that nascent entrepreneurs are vital in all economies because they are potential source of economic growth, innovation, employment opportunities, and this thesis is carried out to contribute deeper understanding about the nascent entrepreneurs and to evaluate the influence of personal factors on entrepreneurial intention among nascent entrepreneurs.

1.3. Literature Gap and Research Question

Nascent entrepreneurship is becoming very popular in recent years. It has drawn significant interest in the worldwide, especially as a result of the interest in focusing the social and economic contributions of nascent entrepreneurs, and the increased attention on creating new ventures in the national and global economies (Parker & Belghitar, 2006). However, nascent entrepreneurship has not grown very much and the influence of factors on entrepreneurial intention among nascent entrepreneurs on the start of creating new ventures is one of the least studied subjects in the entrepreneurship literature (Newbert & Tornikoski, 2013).

Many researchers have been studying on entrepreneurship in different perspectives all around the world. Nascent entrepreneurship literature has been focused

mainly on studying nascent entrepreneurs from the various kinds of sources: compilation of national databases and statistics focusing specifically on nascent entrepreneurs (Carter, Gartner, Shaver, & Gatewood, 2003; Parker & Belghitar, 2006; Kim, Aldrich, & Keister, 2003, Liao & Welcsh, 2003; Lichtenstein, Carter, Dooley, & Gartner, 2007; Mueller, 2006), students and start-up seminars (Sequeira, Stephen, & Jeffrey, 2007), entrepreneurial academicians (Brennan, Wall, & McGowman, 2005), company founders (Delmar & Davidsson, 2000), surveys and questionnaires conducted by colleges and universities (Rodriguez & Santos, 2009; Wagner, 2007).

Since previous studies have mostly centered on students, business founders, successful entrepreneurs or self-employed people involved in an early start-up company, only few studies worked on nascent entrepreneurs. This means that, there is lack of comprehension of how entrepreneurs feel and discern nascent entrepreneurship. Consequently, there is a lack of understanding about the effecting factors weight on entrepreneurial intention among nascent entrepreneurs.

Fayolle and Liñán (2014), propose future directions for entrepreneurial intention research and suggest a need exist to encourage research using samples of nascent entrepreneurs in the entrepreneurial process. They address to the existing gap in the nascent entrepreneurship literature. They realize the current researches are mainly conducted on students, and these researches are not sufficient in understanding the nascent entrepreneurship context. Therefore there is a need to complete current studies with a research employed on nascent entrepreneurs in order to provide deeper understanding of nascent entrepreneurs' intentions.

The main objective of this thesis will be to address the mentioned research gap by studying on nascent entrepreneurs. This will be achieved by proposing a structural model in order to examine the impact of personal factors on entrepreneurial intention among nascent entrepreneurs. Hence, the following two main research questions will be addressed:

- *What are the personal factors impacting on the entrepreneurial intention among nascent entrepreneurs?*

And,

- *What are the interrelations between the influencing factors and entrepreneurial intention among nascent entrepreneurs?*

In this context, following listed research questions were focused on in this thesis:

- *How does personal attitude (PA) relate to entrepreneurial intention?*
- *How does self-efficacy (SE) relate to entrepreneurial intention?*
- *How does internal locus of control (LoC) relate to entrepreneurial intention?*

In order to address the above research questions, the specific objective of this thesis is as follows:

- *To analyze the direct and interaction impact of personal factors on entrepreneurial intention among nascent entrepreneurs*

Once the research gap and related research questions have been identified, the methodology of the study will be mentioned in the next section.

1.4. Methodology of the Study

In terms of the methodology, this study follows a quantitative approach by means of posited hypotheses, constituted measures, submitted data, and used various techniques to test the hypotheses.

Primarily, the search of the literature on the subjects of entrepreneurial intention was the first step of the study. On the basis of a comprehensive and the detailed study on the review of the literature on entrepreneurial intention, hypotheses related to the factors on entrepreneurial intention among nascent entrepreneurs are formed by the theoretical framework on behalf of the entrepreneurial intention literature. This stage step was followed by a structural model. After developed structural model, the questionnaire instrument was established based on scales that confirmed in previous international studies.

A questionnaire instrument was used for collecting data for the main study to test the ability and self-assessment of nascent entrepreneurs concerning the designated factors and related items for these traits influencing on entrepreneurial intention. The questionnaire comprised of two sections including descriptive statistics about the

respondents and measurements for the estimation of the influencing factors on entrepreneurial intention in this study.

Totally 23 questions were asked to respondents in this survey. First 20 questions were related with factors influencing on entrepreneurial intention measured on a five-point likert type scale. The scale on likert type was one to five ranging from 1: completely agree to 5: completely disagree. And last three questions in the questionnaire are related with their demographic characteristics.

Once review and clarify the questionnaire, a pilot study was performed with nine suitable participants. Subsequent to, evaluation and analysis process of the collected data for the pilot study, the questionnaire was distributed to the whole participants. Finally, data were collected from the respondents for the main study.

The sample population composed of 312 nascent entrepreneurs and the samples were selected randomly on a voluntary basis from the target population. After receiving the questionnaires for the main study, data analysis process started regarding descriptive statistics and data screening. In this step, data screening includes normality, incorrectly entered data, missing data, and outliers. After evaluation and analysis of the data screening, validity and reliability of the questionnaire were confirmed.

Subsequently, structural equation modeling (SEM) was implemented to improve the structural model and to test the proposed hypotheses. In this context, exploratory factor analysis (EFA) was applied before confirmatory factor analysis (CFA). And finally path analysis of the final structure model was conducted. After all, results and evaluations of the analyses were discussed and documented.

1.5. Structure of the Study

This study consists of five chapters with a reference section and appendices in the end. All chapters start with a summary of its content as a brief introduction.

The first chapter introduces the purpose of the study, its importance, existing research gap, related research questions, research method and the structure of the study. In addition to the overall thesis framework, definitions of some selected terms will be summarized in a table at the end of this chapter to better understand some terms used in this study.

The second chapter builds on the current literature review on nascent entrepreneurship, and comprised of four sections. This literature review firstly provides an overview of the concept of entrepreneurship and nascent entrepreneurship. Starting from the miscellaneous definitions of entrepreneurship to what is meant by nascent entrepreneurs will be discussed on the focus of entrepreneurship context. Then, the most common entrepreneurial intention models will be examined in detail providing model diagrams. And last section provides detailed discussion of the influence of different factors on entrepreneurial intention with proposed hypotheses on each.

The third chapter consists of two main parts. The first part presents the research model of the thesis and, discusses the main focus of the study, theoretical foundations underpinning the research model, construct relationships, and the hypothesis developed. The second part of this chapter provides methodology preferred and maintained for this study. This section presents detailed information relating to the research participants in the survey, research approach, data collection, survey questionnaire formulation, the scales used to evaluate factors and related items for the proposed structural model constructs, measurements and the data analysis method applied in this study.

The empirical data analyses and the results of the thesis will be reported in chapter four. The findings of the analysis are submitted in seven sections. The results of demographic information analyses are provided in the first section. The second section presents the findings of the data screening as initial data analyses. Exploratory factor analysis and confirmatory factor analysis are performed in the third and fourth sections respectively. Microsoft Office Excel and IBM Statistics software programs of SPSS and AMOS were used primarily in this chapter for the empirical data analyses. The last three sections provide information on advanced data analysis using the Structural Equation Modeling. The fifth section provides path analysis of structural model. The sixth section reveals a brief of the hypothesis relationships and level of support for each hypothesis identified in this study. Last section of the fourth chapter provides additional analyses and findings based on demographic variables.

The last chapter of the thesis provides the conclusion of the study. A summary of the main findings of the thesis will be presented in the discussion section. The research limitations of the study and the future research considerations for future studies

will also be discussed in the fifth chapter. Lastly, contributions of this study will be considered in the last section of the final chapter.

1.6. The Definitions of Select Terms

The definitions of select terms (entrepreneurship, nascency, nascent entrepreneur, structural equation modeling and venture) used in this study are presented in Table 1.1.

Table 1.1. *Definitions of Select Terms*

Term	**Definition / description**
Entrepreneurship	A set of actions or any attempts at forming new business organization, associated with new venture creation and development by alone or with others, including opportunity recognition and exploitation, risk taking and innovation (Reynolds, Hay, & Camp, 1999).
Nascency	The process of nascent entrepreneurship undertaken by a nascent entrepreneur
Nascent Entrepreneur	Someone engages in the act of establishing a new venture. Nascent entrepreneur is considered as a person who is intending or actively trying to start a new business with alone or together, or has already established a business within the past three months (GEM, 2012).
Structural Equation Modeling (SEM)	(SEM) Structural Equation Modeling is an advanced statistical analysis which identifies relationship among set of variables by means of path diagrams (Byrne, 2016).
Venture	A business enterprise which involves risking capital or other assets in the hope of gain, either commercial profit or other

CHAPTER 2

LITERATURE REVIEW

Many academicians and researchers have been interested in entrepreneurship as a fascinating major field after the worthy studies by Joseph Schumpeter in the first half of the 20th century (Baumol, 1996; Kristiansen & Indarti, 2004; Stevenson & Jarillo, 1990). Governments, institutions, scholars, politicians and decision makers are concentrating on increasing the number of entrepreneurs in the economy for generally two reasons: First, entrepreneurship decreases unemployment (Campbell, 1996; Carree & Thurik, 1996; Evans & Leighton, 1990; Lee, Florida, & Acs, 2004; Reynolds, Storey, & Westhead, 1994; Santarelli, Carree, & Verheul, 2009), and second, entrepreneurship increases economic growth (Acs, 2006; Audretsch, 2007; Baumol, 1996). In order to boost the number of potential entrepreneurs, it is essential to encourage more people to become entrepreneurs and to catch on the factors affecting the entrepreneurial intentions of nascent entrepreneurs.

In the view of the fact that the main aim of the thesis is to examine several factors which could affect entrepreneurial intention among nascent entrepreneurs, the literature review firstly provides an overview of the concept of entrepreneurship and nascent entrepreneurship, following the entrepreneurial intention models and lastly provide proposed hypotheses based on detailed discussion of the influence of different factors on entrepreneurial intention among nascent entrepreneurs.

2.1. Entrepreneurship

The idea of the entrepreneurship needs to be defined for better understanding of entrepreneurial intention. The origin of the word “entrepreneur” comes from the Old French language and was firstly used in economy literature in the middle of 18th century by Richard Cantillon in 1725 (Hisrich, Peters, & Shepherd, 2002; Kuratko & Hodgetts, 1992). And this concept has reached its meaning used today by French economist and businessman Jean-Baptiste Say (Hisrich et al., 2002; Stevenson & Jarillo, 1990).

According to Say, the concept of entrepreneur is the person who produces a commodity by bringing together all the factors of production and takes risks for profit. Say's entrepreneurial definition is based on the principle of having risk-taking and management ability (Hisrich et al., 2002; Stevenson & Jarillo, 1990).

The entrepreneur is defined in one of the well known dictionary, Webster's New World College Dictionary (p, 982), as "*a person who manages and organizes a business venture undertaking, and assumes assuming the risk for the sake of the profit".* It is easily understood from this definition that entrepreneurs are people who undertake to organize, manage and assume the risks of new organizations. The term *entrepreneur* derives from the Old French verb *entreprendre* with the meaning of undertake (Kuratko & Hodgetts, 1992).

There are discrepancies among current definitions and there is not any singular definition in the entrepreneurship literature (Brochaus & Horwitz, 1986; Gartner, 1988; Low, 2001 Sexton & Smilor, 1986; Shane & Venkataraman, 2000; Waldinger, Aldrich, Ward, & Blaschke, 1990; Wortman, 1987).

Definitions and descriptions of entrepreneurship emphasize a great number of operations in wide scale actions along with the creating new ventures (Brandstätter, 1997; Gartner, 1985; Leibenstein, 1968; Low & McMillian, 1988), the finding new opportunities (Kirzner, 2015), the executing new organizations (Baumol, 1996; Kristiansen & Indarti, 2004; Stevenson & Jarillo, 1990), and the assembling resources together for production (Hisrich et al., 2002; Stevenson & Jarillo, 1990).

Entrepreneurship has different definitions ranging from personal to institutional context. In the context of possessing an innate entrepreneurial personality, entrepreneur is a self-made man, opportunist or economic hero who is brave, ambitious, and successful (Clews, 2007; Down & Warren, 2008). Entrepreneurship is also described as the process of devoting effort and time to create something different (Hisrich et al., 2002). According to Schumpeter, entrepreneurship means innovation (Baumol, 1996; Kristiansen & Indarti, 2004; Stevenson & Jarillo, 1990).

Aldrich and Ruef (2006) mention four competing academic explanations to define entrepreneurship. These interpretations are based on opportunity recognition, innovation, high growth and creation of new organizations.

Entrepreneurship can be regarded as an important vocational option for different types of careers in the sense of occupational notion of entrepreneurship (Brazeal & Herbert, 1999; Van Gelderen, Brand, Praag, Bodewes, Poutsma, & Van Gils, 2008).

Arenius and DeClercq (2005) defined entrepreneurship as an employment choice and Shane (2008) defined entrepreneurship as a creation of new venture. Klofsten and Jones-Evans (2000) explained entrepreneurship as commercial occupational activities. Krueger, Reilly, and Carsrud (2000) noted that entrepreneurship is a way of thinking that recognizes business opportunity referring entrepreneurial behavior.

Entrepreneurship also viewed as an event (Angrist & Krueger, 1999; Hill & McGowan, 1999; Low & MacMillan, 1988; Shapero & Sokol, 1982). According to Long (1983), entrepreneurship has uncertainty, risk, competence, and opportunism. Ronstadt (1985) describes entrepreneurship is a dynamic process creating incremental wealth and adding value to community. Timmons and Spinelli (2009) view entrepreneurship as a human creative art to create a vision from practically nothing. It is worth noting that Stevenson and Jarillo (1990) have another point of view on defining entrepreneurship as series of actions to achieve exploration of entrepreneurial opportunities regardless of the resources.

Davidsson (2004) asserts that the notion of the independently owned business and risk taking are the two important meaning of entrepreneurship. Hisrich et al. (2002) define an entrepreneur as someone who takes risks to start something new.

Rae (2007) focuses on venture creation in the definition of entrepreneurship. Aitken (1965) concluded that entrepreneurship basically consists in doing uncommon things in business by implementing new ways. According to Schumpeter, entrepreneurship is about pioneering actions rather than ownership and he identifies that an entrepreneur should discover and apply new ideas (Baumol, 1996; Kristiansen & Indarti, 2004; Stevenson & Jarillo, 1990). Kao (1993) presents a definition of entrepreneurship as the process of doing something new and different. According to Kao, entrepreneur is a person who engages in the process of wealth-creating for individual and adding value to society by way of incubating ideas, gathering resources together and making things happen.

2.2. Nascent Entrepreneurs

Previous section sought to explain the concept of entrepreneurship and entrepreneur. Nevertheless, this study is not about entrepreneurs in general, but rather nascent entrepreneurs. This section will focus on what is meant by nascent entrepreneur.

In recent years, nascent entrepreneurship has become much popular in the world. Parker and Belghitar (2006) explain the popularity of nascency as the result of the heightened interest in realizing the economic and social improvements of nascent entrepreneurs, and the increased attention on creating new business ventures in global economies. However, nascent entrepreneurship has not grown very much and the influence of factors on entrepreneurial intention among nascent entrepreneurs on the start of creating new business ventures is still one of the least studied gaps in the entrepreneurship literature (Newbert & Tornikoski, 2013).

The nascent entrepreneurship issue has been examined in a wide range of distinctive perspectives and in different cases (Blanchflower & Oswald, 1998; Carter et al., 2003; Delanoë, 2011; Delmar & Davidsson, 2000; Davidsson & Henrekson, 2002). The topic of nascent entrepreneurship includes the role of gender differences, the success and failure of nascent entrepreneurs, the role of social and financial capitals of nascent entrepreneurs, personal traits of nascent entrepreneurs, risk attitudes of nascent entrepreneurs, impact of social environment on nascent entrepreneurship, characteristics and determinants of nascent entrepreneurs, women nascent entrepreneurs, entrepreneurial opportunity recognition, entrepreneurial personality, problems and outcomes of nascent venturing, business founder success, career preferences of nascent entrepreneurs, and so forth.

Some selected studies of the nascent entrepreneurship are listed in Appendix-1; nascent entrepreneurship topics including the publication years and the publications names with the authors involved, nascent entrepreneurship topics.

Nascent entrepreneurship studies are mainly attended in United States. In addition to the United States, following countries have some other nascent entrepreneurship studies: the Netherlands (Van Gelderen, Thurik, & Bosma, 2006), the United Kingdom (Brennan et al., 2005), China (Li & Gustafsson, 2012), Spain

(Rodrigues & Santos, 2009), Germany (Mueller, 2006; Wagner, 2007), Canada (Diochon, Menzines, & Gasse, 2007), Sweden and Norway (Delmar & Davidsson, 2000; Davidsson & Henrekson, 2002), Italy (Vivarelli, 2004, 2013), and France (Delanoë, 2011). Consequently, all these studies signify that the topic of nascent entrepreneurship has been receiving much attention as an important field in scholarship.

The term nascent entrepreneur defines an individual who involves in a creation of new business venture in the start-up process. According to Korunka, Frank, Lueger, and Mugler (2003), the first step of the start-up process of a new business begins with speaking of the business idea and finishes with the launch of the any service or product offered by the nascent entrepreneur (Storey & Greene, 2010).

There are many definitions for nascent entrepreneurs. Thompson (2009) argues the different definitions of nascent entrepreneurs by discussing the discrepancies between a non-nascent entrepreneur and a nascent entrepreneur.

Aldrich and Martinez (2001) prefer to describe nascent entrepreneurs as people who have started serious and major steps to create new ventures. Rodriguez and Santos (2009) suggest a nascent entrepreneur as someone who has established business, but not realized any sales yet. Delmar and Davidsson (2000) also define nascent entrepreneurs as individuals who are trying to establish their own business.

Some authors imply that nascent entrepreneurs are people who are in the earlier stage of organizing and assembling the required resources to create their own independent ventures (Begley, 1995; Hayek, 2012; Kim et al., 2003). However the other authors specify a nascent entrepreneur as an individual who is in the start-up process beginning with serious establishment activities involves applying to a start-up advisor center, making business plans, analyzing market reports, investigating financial and human capitals, and so on, and ceases before realizing first profits (Korunka et al., 2003).

Generally, with everything considered, researchers and scholars have different perspectives and ideas to define a distinct description of nascent entrepreneurship. However, scholars agree that nascent entrepreneurship is well related to the creation of a new venture and establishing a new firm is not a discrete event (Diochon et al., 2007); it is a complex process that it is very hard to determine venture creation absolutely

(Obschonka, Silbereisen, Schmitt-Rodermund, & Stuetzer, 2011; Oviatt & McDougall, 2005).

As mentioned in the earlier, researchers and scholars cannot agree to participate in a unified and precise definition of the term nascent entrepreneur. Notwithstanding a single and complete description should be determined to specify the term "nascent entrepreneur" was considered very important for this thesis. It is, therefore, the Panel Study of Entrepreneurial Dynamics (PSED) and the Global Entrepreneurship Monitor (GEM) are scanned to identify a single unified definition of the term nascent entrepreneur.

The Global Entrepreneurship Monitor (GEM), which is one of the biggest entrepreneurial monitoring programs in the world, measures the entrepreneurial activities between countries, has a comprehensive definition to describe a nascent entrepreneur as someone who is engaged in the new venture creation alone, or with others (GEM report, 2012).

The GEM classified an individual as *nascent entrepreneur* if the venture is less than three months old. If the nascent entrepreneur's venture remains alive between the venture ages of three months and less than three and a half years, in that case, an individual becomes a *new entrepreneur* as seen in Figure 2.1. If the entrepreneur's venture continues to live beyond three and a half years, then an individual categorized as *established entrepreneur*.

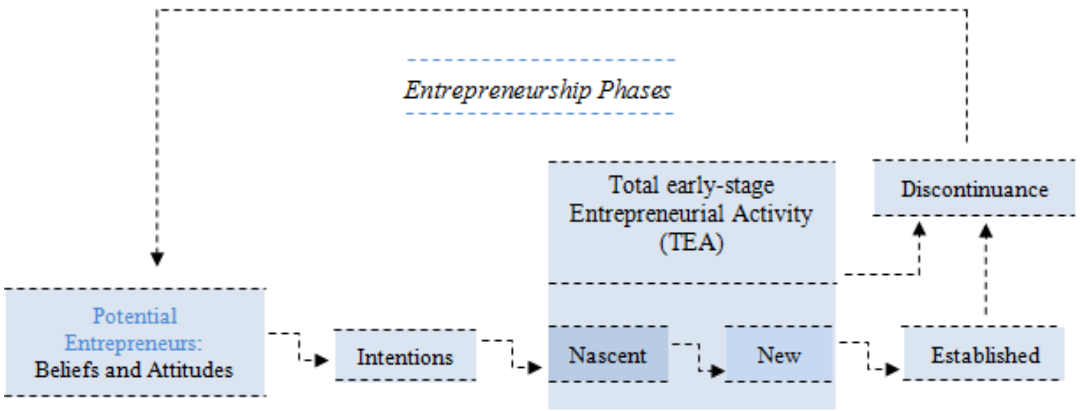

Figure 2.1. Stages of the Entrepreneurship Phases (Source: GEM Report, 2012)

The report published by GEM (2012), combines new entrepreneurs with nascent entrepreneurs into a collection forming the early stage of Total Entrepreneurial Activity (TEA) in entrepreneurship phases to discover the effect of new business creations.

As a part of this thesis, a certain of this definition of nascent entrepreneur has been composed from the Global Entrepreneurship Monitor Report (2012) as;

"A *nascent entrepreneur* is someone who is currently intending to form a business alone or with others and seriously attempting to establish a venture or has created a venture within the past three months."

2.3. Entrepreneurial Intention Theories

Entrepreneurial intention needs to be understood as to how it emerges in the nascent entrepreneurship process. It is seen in the phase of entrepreneurship process reported by GEM (2012) that intention is a temporary stage in the entrepreneurship phases (Choo & Wong, 2006). Davidsson (2006) believes that intent is quite common and entrepreneurship is a social process. He concludes that research indicates approximately one third of the world population will involve in a business activities during their lifetime.

Galloway, Kelly and Keogh (2006) discuss that intention is related to characteristics and values. On the other hand, Carter et al. (2003) define entrepreneurial intention as a set of purposes for getting into business. They present that these purposes include 'to achieve, to challenge oneself, to earn, to grow, to lead, to respected and to attain higher position' based on the results of a range of studies.

According to Gartner and Carter (2004), the entrepreneurship process is composed of two stages; cognitive and behavioral. The cognitive stage is the thinking about starting a business and the behavioral stage is acting to start a business. They point out the relation between intention and action.

The importance of entrepreneurial intention is highlighted by Krueger et al. (2000). They mention that entrepreneurial intention should be studied for gaining more knowledge about the whole entrepreneurship stages. They mainly emphasize the entrepreneurial intention as the process of opportunity identification in the context of entrepreneurship research.

Thompson (2009) explains that the individual's entrepreneurial intents refer to establish newly ventures in the past, but it is more related with the beliefs and desires of the entrepreneurs recently.

There are some entrepreneurship theories or models widely used to analyze entrepreneurial intention and behavior. These are: Bandura's social cognitive theory, Krueger and Brazeal's entrepreneurial potential, Ajzen's theory of planned behavior, Bird's conceptual model of intentionality, Shapero's entrepreneurial event model, and Boyd & Vozikis' extended model of intentionality. Review of these theories will be discussed briefly in the following sections historically.

2.3.1. Shapero and Sokol's Model of Entrepreneurial Event (EE)

The entrepreneurial event model was the first reported conceptual model pertaining to entrepreneurship created by Shapero and Sokol (1982). Until that time, psychological aspects, personality, profiles, habits, characteristics and traits had been expressed to be the determinants of entrepreneurial intention and behavior.

Shapero and Sokol (1982) designed a theoretical framework model to clarify and interpret the entrepreneurial event by the perceived feasibility and perceived desirability.

Shapero and Sokol's model of entrepreneurial event implies that entrepreneurial intentions are prominent in the development of the entrepreneurial event. They considered the changes in life impel a change on the perception of feasibility and desirability of forming a new venture. And also, propensity to act on entrepreneurial opportunity should be present for the venture creation.

The model suggests that the life path changes, the displacement, impact on entrepreneurial intention and behavior.

The displacement or the critical life changes might be in a positive or negative. Positive displacement moves people into venturing and negative displacement moves people away from venturing. Displacement must be viewed as a catalyst for a change in entrepreneurial behavior for people to be in potential business start-ups. It helps individuals to act according to their perceived feasibility and perceived desirability to

involve in a venture creation. For this reason, the entrepreneurial events require the individual potentiality to initiate a business exists before creating the venture structure.

The Shapero's and Sokol's model is illustrated in Figure 2.2.

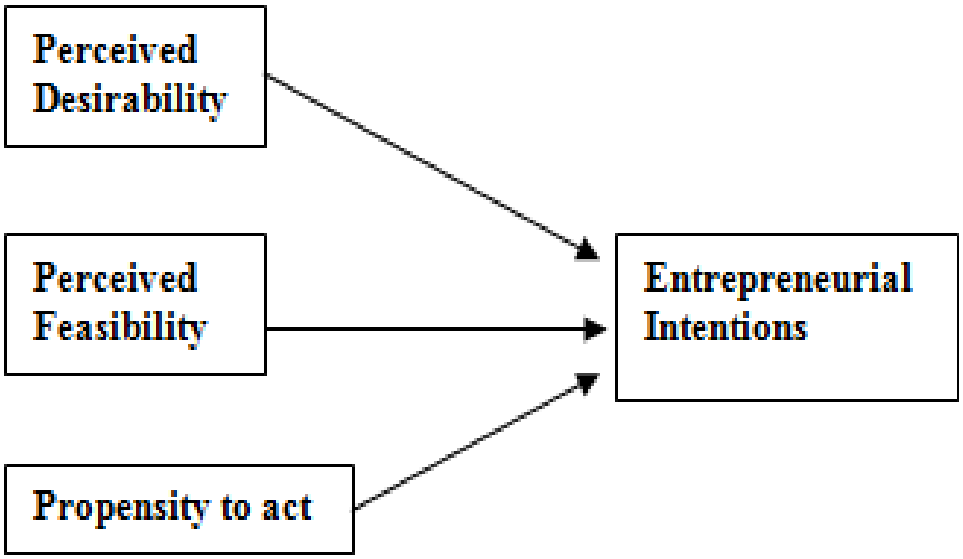

Figure 2.2. The Model of Entrepreneurial Event (Source: Shapero & Sokol, 1982)

Shapero and Sokol's model of entrepreneurial event considers that human behavior is inactive until it is a sudden movement. This expected change of movement hastens the behavioral change where the decision maker tries to find the best choice from the exist alternatives available.

The perceived feasibility and the perceived desirability are the two main predictors in entrepreneurial event model. The perceived feasibility refers to the personal capability of starting a business and the perceived desirability reflects the personal attraction of starting a business (Shapero & Sokol, 1982). Bird (1988), states the personal feasibility is formed on rational thinking and the personal desirability is presented from intuitive thinking in the intention process. The situation of starting an entrepreneurial event or becoming an individual entrepreneur is based on perceived feasibility and desirability of that event and it requires also a propensity to act whenever opportunities occur (Krueger, 2007).

2.3.2. Bandura's Social Cognitive Theory (SCT)

Social cognitive theory is another well known entrepreneurial theory which was developed by Bandura (1986, 1989, 2001) in order to explain the behavior of the individuals. He discusses that personal characteristics, behavior and environmental factors all affect each other in a bidirectional flow acting as interlocking mechanisms. Social cognitive theory assumes that the occurrence of the behavior of the individual is the result of the interaction between the individual's external environmental factors and the personal characteristics (Bandura, 1986, 1989, 1991; Scott, 2012).

Figure 2.3 illustrates the framework of the social cognitive theory.

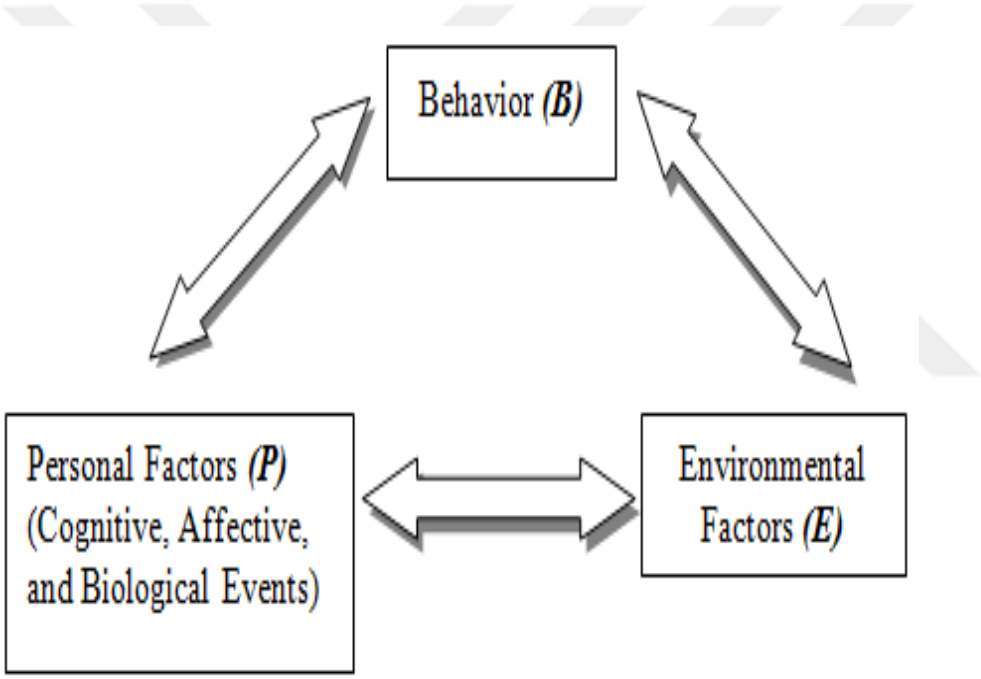

Figure 2.3. Social Cognitive Theory (Source: Bandura, 1986)

Social cognitive theory claims that individual's behaviors result from the interaction between personal factors and environmental factors. The reciprocal influence between the external environment and the person includes the cognitive events and individual's beliefs which are improved by the social and corporeal environment (Kickul, Wilson, Marlino, & Barbosa, 2008; Wang, Prieto, & Hinrichs, 2010). The physical environment refers to the individual's surrounding and access to available

resources, whereas, the social environment involves the individual's friends, role models, and family members (Pajares, 1997).

The most important aspect of the SCT is the self-efficacy for any specific behavior (Bandura, 1986; Kickul et al., 2008). Bandura (1977, 1989) considers self-efficacy as individuals' assessments of the capabilities to coordinate and accomplish the required actions to achieve defined performance types. In the entrepreneurial event, self-efficacy is described as an active set of confidences and beliefs that are very particular to specific behaviors and that interaction with other persons, behaviors and external factors (Moriano, Gorgievski, Laguna, Stephan, & Zarafshani, 2012; Van Gelderen et al., 2008).

The self-efficacy is very important and most widely used factor in social cognitive theory to study entrepreneurial intention and entrepreneurial behavior in entrepreneurship area (Bandura, 2006; Kickul et al., 2008; Lee, Wong, Der Foo, & Leung, 2011; Moriano et al., 2012; Prodan, & Drnovsek, 2010; Van Gelderen, Thurik, & Patel, 2011; Wang, Prieto, & Hinrichs, 2010).

2.3.3. Bird's Model of Intentionality

Bird (1988) describes entrepreneurial intentionality is a state of mind leading an individual's attention and experience toward a target behavior in order to accomplish something. She designed a behavioral model of intentionality to explain how entrepreneurs create, sustain and transform business concepts based on interviews with 20 entrepreneurs.

Her model of intentionality refers to rational and intuitive thinking based on the interaction of personal and social context in the entrepreneurial event. Personal and social contexts may have an effect on individuals to engage in a business formation. Personal context involves personality traits, personal capabilities and previous self-employment experience. And, social context refers to social, political, economic environmental conditions such as economic conditions and the government policy and regulation of industries.

Bird's (1988) model of intentionality is depicted in Figure 2.4.

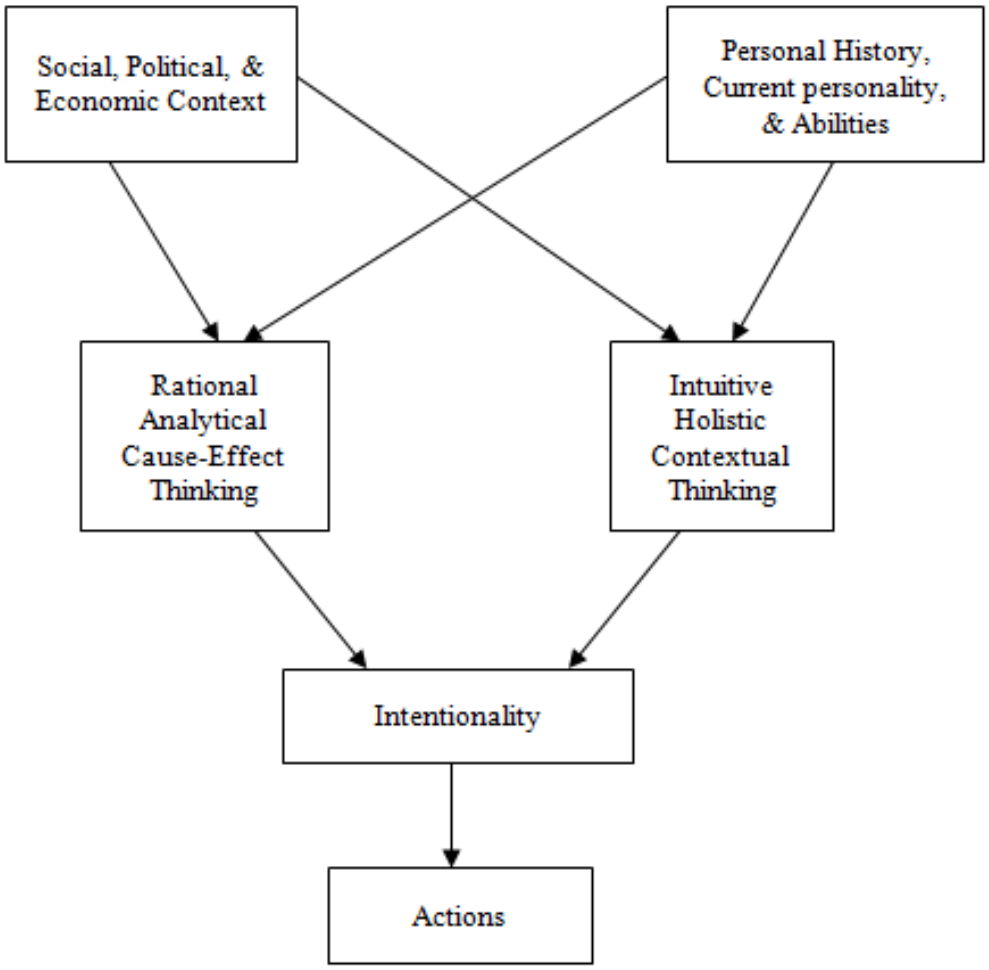

Figure 2.4. Bird's Model of Intentionality (Source: Bird, 1988)

Bird (1988) claims that the entrepreneurial ideas and entrepreneurial intentions of the individuals are main components that form the initial stage of creating new organizations. She claims that the entrepreneurial ideas start with inspiration and these ideas cannot be manifest without intentions.

According to her intentionality model, intentionality and actions are based on the entrepreneur's personal need, values, beliefs, and social, political and economic context with the combination of the ability of creating and maintaining temporal tension, sustaining a strategic target and developing a strategic posture.

Bird (1988) identifies the temporal tension as an ability to have a vision about the future and claims that successful entrepreneurs have this ability. She also claims that successful entrepreneurs are better able to build and sustain a strategic target, and to possess temporal tension ability to see both the longitudinal whole picture.

2.3.4. Ajzen's Theory of Planned Behavior (TPB)

The theory of planned behavior is viewed as the most common effective theoretical model used for the prediction of individuals behavior created by Ajzen (Ajzen, 1987; Delmar & Davidsson, 2000; Krueger et al., 2000). This theory has been used in the entrepreneurship literature as the foundation of entrepreneurial attitude (Liñán & Chen, 2009).

There is another widely known theory, developed by Ajzen and Fishbein in 1980, related to behavioral intention in the entrepreneurial literature is the theory of reasoned action (TRA) (Ajzen, 1991, 2002).

The main difference between the theory of planned behavior and theory of reasoned action is the limitation of volitional control in the theory of reasoned action in relating to human behaviors. Behavioral intentions are determined by the individual's attitude and beliefs behavior and subjective norms can be role models, leaders, relatives or more who significant influence on her/him in the theory of reasoned action,

The Theory of Planned Behavior assumes that individuals are rational and they consider all available information to identify their behaviors (Ajzen, 2005). Moreover, TPB has extensive applications on a wide range of different disciplines such as sociology, social psychology, political sciences, economics, information technology, nursing, and health psychology (Armitage & Christian, 2003).

TPB is very helpful in providing valuable information that is consistent in understanding behaviors performed in both social and behavioral sciences in the context of behavioral interventions and according to this theory, behaviors result from intentions and plans (Ajzen, 2005).

The theory of planned behavior is based on a cognitive perspective that focusing on the entrepreneurial to execute a specific behavior. Krueger (2003) expresses intention is the cognitive situation before accomplishing a specific behavior in cognitive psychology. In essence, intention shows the strength of an individual's readiness and willingness performing particular behavior.

Another important concept is the transformation of intention into action under volitional control. Volitional control refers to a cognitive process that an individual is

free to decide and commit to a particular behavior. However, most actions depend on availability of important opportunities and resources to be performed successfully (Ajzen, 1991). Therefore, a person's real control involves volitional control and required important resources and opportunities to carry out the behavior.

The model of the Theory of Planned Behavior, illustrated in Figure 2.5 incorporates with attitudes, intentions, beliefs, and behavior (Ajzen, 1991).

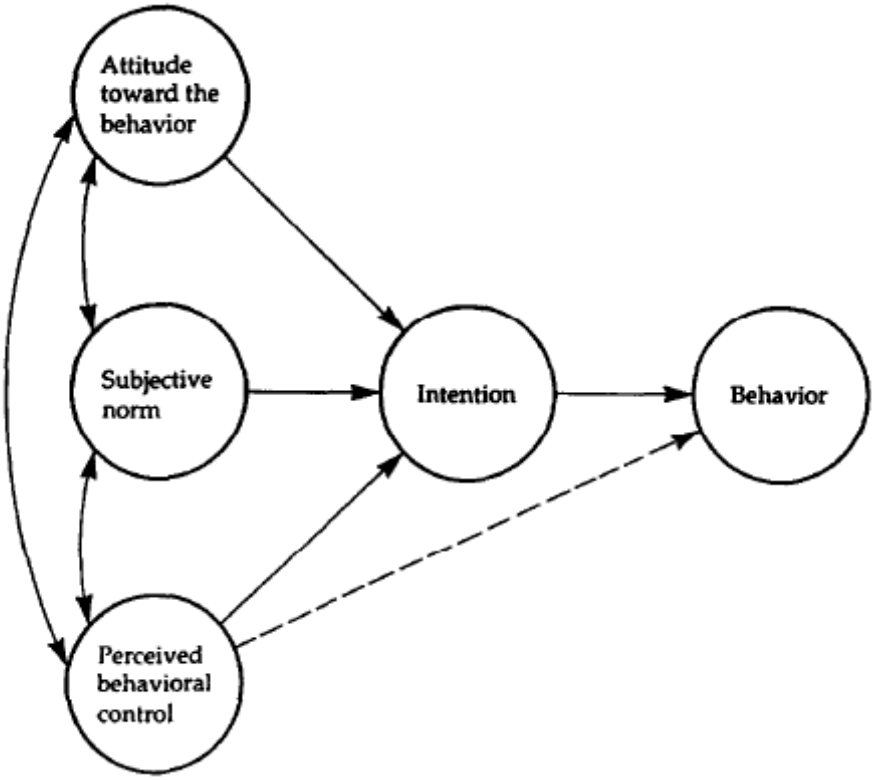

Figure 2.5. Theory of Planned Behavior (TPB) (Source: Ajzen, 1991)

Perceived behavioral control, subjective norm, and attitude toward the behavior are three important determinants of entrepreneurial intention to predict future behavior in TPB. The behavioral personal judgments indicate the personal belief of attitude toward the behavior. The second determinant, subjective norm, relates to the social pressure on individuals influencing their decisions to execute a specific behavior. Perceived behavioral control is the third determinant concerning with the individual's perceived ability to execute and accomplish a specific behavior (Ajzen, 2005).

Ajzen (2005) identifies that behavior can be traced back to three substantial types of beliefs as normative beliefs, behavioral beliefs, and control beliefs. According

to the theory of the planned behavior model, control beliefs influence the perceptions of behavioral control, normative beliefs impact subjective norms, and behavioral beliefs are said to influence attitudes toward the behavior.

The relations of these beliefs are illustrated in Figure 2.6.

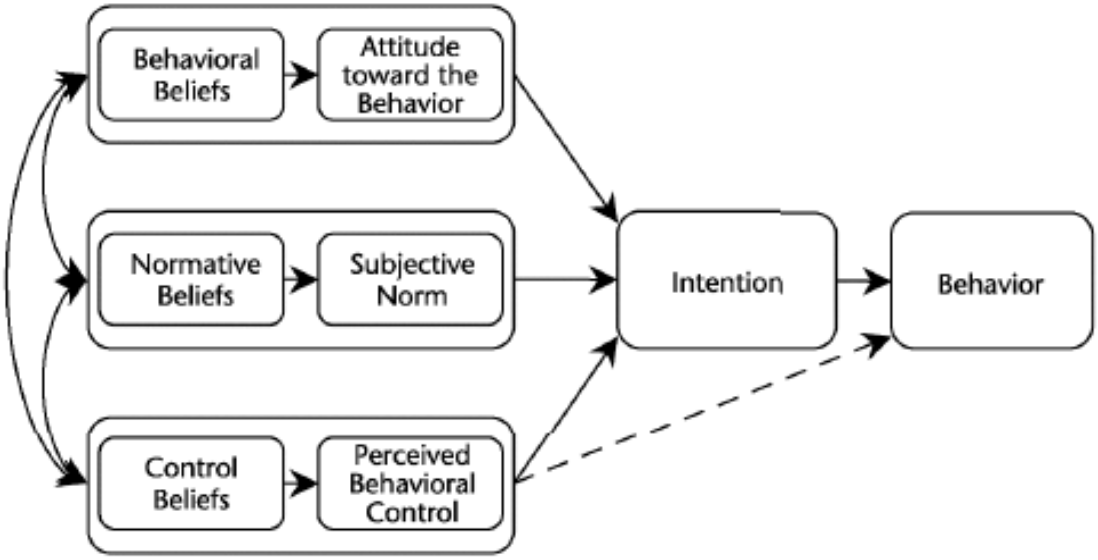

Figure 2.6. Beliefs of intentions and behavior in TPB (Source: Ajzen, 2005)

Ajzen (2005) revised the original model of the theory of planned behavior he developed in 1991 by adding background factors on beliefs. He claims that these background factors have an important impact on beliefs and should be considered as the main components of the theory of planned behavior. Age, gender, education, personality, religion, race, ethnicity, attitudes, opinions, emotions, desires, feelings, values, traits, principles, morals, intelligence, knowledge, experience and perceptions are some examples of such background factors (Ajzen, 2005).

Ajzen (2005) categorized background factors into three dimensions: social, personal, and information represented in Figure 2.7.

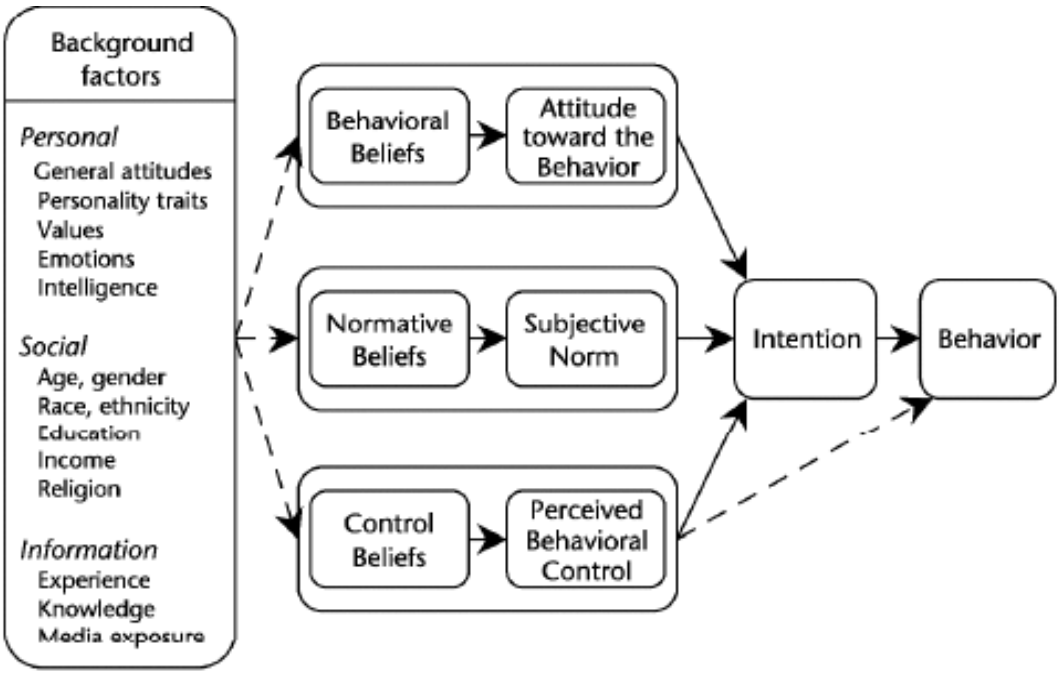

Figure 2.7. Background factors in TPB (Source: Ajzen, 2005)

Although, there are many background factors influencing beliefs and not limited, the TPB theory model is unable to prove a specific link between factors and beliefs. Therefore, background factors and beliefs are joined with the dotted lines to display this weak connection in Figure 2.7.

2.3.5. Krueger and Brazeal's Entrepreneurial Potential Model

Krueger and Brazeal (1994) developed a framework to indicate the similarity of Ajzen's theory of planned behavior and Shapero and Sokol's model of the entrepreneurial event. They demonstrated the relationships between these two models. They claimed that perceived behavioral control of the theory of planned behavior is related to perceived feasibility in the entrepreneurial event model. They argued that perceived desirability in the entrepreneurial event model corresponds to social norms and the act of forming a new business in the theory of planned behavior (Kickul et al., 2008; Van Gelderen et al., 2008).

Krueger and Brazeal (1994) placed new term credibility into the model to explain and distinguish entrepreneurial potential from intentions. Figure 2.8 illustrates the model of entrepreneurial potential.

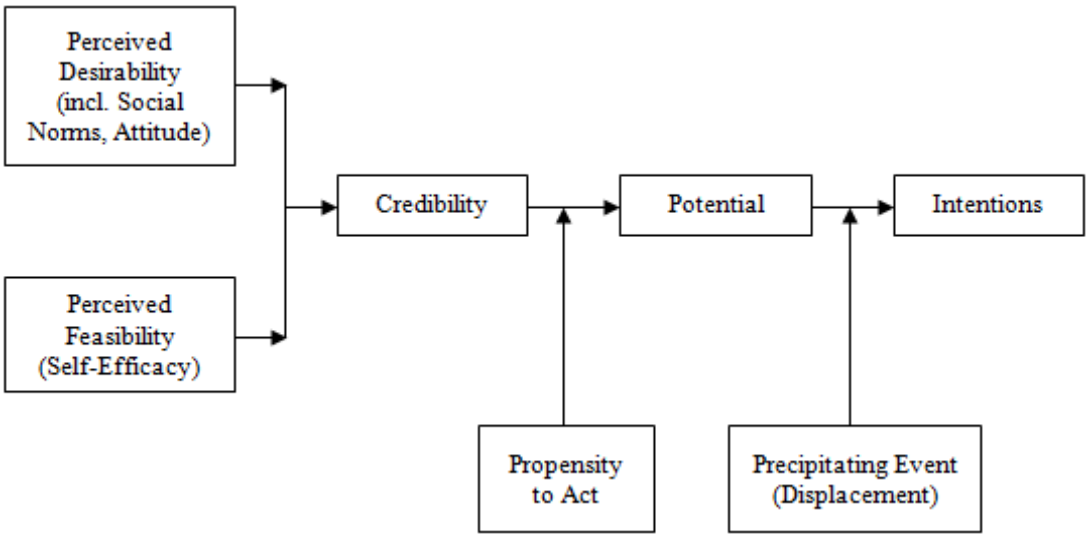

Figure 2.8. Model of Entrepreneurial Potential (Source: Krueger & Brazeal, 1994)

According to their model of entrepreneurial potential, credibility results from both perceived desirability and perceived feasibility, and entrepreneurial behavior is dependent on the different credibility of varied behaviors integrated with some propensity to act. The relative credibility also requires potential entrepreneurial behavior.

Krueger and Brazeal (1994) suggest that propensity to act controls the potential to start a business venture as a moderator and entrepreneurial potential exist before any economic, political or social displacement in the entrepreneurial event. They also claim that other impacts work through perceptions of feasibility and desirability with propensity to act by influencing on attitude. They define perceived feasibility as a personal capability to carry out a specific behavior involving competence and control in a specific condition. They argue that perceived feasibility and perceived self-efficacy has the same concept. Moreover, they conclude that Shapero and Sokol's model of entrepreneurial event is almost similar to the Ajzen's theory of planned behavior.

2.3.6. Boyd and Vozikis' Extended Model of Intentionality

Boyd and Vozikis (1994) enhanced the Bird's intentionality model of by adding the self-efficacy construct. The main modification includes a self-evaluation of personal competence involving motivation.

Figure 2.9 illustrates the extended model of intentionality.

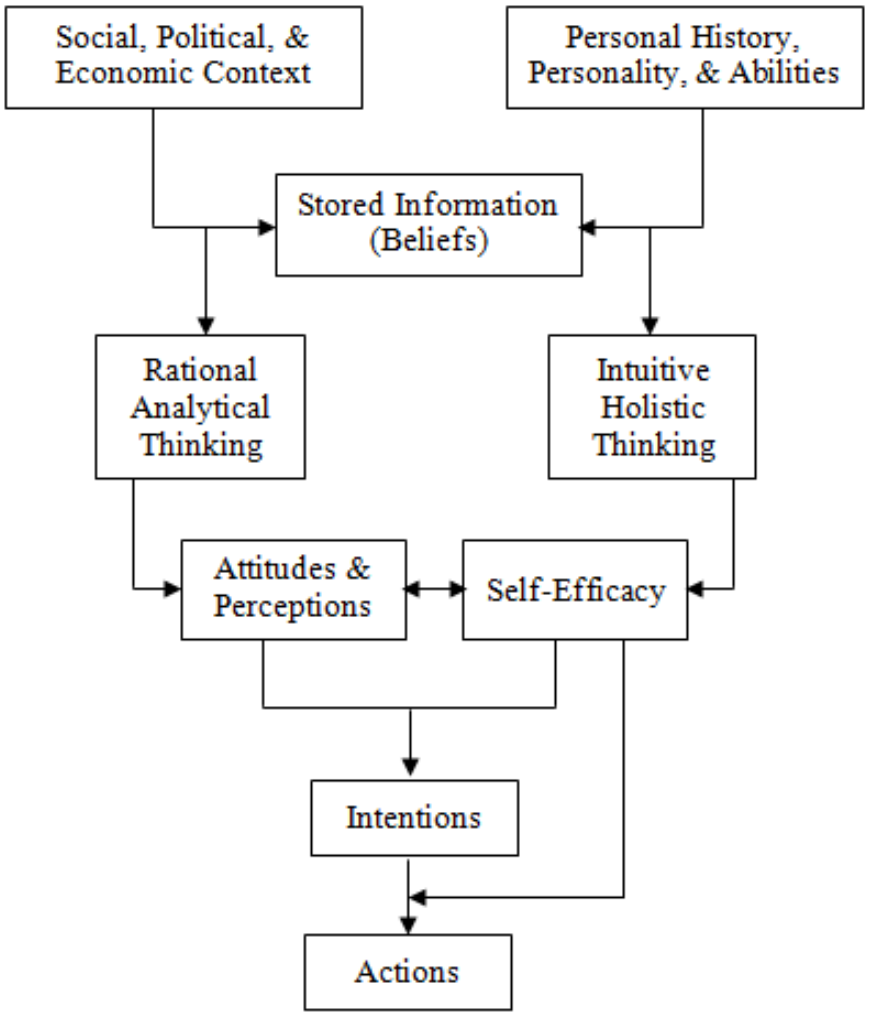

Figure 2.9. Extended Model of Intentionality (Source: Boyd & Vozikis, 1994)

There are some theoretical propositions related to this model concerning goal setting and goal commitment. It has been argued that people's beliefs are affected by self-efficacy about attaining certain goals (Boyd & Vozikis, 1994).

Boyd and Vozikis (1994) claim that self-efficacy results from the intuitive behaviors as an individual's beliefs about perceived ability to execute specific job in a given situation. Gist and Mitchell (1992) explained that self-efficacy is an extensive summary of judgment of perceived capability to carry out a particular task.

Wood and Bandura (1989) discuss that self-efficacy is most relative to perceived capability of an individual to activate behavior pattern and motivation required to satisfy

specific demands. The self-efficacy term originates from social learning theory which has been expanded to social cognitive theory (Bandura 1997, 2001).

Bandura (1997) argued that the acquisition of skills affect preferences, choices, goals, desires, passions, aspirations, hopes, and intentions. The self-perception of one's capabilities provides higher aspirations, strengthens self-efficacy and improves future performance by previous achievements (Gist, 1987). Self-efficacy is evenly achieved by the improvement of linguistic, physical, cognitive, and physical social skills that are acquired through different types of experience such as social persuasion, mastery experience, and vicarious experience (Wood & Bandura, 1989).

Furthermore, Kolvereid (1996) used Ajzen's theory for predicting occupational choice intentions; Reitan (1996) combined Ajzen's theory with Shapero's entrepreneurial event model into a new model to study situational factors in entrepreneurial intentions, Davidsson (1995) developed an economic-psychological model with a construct labeled conviction as the main determinant of entrepreneurial intentions, and Autio, Keely, Parker, Klofsten, and Hay (2001) have also tested Davidsson's model and focused on situational variables such as university environments.

As explained by the different research models, there appear to be several possible approaches to studies of entrepreneurial intentions. Despite many similarities exist in the proposed intention models, the different approaches undertake to predict entrepreneurial behavior based on the formation of entrepreneurial intentions.

Based on the main research questions introduced in the introduction chapter, the present literature review, and empirical studies, it appears that Ajzen's theory of planned behavior may serve as a convenient model for this thesis.

Consequently, it is important to examine influenced factors on entrepreneurial intentions for better understanding the entrepreneurial event. In this study, the influence of different factors on entrepreneurial intention will be studied to better understand the intended behavior.

2.4. Factors Affect Entrepreneurial Intention

As presented in the first chapter, different dimensions of personal factors have been studied in this research. Personal factors include personal attitude, internal locus of control, and self-efficacy. Based on Ajzen's (1991) theory of planned behavior, this study identifies the influence of personal factors on entrepreneurial intention among nascent entrepreneurs. Each factor will be discussed in the following sections with the proposed hypotheses respectively.

2.4.1. Personal Attitude

Many empirical analyses concentrate on the personal level analysis of entrepreneurial behaviors (Autio, Klofsten, Keeley, Parker, & Hay, 2001; Kristiansen, 2001; Lee & Wong, 2003). The two major factors treated to be the main research target are cognitive factors and human capital factors.

Ang and Hong (2000) revealed that the cognitive factor involves tolerance of ambiguity, risk-taking propensity, and internal locus of control, novelty, self-determination and independence. Franco, Haase, and Lautenschläger (2010) described cognitive factors to encompass personal factors, which could separate entrepreneurs from non-entrepreneurs. Abbey (2002) classified personality features, individual motives and some specific characteristics into personal factors. Lüthje and Franke (2003) discussed that the personality traits and personal attitudes could have an important effect on entrepreneur's choices.

In the entrepreneurship literature, the individual characteristics level has also been interested in human capital factors, such as marital status, gender, age, education, family experience, management capability and previous working experience. Many researches have focused on the influence of specific demographic characteristics (Becker, 1994; Bird & Wennberg, 2014; Franco et al., 2010; Lee et al., 2003; Li, 2007; Minniti & Nardone, 2007; Stewart et al., 2003; Wilson, Kickul, & Marlino, 2007).

Turker (2005) discovered that the human factors are statistically vital in analyzing entrepreneurial intention. Wilson et al. (2007) studied the influence of gender on entrepreneurial intention. They founded male students showed higher entrepreneurial self-efficacy than female students.

Arenius and Minniti (2005) discuss the concept of perceptual variables, which could describe the subjective perceptions and beliefs of the individuals. They investigated individual's decision of becoming an entrepreneur in 28 countries by concluding perceptual variables are highly correlated in the creation of new ventures.

Ajzen (2002) stated that personal attitude would impact beliefs which in turn influence entrepreneurial intentions. According to Ajzen (2002), personal attitude refers to an individual's emotional deliberations that reflect the extent to which a person receives a negative or positive evaluation about a behavior when starting entrepreneurial activity.

Attitudes have certain relations with the entrepreneurial intention in studies by Angriawan, Conners, Furdek, and Ruth (2012), Kolvereid and Isaksen (2006), Küttim, Kiis, Kallastea, and Venesaara, (2014), Liñán and Chen (2009), Mueller (2001), Malebana (2014), Otuya, Gichira, Martin, and Kibas, (2013), Zampetakis, Anagnosti and Rozakis (2014). Based on the arguments, this thesis will seek to measure the personal attitude of nascent entrepreneurs in order to determine if there is any influence on entrepreneurial intention and the first hypothesis will be:

Hypothesis 1: There is a relationship between personal attitude (PA) and entrepreneurial intention (EI) among nascent entrepreneurs.

2.4.2. Self-Efficacy

Self-efficacy is another personal factor that could influence the individual's entrepreneurial intention. Bandura (1977, 1989, 2001) describes self-efficacy as individuals' assessments of the abilities to accomplish and achieve a specific performance. According to Sesen (2013) self-efficacy influences beliefs and intentions of people in a way regardless from their success in accomplishing personal ideals (Wilson et al., 2007) and is also considered a motivational notion that impacts individual choices (Malebana, 2014).

Basu and Virick (2008), argue that self-efficacy is the staying power and persistence of one's belief in own capability to perform particular tasks and achieve

intended goals. Kristiansen and Indarti (2004) stated that self-efficacy can affect people's intent to be an entrepreneur.

Markman, Balkin, and Baron (2002) noted that self-efficacy influences on perceptions of control and stress. It also effects on the depression individuals experience and achievements that individuals experience in taxing, wearying, trying, exhausting or uncertain situations that requires a lot of mental or physical effort.

Bandura (1986, 1991) discussed that an individual's belief in their own efficacy affects their choices, aspirations, motivation and endeavor. He also stated that self-efficacy is the most effective estimator for predicting entrepreneurial performance.

Chen, Greene, and Crick (1998) discuss that efficacy is nearly to action and intentionality. Krueger and Brazeal (1994) stated that entrepreneurial self-efficacy was another basic prerequisite for nascent entrepreneurs to become a recent potential entrepreneur. Drnovsek and Glas (2002) suggest that self-efficacy is a suitable perspective to study entrepreneurship.

Chen et al. (1998) mentioned that self-efficacy can be used to estimate and examine the opportunities, alternatives, choices, decisions, persistence and effectiveness of entrepreneurs. They concluded that small business founders reached much higher in entrepreneurial self-efficacy when compared to non-founders in their study. Another study conducted by Baum and Locke (2004), discovered that creator or founder of the business that have higher self-efficacy were able to perform higher growth in their business. Therefore, next hypothesis will be:

Hypothesis 2: There is a relationship between self-efficacy (SE) and entrepreneurial intention (EI) among nascent entrepreneurs.

2.4.3. Locus of Control

Locus of control is mainly seen to be a cognitive characteristic. Swayne and Tucker (1973) refer to action orientation when indicating locus of control where Bateman and Crant (1993) notice to the proactive personality.

McNerney (1994) advises that entrepreneurs are self-motivated people and do not accuse exterior powers for happenings in their lives. He also points out

entrepreneurs believe that they have control over their destiny. Brockhaus and Horowitz (1986) refer to this belief of efforts and abilities as locus of control. They argue that locus of control is an important determinant in entrepreneurial literature influencing individual's entrepreneurial intention.

Locus of control is generally relative to the Internal-External Locus of Control Scale published by Rotter (1966). He defined internal locus of control as an intuitional entrepreneurial behavior. People with a strong internal locus of control believe that their future is in their own hands and that their lives derive from their own efforts and abilities.

According to Shaver and Scott (1991), locus of control is an idea given much attention in the entrepreneurial literature. Locus of control is the reflection of the beliefs that influence the personal traits, motivations, and decisions (Ajzen, 2002; Corman, Perles, & Yancini, 1988). Shapero and Sokol (1982) concluded that entrepreneurs have more internal locus of control. Therefore, next hypothesis will be:

Hypothesis 3: There is a relationship between internal locus of control (LoC) and entrepreneurial intention (EI) among nascent entrepreneurs.

Table 2.1 presents the summary of the underlying hypotheses.

Table 2.1 *Summary of the Underlying Hypotheses*

No.	**Hypothesis**
H_1	There is a relationship between personal attitude (PA) and entrepreneurial intention.
H_2	There is a relationship between self-efficacy (SE) and entrepreneurial intention.
H_3	There is a relationship between locus of control (LoC) and entrepreneurial intention.

CHAPTER 3
RESEARCH METHOD

The research methodology adopted in this thesis will be explained in this chapter. It discusses particular information of the research model, research approach, research participants, data collection, survey questionnaire formulation, measures, and the data analysis process used in this study.

3.1. Research Model

The literature review in the earlier chapter suggests that entrepreneurial intent is affected by personal factors (Krueger et al., 2000; Minniti, 2005; Sternberg & Wennekers, 2005) and environmental factors (Bowen & De Clercq, 2008; Diaz - Casero et al., 2000).

The theoretical outline of this thesis is based on the theory of planned behavior (TPB) Ajzen (1991) that essentially implies the intention to execute a specific behavior is the most important determinant of entrepreneurial behavior.

As stated in Ajzen's theory of planned behavior, intentions are subject to perceived behavioral control, personal attitudes or attractions, and subjective norms (Ajzen, 2002; Friedkin, 2010; Liñán, Nabi, & Krueger, 2013). According to TBP model, *subjective norms* indicate the perception of reference group. Subjective norms reveal the approvement of this reference group involving friends, family, or others for entrepreneurial start-up decision of.

Ajzen (2002) suggests that individuals improve their own attitudes pertaining to the beliefs for executing specific behavior. *Attitude toward the behavior* indicates to the degree to which the individuals hold a complete negative or positive personal valuation about starting a new business as an entrepreneur. The results of the behavior performances include various extrinsic and intrinsic rewards that determine the intention to start a new venture (Bowen & De Clercq, 2008; Krueger et al., 2000; Minniti, 2005; Vanevenhoven, & Liguori, 2013).

Perceived Behavioral Control indicates to one's self reliance and belief of ability to perform an entrepreneurial activity (Ajzen, 1991). It may also be considered as *entrepreneurial self-efficacy* in the entrepreneurship context and highly affects entrepreneurial intention (Krueger et al., 2000). Perceived behavioral control helps to realizing success and self confidence in business (Ajzen, 2002; Sternberg & Wennekers, 2005).

Shapero and Sokol (1982) believe that entrepreneurial intentions to create and establish a new venture results from the perceptions feasibility and desirability with a propensity to act. They assume that perceived feasibility and desirability that manage personal decisions are the results of social and cultural environments.

Krueger and Brazeal (1994), describes *perceived feasibility* as a perceived feasible career option that can start a new business. Perceived feasibility can be affected by the presence of reference group, barriers, handicaps, restrictions, education, social and financial support, resource availability, reliance in ability to accomplish efforts to start a new venture (Gasse & Tremblay, 2011). It is seen that perceived feasibility is identical to perceived behavioral control in the theory of planned behavior model.

Perceived desirability defines a willingness that reflects attraction against entrepreneurial activity (Krueger, 1993). According to the theory of planned behavior, the accomplishment of start a new venture is regarded as a collection of social norms and personal attitudes together. Desirability of perceptions concept is investigated by Shapero and Sokol (1982) using information on friends, role models, peer groups, family members, social and cultural values held by potential entrepreneurs.

Propensity to act refers to the tendency to conceive in order to influence one's decisions and is dependent on one's perception of control (Krueger et al., 2000).

The original model of the theory of planned behavior was modified by Ajzen (2005) adding new background factors including environmental, personal, and demographic factors. Bird (1988) and Shapero and Sokol (1982) draw attention to the indicative role of both environmental and personal factors in entrepreneurial intention.

The research model based on Ajzen's (1991) model of the theory of planned behavior analyzes relationships among personal factors, and their influence on entrepreneurial intention. Individual's behaviors are pretended to be components of the

pertinent knowledge and beliefs that relevant to these particular behaviors in the theory of planned behavior (Ajzen, 1991). Since the TPB model is created for predicting and explaining behaviors in specific contexts, this theory is suitable for this study.

Along these lines, personal factors of the structural model that are proposed in this study are deducting from the Ajzen's (1991) theory of planned behavior. This is suitable for this thesis because TBP model has been applied for earlier researches to predict and to explain possible entrepreneurial intentions in entrepreneurship activities (Ajzen, 2002; Bird, 1988; Elfing, Braanback, & Carsrud, 2009).

Tkachev and Kolvereid (1999) studied on self-employment intentions of university students of medical and technical department from three different universities in Russia. They concluded that TPB determined employment status choice intentions. Kolvereid (1996) implemented the theory of planned behavior for predicting and revealing intention choices of the employment status with using a sample of business department students.

Engle, Alvarado, Buame, Gavidia, Dimitriadi, Delaone, He, Schlaegel, and Wolf (2010) examined the competence of TPB model for predicting entrepreneurial intention among university students in 12 different countries. They concluded that Ajzen's TPB model significantly predicts entrepreneurial intention in each countries and social norms was the most considerable predictor variable of entrepreneurial intention among university students.

Krueger et al. (2000) employed a competing perspective to theory of entrepreneurial events (Shapero & Sokol's, 1982) by examining Ajzen's TBP model. The results concluded that strong statistical support was offered for both intention-based models.

In another international study, Ajzen's TBP model is applied for determining the influencing determinants on entrepreneurial intention among university students from four different countries having a result of perceived behavioral control as the strongest influence factor on entrepreneurial intention (Autio et al., 2001).

Kolvereid and Isaksen (2006) tested TPB model by substituting Bandura's (1990) self-efficacy for perceived behavioral control concerning self-employment in new businesses using data from Norwegian business founders. In the context of the

entrepreneurial intention development, theory of planned behavior is applied in another study conducted by Fayolle, Gailly, and Lassas - Clerc (2006) to examine the effect of an entrepreneurship education program.

Liñán and Chen (2009) used TPB model for testing demographic variables in the decision of starting new ventures as the most important factors on entrepreneurial intentions among university students in two different countries. They founded that demographic variables have significant influence on entrepreneurial intent and cultural values have vital role in perceiving entrepreneurial intention.

Some of studies, in the context of entrepreneurship, concentrate attention on environmental conditions as important factors of personal enthusiasm to start new businesses (Schwarz, Wdowiak, Almer-Jarz, & Breitenecker, 2009). The entrepreneurial environment is described as a key determinant in developing entrepreneurship since individual's attitudes and behaviors are influenced by the environmental conditions (Sadeghi et al., 2013).

Consequently, as can be seen, the TPB theory has much relation in entrepreneurship context. In keeping with these arguments, personal factors concluded in a proposed research model depicted in Figure 3.1 to investigate how they contribute to entrepreneurial intention among nascent entrepreneurs. The proposed research model identifies personal factors effect on entrepreneurial intention among nascent entrepreneurs.

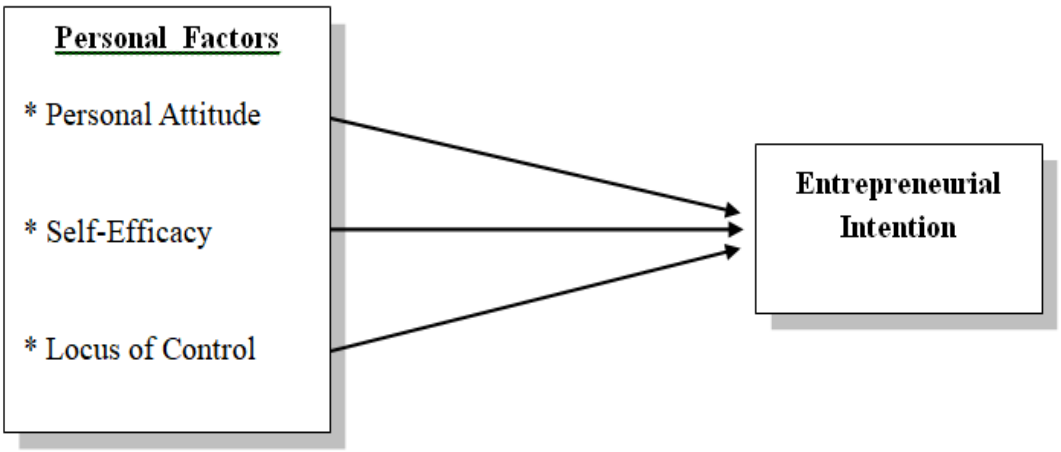

Figure 3.1. Proposed Research Model

The proposed structural model illustrated in Figure 3.1 displays a general view of the proposed research model. Davidsson, Delmar, and Wiklund (2006) noticed that there is an increasing demand to study on the company level of the entrepreneurship. On the other hand, since there is no company yet in the intention period, nascent entrepreneurship should be examined on the individual level. Therefore, the individual level analysis is the main focus of this thesis.

Considering the structural model that examined in this study, proposed hypotheses are provided in Figure 3.2 linked to the structural model.

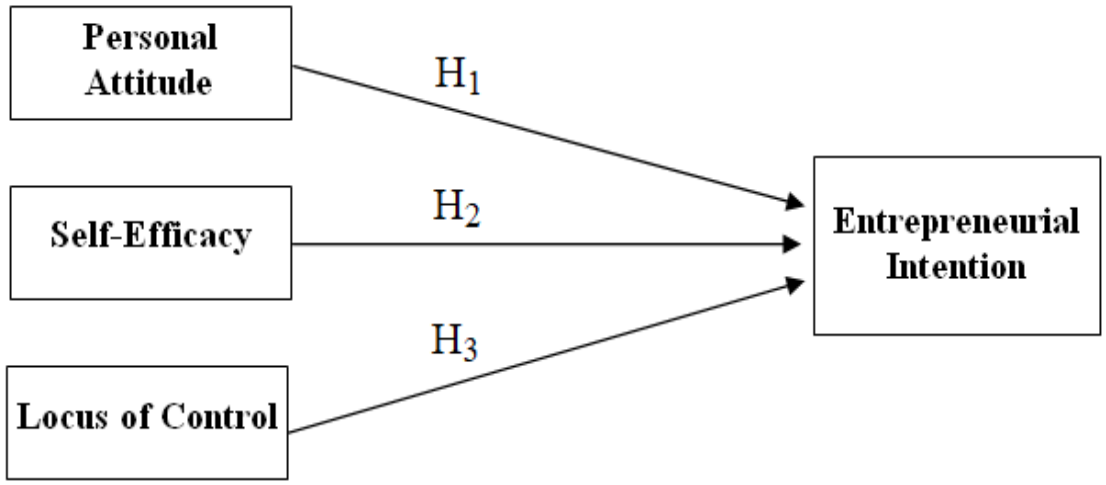

Figure 3.2. Proposed Structural Model with Hypotheses

3.2. Research Approach

Research approaches are methods of data collection, analysis, and interpretation that represent a perspective for research involving the steps from broad assumptions to detailed plans and procedures (Creswell, 2013). He describes three research methods as qualitative approach, quantitative approach, and mixed approach methods.

According to Creswell (2013), qualitative approach is a method for analyzing and interpreting the meaning individuals or a group ascribes to a social problem. This method involves questions and procedures, data collection, inductive data analysis and interpretations.

However, quantitative approach examines targeted assumptions by investigating the relationships among constructs. In this method, statistical procedures are used for data analysis. Mixed method is another approach that involves both quantitative and qualitative methods. This method uses different designs that may include philosophical assumptions and theoretical foundations by integrating the two forms of data.

This thesis adopts a quantitative approach because many of the following points are identified in this study defined as key elements of quantitative approach method by Neuman (2002) and Creswell (2013):

- Hypotheses are posited and tested by the researcher,
- The researcher is unbiased,
- Measures are constituted before data collection,
- Objective theory is primarily casual and deductive,
- Definite constructs and variables are used in the concepts,
- Data is submitted by numbers obtained from determined analyses, and
- Data analysis is attempted to making use of mathematics and statistics to prove how the collected data link to the underlying hypotheses generated.

This study is also considered as a positivist approach. Firstly, theoretical hypotheses are stated. Second, empirical evidence is combined into a collection in order to prove hypotheses by following processes of deductive reasoning (Creswell, 2013). Third, mathematical analyses and statistical methods are used to demonstrate relationship among interested constructs (Chen & Hirschheim, 2004; Creswell, 2013; Neuman, 2002). Fourth, a survey questionnaire is used for data collection derived from an unbiased representative sample of target population means quantitative and positivist approach. Fifth, generalization and replication of results were the objective of this study (Crotty, 1998; Neuman, 2002).

3.3. Research Participants

The population of interest for this research is nascent entrepreneur. As identified within the previous chapter, the term *nascent entrepreneur* defines a person who engaged in a business start-up process. In this study, research participants are the nascent entrepreneurs who attained to the entrepreneurship course program founded

through the Small and Medium Industry Development and Support Agency (KOSGEB) in Adana, Turkey.

Participants in the main study were selected on a voluntary basis among the attendees of the entrepreneurship course program at Adana Science and Technology University (ABTU) in May 2016.

Thompson (2002) defines sample selection as the sampling from the target population for predicting the entire population. In this study probability sampling is used. According to Thompson (2002), the likelihood of chosen any individual from the target population is equal in probability sampling. Additionally, the samples used in this study were selected randomly from the target population and therefore they are designated as random samples.

3.4. Data Collection

To collect data, a questionnaire was deployed in this study to measure the self-assessment of nascent entrepreneurs regarding the factors influencing on entrepreneurial intention identified in previous chapter.

The scales used in the questionnaire had been confirmed in previous international studies. Furthermore, a pilot study was conducted before the main study to assure of the printed form questionnaire instrument is suitable for the study with nine participants from the target population (Creswell, 2013; Neuman, 2002). After receiving responses from the pilot study, no modifications were needed to the questionnaire.

The printed form questionnaires were handed out to the nascent entrepreneurs that were selected on a voluntary basis among the entrepreneurship course attendees for the main study. The researcher remained at the front of the room while the printed form questionnaires were delivering to participants for the purpose of to answer any questions if participants had. So, the participants could be cleared up and clarified for more accurate responses by the researcher immediately.

The collected data set were analyzed with specialized statistics software IBM SPSS Statistics and the model was tested by structural equation modeling software IBM SPSS AMOS.

3.5. Survey Questionnaire Formulation

A questionnaire instrument was arranged to gather information based on designated factors and related items for these factors. In order to answer questions more quickly and easily by participants, questions about the same factor were grouped together in the questionnaire (Malhotra, 2006; Kendall K. & Kendall J., 2005; Walonick, 2010). Shuttleworth (2008) mentions similar topics should be grouped together in the questionnaire.

Eventually, designed questionnaire is composed of two sections. First section of the questionnaire instrument is related to items to measure the personal factors impacting on entrepreneurial intention among nascent entrepreneurs (personal attitude, self-efficacy, locus of control, and entrepreneurial intention). These interested factors are measured on a five-point likert-type scale ranging from 1 to 5, where "1 = completely agree", "2 = agree", "3 = undecided", "4 = disagree" and "5 = completely disagree". The survey questionnaire can be found in Appendix-1. The other section is related to demographic information including education level, age, and gender about the participants. Detailed information about the scales is given below;

- Five questions are formulated to measure the *personal attitude (PA)* of the respondents to this survey. These questions to evaluate the respondent's personal attitude are based on a survey conducted from Liñán and Chen (2009).
- Five questions are formulated to assess the *self-efficacy (SE)* among the respondents to this survey. The questions to determine the respondent's entrepreneurial self-efficacy are based on a study from Kolvereid and Isaksen (2006).
- Five questions are formulated to examine the *entrepreneurial intention (EI)* of the respondents to this survey. These questions are formulated based on two different surveys developed by Krueger et al. (2000) and Liñán and Chen (2009).

- Five questions are formulated to test how internal the *locus of control (LoC)* among the respondents to this survey. These questions are formulated based on enterprising tendency test developed by Caird (2013).
- Last three questions are asked to get the *demographic information* among the respondents to this survey. These questions are related to gender, age and education level of the respondent's.

3.6. Measuring the Constructs

As stated in the previous chapters, this study analyses the effect of various factors on entrepreneurial intention among nascent entrepreneurs. Entrepreneurial intention (EI), personal attitude (PA), self-efficacy (SE), and internal locus of control (LoC) are the key factors of this thesis. In this study, likert-type scales were used for the variables (Blumberg, Cooper, & Schindler, 2014; Cooper, Schindler, & Sun, 2003; Davidsson, 2004; Gliem J. & Gliem R., 2003).

Entrepreneurial intention (EI) is a key factor examined in this study. The dependent variable for this study is the measurement of entrepreneurial intention. Entrepreneurial intention employed in this study is considered as an endogenous variable in the model design (Pearl, 2009). A five-point likert-type scale was used to measure entrepreneurial intention of participants ranging from 1 to 5, where "1 = completely agree", "2 = agree", "3 = undecided", "4 = disagree" and "5 = completely disagree".

Independent variables are composed of three factors. These factors are personal attitude (PA), self-efficacy (SE), and internal locus of control (LoC). These factors are measured on a five-point likert-type scale ranging from 1 to 5, where "1 = completely agree", "2 = agree", "3 = undecided", "4 = disagree", and "5 = completely disagree".

In the entrepreneurship literature, recent studies have shown the importance of the socio demographic characteristics in the explanation of entrepreneurial behavior (Arenius & Minniti, 2005; Estrin, Mickiewicz, & Stephan, 2013; Urbano & Turró, 2013; Wennekers et al., 2005). Thus, for this study, age, gender, and education level of the participants' demographic data will derive from the last three demographic

questions of the survey. Participant's actual age is recorded. For the education level, the highest education diploma degree they had earned was asked to survey participants. Respondents were categorized in the following five groups as, coded "1" for primary school education level, coded "2" for high school education level, coded "3" for technical high school education level, coded "4" for university education level and coded "5" for master's degree and doctoral degree education level. A binary variable is used for Gender, recording female respondents as "1" and male respondents as "0".

3.7. Data Analysis Process

Receiving of the printed form questionnaires filled by the participants was the first step of the data analysis process. The collected data then after were entered into a spreadsheet system software program of Microsoft Office Excel. The captured data was then uploaded into statistics software program IBM SPSS for preparing the participants' data.

After working on primary data analyses, structural equation modeling (SEM) was undertaken to test proposed structural research model (Jöreskog, 1971, 1993; Kaplan, 2008; Shah & Goldstein, 2006). IBM AMOS (Analysis of Moment Structures) statistics software program is selected for SEM data analysis (Arbuckle, 2016; Kline, 1998). In this phase of the study, following stages were adapted in data analysis process (Arbuckle, 2016; Creswell, 2012; Kaplan; 2008; Sekaran, 2006)

Data Preparation

- Data collection (IBM SPSS and Microsoft Office Excel)

Data Screening

- Checking for incorrectly entered data (IBM SPSS)
- Checking for Missing Data (IBM SPSS)
- Checking for Outliers (IBM SPSS)
- Checking for Normality (IBM SPSS)

Data Analysis

- Descriptive Statistics (Microsoft Office Excel and IBM SPSS)
- Calculation of Reliabilities and Validity (IBM SPSS)

- Exploratory Factor Analysis (IBM SPSS)
- Confirmatory Factor Analysis (Excel, IBM SPSS and AMOS)
- Convergent and Discriminant Validity Analysis (Excel, IBM SPSS and AMOS)
- Path Analysis of the full structural model (AMOS)

3.7.1. Bias Issues

First step was to identify any potential biases within the population. Looking at the gender distribution of the participants group, a low proportion of females (38.78 %) is founded among the nascent entrepreneurs. In entrepreneurship studies, females are generally underrepresented (Gupta, Turban, Wasti, & Sikdar, 2009). Therefore, the number of female participants in the population is not a bias.

The average age of the participants is 32.56 years. The average age for females is 33.5 years where 31.97 years is the average age for males. Age is also normally distributed. Therefore, it is concluded that the age distribution is not a bias.

3.7.2. Reliability Issues

Cronbach's Alpha test is used for calculating Reliabilities for the factors and related items in this study.

In the SEM context, Cronbach's Alpha test is the most widely preferred measure of internal consistency of reliability of a variable (Hair, Black, Babin, & Anderson, 2010; Nunnally, 1978; Nunnally, & Bernstein, 1994; Robinson, & Shaver, 1973; Peter, 1978; Robinson, Shaver, & Wrightsman, 1991; Schumacker & Lomax, 2004).

In general, value of 0.70 Cronbach's alpha is accepted as a lower limit and reliability values below 0.60 are considered poor but acceptable in SEM (Hair et al., 2010; Nunnally, 1978; Robinson, Shaver, & Wrightsman, 1991; Schumacker & Lomax, 2004). Reliabilities above 0.80 are evaluated to be good and higher than 0.90 is accepted as excellent (Cavana, Delahaye, & Sekaran, 2001; Gliem J. & Gliem R., 2003; Schumacker & Lomax, 2004).

The Cronbach's alpha test value for all factors in the whole data was calculated as 0.947 presented in Table 3.1. This reliability value is above 0.70 that is the required for the minimum reliability (Nunnally, 1978; Schumacker & Lomax, 2004).

Table 3.1. *Reliability Statistics*

Factors	Number of Items	Cronbach's Alpha
Personal Attitude	5	0.885
Self-Efficacy	5	0.861
Locus of Control	5	0.950
Entrepreneurial Intention	5	0.912
ALL FACTORS	20	0.947

Additionally, reliabilities of each factor are higher than 0.70 with meeting Nunnally's (1978) reliability standards indicate an excellent internal consistency for the variables.

3.7.3. Validity Issues

Carmines and Zeller (1979) describe validity as a very useful tool for providing measurement results in regard to the accuracy of a measure in research methodology.

Basically, validity searches for the study is valid or not (Kimberlin & Winterstein, 2008). The answer of that question maybe expressed in a specific reason or in a general manner. Creswell (2013) mentions the four types of validity in research and statistics as internal validity, external validity, construct validity, and statistical validity.

- *Internal validity* relates to if independent variable is liable for the changes observed on the dependent variable. To ensure the variables, validated factors with related items were used to build the conceptual model based on well known intention models and theoretical predictions.

- *External validity* deals with the results could be applied to the extensive population. Unrepresentative sample is the most important external validity threat. To guard against this kind of external validity threat, participants were chosen from the nascent entrepreneurs only.
- *Construct validity* refers to discover if designated model or framework is the most suitable to explain the outcomes or not. In order to protect from construct validity threats, validated entrepreneurial intention models are investigated and well validated factors were examined in the study.
- *Statistical validity* points to whether the employed tests are correct. Internationally confirmed scales and valid measurements for the variables were used in this study to avoid adopting unreliable measures.

3.7.4. Sample Size Issues

Mainly, structural equation modeling requires large samples. If the sample size is not sufficiently large, results of the structural equation modeling may not be correct (Kline, 2015). Therefore, larger samples are asked in SEM to ensure the stability of results.

Boomsma (1983) recommends the sample size should be greater than 200. In addition, Fabrigar, MacCallum, Strahan, and Wegener (1999) mention a sample of above 200 is acceptable. Consequently, larger samples are accepted as suitable size in SEM. In this study, sample size was 312 nascent entrepreneurs, considerably higher than the acceptable value of 200 cases.

Rule of ten is another sample size statistical thinking for deciding the minimum sample size in factor analysis (Kline, 2015; Neill, 2012; Thompson, 2004). Rule of ten is expressed as a sample size to items ratio. It is a ratio of 10 cases for each item. That is, at least ten cases for each item must be attained in the questionnaire.

In this study, there were 20 items and 312 cases available. Thus, the ratio of sample size to factors was 15.6 in this study, which is significantly higher than the minimum 10.0.

Consequently, in the context of structural equation modeling, sample size and ratio of sample size to items are greater than the suggested values. Therefore, the sample size adequacy requirement was correctly met for this study.

3.7.5. Structural Equation Modeling (SEM)

The favored data analysis preferred in this study was Structural Equation Modeling (SEM). The decision of chosen SEM was based on the research conceptual design and the specific variables of interest in this study.

Structural Equation Modeling helps to analyze the relations among a group of constructs in a structural model as a widely used tool for examining the validity of theoretical models (Chou, Bentler & Satorra, 1991; Hu & Bentler, 1999; Kaplan, 2008).

SEM performs summary statistics derived from empirical measures based on analysis of a structural theory on a hypothesized model (Byrne, 2016; Jöreskog, 1970). It helps to examine and analyze relationships among multiple variables. Factor analysis and path analysis are the main techniqual approaches in structural equation modeling (Kaplan, 2008).

SEM data analysis was considered the preferred data analysis methodology because of the selected variables and adopted conceptual model design used in this study (Arbuckle, 2016; Bentler, 1994; Cheung & Rensvold, 2002; Kaplan, 2008; Schumacker & Lomax, 2004; Ullman & Bentler, 2003).

There are many structural equation modeling software packages used in analyzing the data for scientific studies but most widely preferred software programs are AMOS, EQS, LISREL, and Mplus. IBM SPSS AMOS (Arbuckle, 2016) was selected in analyzing the data in this study.

The following fit measures are most generally preferred for evaluating data against the structural model in structural equation modeling data analysis (Bollen & Stine, 1992). These are Standardized Root-Mean-Square Residual (SRMR), Root Mean-Square Error of Approximation (RMSEA), Chi-square statistics (χ^2), Comparative Fit Index (CFI), Non-Normed Fit Index (NNFI) / Trucker-Lewis Index (TLI), Adjusted Goodness-of-Fit Index (AGFI), and Goodness-of-Fit Index (GFI).

A brief summary of the previously mentioned fit measures and acceptable level of fit values for evaluating the model appears below.

- **Chi-Square (χ^2):** The Chi-square is considered as an essential fit index by Hair et al. (2010). It tests whether the data completely fits the proposed model or not. The p-value above 0.05 is suggested as acceptable level (Sattora & Bentler, 1988, 1994).

- **Root Mean-Square Error of Approximation (RMSEA):** RMSEA accurates the propensity of chi-square statistic. The value of RMSEA indicator 0.05 or less represents an acceptable model (Chen, Curran, Bollen, Kirby & Paxton, 2008; Hu & Bentler, 1995).

- **Standardized Root Mean-Square Residual (SRMR):** The SRMR indicator measures the average residual differences of the matrix of sample covariances and variances (Hu & Bentler, 1998). Acceptable levels of model fit values are between 0 and 1.00. Zero value indicates perfect model fit. Good fit model should be less than 0.05 (Byrne, 2006). Any value above 0.08 might suggest outliers in the data (Chen, Curran, Bollen, Kirby & Paxton, 2008; Hu & Bentler, 1998).

- **Tucker-Lewis Index (TLI) / Non-Normed Fit Index (NNFI):** Tucker-Lewis index (TLI) and the Non-normed fit index (NNFI) are similar indices (Tucker, & Lewis, 1973). The fit index ranges between 0 and 1.00. Holmes, Coute and Cunningham (2006) suggest above 0.90 but consider the model overspecified if the value is greater than 1.00. Hu and Bentler (1999) suggest an acceptable level for greater than 0.90 and describe as perfect model as 1.00.

- **Comparative Fit Index (CFI):** The Comparative Fit index (CFI) is another indicator used for indicating the improvement level on proposed model (Hu and Bentler, 1995). CFI is constrained between 0 and 1.00. Hair et al. (2010) consider good fit higher than 0.90 and Kline (2015) considers well-fitting model above 0.95 CFI value.

- **Adjusted Goodness-of-Fit Index (AGFI) / Goodness-of-Fit Index (GFI):** AGFI and GFI indicators are certain fit indices to establish a fit statistic that compare the hypothesized model (Hair et al., 2010). Both AGFI and GFI indicators suggest a well-fitting model with the value close to 1.00 where range from 0.00 to 1.00 (Jöreskog & Sörbom, 1986). Both indices must be above the value of 0.90 (Hair et al., 2010; Hu & Bentler, 1998; Kline, 2015).

The parameter of good fit for SEM is given in Table 3.2 (Schermelleh-Engel, Moosbrugger & Müller, 2003).

Table 3.2. *Acceptable Levels of Fit Indices for SEM*

Indices	Moderate Fit	Good Fit
P value	$0.01 \leq p \leq 0.05$	$0.05 \leq p \leq 1.00$
Chi-Square	$2df \leq \chi^2 \leq 3df$	$0 \leq \chi^2 \leq 2df$
CMIN/df	$2 \leq \chi^2/df \leq 3$	$0 \leq \chi^2/df \leq 2$
CFI	$0.90 \leq CFI \leq 0.95$	$0.95 \leq CFI \leq 1.00$
SRMR	$0.05 \leq SRMR \leq 0.1$	$0.00 \leq SRMR \leq 0.05$
GFI	$0.90 \leq GFI \leq 0.95$	$0.95 \leq GFI \leq 1.00$
AGFI	$0.90 \leq AGFI \leq 0.95$	$0.95 \leq AGFI \leq 1.00$
TLI	$0.90 \leq TLI \leq 0.95$	$0.95 \leq TLI \leq 1.00$
NFI	$0.90 \leq NFI \leq 0.95$	$0.95 \leq NFI \leq 1.00$
RMSEA	$0.05 \leq RMSEA \leq 0.08$	$0.00 \leq RMSEA \leq 0.05$

(Source: Schermelleh-Engel, Moosbrugger & Müller, 2003)

3.7.6. Discriminant Validity and Convergent Validity

Götz, Liehr-Gobbers, and Krafft (2010) explain that discriminant validity is used for determining the correlations in a measurement model and statistically difference of the factors/constructs. Factors or constructs should not be correlated each other in the measurement model. It indicates a low discriminant validity If the correlations among factors are higher than 0.85 (Kline, 2015). In order to estimate discriminant validity in the model, confirmatory factor analysis is considered as a widely used tool in structural equation modeling by calculating the structure and pattern coefficients of the factor loadings (Schumacker & Lomax, 2010; Thompson, 1997).

In this study, the pattern and structure coefficients of factors were used for assessing discriminant validity.

CHAPTER 4

DATA ANALYSES AND HYPOTHESES TESTING

This chapter provides preliminary and advanced data analyses with the results and hypotheses testing in this study. Data analyses and hypotheses testing chapter is comprised of seven sections.

- The first section yields demographic information analyses by means of gender, age and education level of participants' data.
- The second section presents the initial data analyses along with the results. This section provides data screening and IBM SPSS Statistics software is primarily utilized for this part of the analyses.
- The third and fourth sections of the chapter provide more advanced data analysis using the IBM SPSS AMOS software as Structural Equation Modeling (SEM) package.
- The fifth section introduces the path analysis with results of the proposed structural model.
- The sixth section of this chapter presents the hypotheses results. The hypotheses identified in this study will be presented together with the level of support for each.
- Last section of this chapter provides additional analyses and findings based on demographic variables.

4.1. Descriptive Statistics

This section reveals the descriptive statistics of demographic profile of research participants.

Many studies have examined the importance of certain demographic characteristics, such as family members, age, religion, race, marital status, gender, socioeconomic status and education (Franco et al., 2010; Reynolds et al., 1994). Of these factors, age, gender and education were used in this study since these are the most

widely used demographic factors in entrepreneurial intention (Franco et al., 2010; Lee & Wong, 2003; Liñán & Chen, 2009; Seo, 2013; Turker & Sonmez, 2009; Wilson et al., 2007).

Gender, age and education level of participants' data will be present in this section.

Gender is one of the most important key factors in demographic traits. Recent report from the Global Entrepreneurship Monitor (GEM) revealed that men are twice as effective as women in entrepreneurial activities on average (GEM report, 2015). In a broad sense, the worldwide rate of entrepreneurial men is much higher than women.

Generally women are less interested than men to participate in entrepreneurship. It is a fact that the men rates are much higher than women rates in total self-employment (GEM report, 2015). The GEM report shows that the rates of women's entrepreneurship were lower than men's in 45 economies but has accelerated rapidly in recent years.

Wilson et al. (2007) investigated the influence of gender on entrepreneurial intentions among university students. He noticed that the probability of preferring to be self-employed is higher for males than females. He also remarked that women in particular avoid entrepreneurial efforts because they think they are talentless. Steinpreis, Anders, and Ritzke (1999) discovered that both men and women preferred to employ a male rather than female.

Table 4.1 sets out the gender distribution of the participants in this study. It reveals that 191 of the participants are males (61.22 %), and 121 are females (38.78 %).

Table 4.1. *Gender Distribution of Participants*

Gender	**Frequency (f)**	**Percent (%)**
Female	121	38.78
Male	191	61.22
Total	**312**	**100.00**

In this study, male participation is greater than the female's. This gender distribution is consistent with previous international researches suggesting the observed gender gap between participation rates of male and female in entrepreneurship (Wilson et al., 2007).

For example, Minnitti, Arenius, and Langowitz, (2005) suggest that participation rates of potential entrepreneurs in middle-income countries, male are 70% more involved than female. Reynolds, Carter, Gartner, Grene, and Cox, (2002), reveal that the number of male in developing countries is twice the number of female in the act of creating new ventures.

Education is another vital characteristics studied in entrepreneurship area. There are many studies that education factor has shown to affect entrepreneurial intention (Franco et al., 2010; Huyghe & Knockaert, 2015; Iakovleva, Kolvereid, & Stephan, 2011; Lee & Wong, 2003; Segal, Borgia, & Schoenfeld, 2005; Van Gelderen et al., 2008; Veciana, Aponte, & Urbano, 2005; Wilson et al., 2007, Wu & Wu, 2008).

Wennekers et al. (2005) noticed that education is a major factor in developing entrepreneurial behavior. Krueger et al. (2000) stated that educators can influence entrepreneurial intentions. Wu and Wu (2008) pointed out education would increase the probability of entrepreneurship. Bowen and De Clercq, (2008) mentioned that education level is an important determinant that could affect entrepreneurship by developing and encouraging individuals' competence and skills. Turker and Sonmez (2009) concluded that entrepreneurship can be encouraged by education. Franco et al. (2010) pointed out nascent entrepreneurs are likely to have higher entrepreneurial intention due to their training and education. Moreover, Wilson et al. (2007) revealed that a higher level of education brings on a higher entrepreneurship level on their study of MBA student in the United States.

Table 4.2 exhibits the education level of participants that the highest degree they had earned.

The majority of the participants have a high school diploma whereas less than 10% of the participants have university degree and higher.

Table 4.2. *Education Level Distribution of Participants*

Level of Education	**Frequency (f)**	**Percent (%)**
Primary School	51	16.35
High School	197	63.14
Technical High School	36	11.54
University	26	8.33
Post Graduate	2	0.64
Total	**312**	**100.00**

Almost 85% of the participants have high school and higher education level in this study. This percentage is consistent with the findings of Wu and Wu (2008), that people having higher level of education have more possible to participate in entrepreneurial activities.

Age is also an important demographic factor in entrepreneurship field. GEM report (2015) shows that 35-44 and 25-34 year olds people are the highest participation rates in entrepreneurship. This reveals that young people have the strong desire for entrepreneurship.

Seo (2013) found that the age of entrepreneur is positively related to the entrepreneurial performance. Delmar and Davidsson (2000) concluded that highest rate of nascent entrepreneurship occurs in the age group between 25 and 34.

Table 4.3 displays the age distribution of the participants' profile. It reveals that 51 (16.35%) of the participants are 18-24 years old, 134 (42.95%) are around the age of 25-34 years, 108 (34.62%) are around the age of 35-44 years and 19 (6.09%) are 45 years and over. Low rates of participation of 18-24 years group may be for the reason that both compulsory military service and high college attendance.

On the other hand, the oldest age group 45-54 years has the smallest percentage. It might be think that they lack of required skills and financial support to start a new business.

This age distribution rates are consistent with the recent report of GEM (2015) showing the highest participation rates among 25-34 and 35-44 year olds. This is also relevant with the findings of the highest rate of 25-34 years age group in the study of Delmar and Davidsson (2000).

Table 4.3. *Age Distribution of Participants*

Age	**Frequency (f)**	**Percent (%)**
18-24 years	51	16.35
25-34 years	134	42.95
35-44 years	108	34.61
45-54 years	19	6.09
Total	**312**	**100.00**

4.2. Data Screening

Data screaming is also another mostly used term for data screening is the primary and valid processing to ensure the data is viable and reliable for conducting statistical analyses (Tabachnick & Fidell, 2001).

The process of data screening includes checking and examining raw data for possible errors before starting data analysis and correcting or cleaning them prior to further statistical analysis. It involves checking incorrectly entered raw data, dealing with the missing data, identifying outliers and checking for the normality. These issues will be discussed in the following sections.

4.2.1. Checking Incorrect Data Entry

To collect data, only printed-form questionnaires were used in this study for all participants. The printed-form questionnaires were handed out to the nascent entrepreneurs that were selected on a voluntary basis among the entrepreneurship course. So it is therefore possible to enter incorrect entry while the transfer of the survey results. Totally, 312 responses were collected in this research.

Data screening requires statistical descriptive programs like IBM SPSS (George & Mallery, 2003; Tabachnick & Fidell, 2001). The all raw data were inspected against incorrect entry for each item of the questionnaire by creating frequency tables in IBM SPSS. Then, it was checked for any incorrect responses. In this inspection process not any incorrect entries were found in the whole data for further statistical analyses.

In fact, it depends on the fact that researcher remained at the front of the room while the participants filling the questionnaires. Any questions clarified immediately by researcher in order to avoid misunderstanding and check incorrect data on printed-form questionnaires at the same time.

4.2.2. Checking for Missing Data

Missing data problems in data analyses are considered to be one of the most common issues that affect statistical analyses (Schumacker & Lomax, 2004; Tabachnick & Fidell, 2001). For that reason, the whole collected printed-form questionnaires were checked against for any missing value.

Descriptive statistics frequencies table was built with IBM SPSS for checking the missing data. After evaluation of the frequencies table, it is seen that there was no missing data in the questionnaire.

4.2.3. Checking for Outliers

Dietz and Kalof (2009) noted that outliers can influence the results by pulling the mean away from the median. Outlier is contrary to the target population and not a member of them, failure to specify missing data values, incorrect raw data entry, and

case of an excessive distribution values of item are the four reasons for the occurrence of outliers (Tabachnick & Fidell, 2001).

- For the first two reasons area related with incorrect data entry and missing data issues that addressed in previous sections. According to evaluation and checking the results of analysis, there was no incorrectly entered data and missing value that may cause outliers. The whole data are accurate in this study.
- The third reason that causes outlier is a case of out of the target population. This is not valid for this study, since all participants are chosen from the entrepreneurship course. Therefore, all participants are member of target population.
- The last reason can be achieved by the trimmed means technique for the decision of retention or removal of potential excessive values (Walfish, 2006).

In this context, trimmed means values, the actual means values, and mean differences in the questionnaire for all items were calculated in a Microsoft Office Excel spreadsheet. After evaluation of the difference values of all items, it was seen that there were no any extreme difference among causing outliers.

Moreover, a new tool created in SPSS for calculating Mahalanobis distance greater or smaller than the value of 0.05. After checking the mahalanobis values in the whole data, it was also seen that there were no any outliers to remove.

Additionally, another application was set to detect other possible outliers. This additional outlier detection rule was that all items had the same scores for a sample case will be defined as outliers. That is, if a participant did answer same value to all questions in the printed form of survey questionnaire, then it is considered as an outlier. Therefore, this rule was applied to the whole data and checked against for possible outliers. After the evaluation of this additional outlier detection rule it is seen that there is no this kind of sample case having same answers in the questionnaire form.

Eventually, it is ensured that there were no outliers having extensive, opposite, utmost, severe effect on the variables used in this study.

4.2.4. Normality of Data

In the field of statistics, the normal distribution, sometimes called the unimodal, bell-shaped, and symmetrical distribution, is the most important and widely used distribution. If mode, median, and mean of a distribution have same values, the distribution might be accepted as normal distribution (Kendrick, 2000; Leech, Barrett, & Morgan, 2005).

Normality, referring to the data distribution shape, is the fundamental assumption in multivariate analysis in structural equation modeling. Kurtosis and skewness of the data should be evaluated for assessing the normality of the data (Hair et al., 2010; Kline, 2015). Morgan and Griego (1998) remark skewness of the data depends on the symmetry of a distribution and value of the skewness can be negative or positive or zero as unbalanced.

The frequencies distributions appear on the left are named skewed negatively, and appear on the right are called skewed positively (Morgan & Griego, 1998).

The skewness value is zero means data have normal distribution. If the value of the skewness is greater than 1 or less than -1, it indicates data have a highly skewed distribution and exceed 2.0 indicates non-normal data (Kline, 2015; West, Finch, & Curran, 1995).

In statistics, kurtosis indicates the distribution peakedness of a variable deviate from normal distribution of that (DeCarlo, 1997; Morgan & Griego, 1998). It measures whether the data are heavy-tailed distribution or light-tailed distribution relative to a normal distribution (Mardia, 1970, 1974).

Kline (2015) declares a normal distribution have the kurtosis value of 3.0. The kurtosis values less than 3.0 refer to negative kurtosis and greater than 3.0 refer to positive kurtosis. West et al. (1995) state non normal distribution when the kurtosis values exceed 7.0. Table 4.4 presents the skewness and kurtosis values created with IBM SPSS Statistics to evaluate the normality.

Table 4.4. *Descriptive Statistics for Means, Skewness and Kurtosis Values*

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
PA1	312	4.42	0.694	-1.760	0.138	5.693	0.275
PA2	312	4.48	0.690	-1.796	0.138	5.150	0.275
PA3	312	4.39	0.657	-1.363	0.138	3.918	0.275
PA4	312	4.36	0.694	-1.663	0.138	5.500	0.275
PA5	312	4.45	0.688	-1.633	0.138	4.560	0.275
SE1	312	4.19	0.619	-1.125	0.138	4.427	0.275
SE2	312	4.23	0.656	-1.248	0.138	4.044	0.275
SE3	312	4.38	0.694	-1.264	0.138	2.636	0.275
SE4	312	4.43	0.686	-1.447	0.138	3.417	0.275
SE5	312	4.31	0.706	-1.297	0.138	3.046	0.275
EI1	312	4.51	0.631	-1.528	0.138	4.262	0.275
EI2	312	4.54	0.636	-1.722	0.138	4.965	0.275
EI3	312	4.58	0.611	-1.658	0.138	3.912	0.275
EI4	312	4.48	0.611	-1.176	0.138	2.375	0.275
EI5	312	4.35	0.619	-1.142	0.138	3.984	0.275
LoC1	312	4.30	0.589	-.861	0.138	3.720	0.275
LoC2	312	4.23	0.561	-.654	0.138	3.959	0.275
LoC3	312	4.36	0.604	-.884	0.138	2.962	0.275
LoC4	312	4.39	0.632	-1.312	0.138	4.255	0.275
LoC5	312	4.26	0.578	-.895	0.138	4.510	0.275

As a result of the evaluation, it was seen that skewness and kurtosis values of some items are out of the range. The results may be considered as these variables are not distributed normal because of the data derive from a five point likert type (Barnes, Cote, Cudec, & Malthouse, 2001; West et al., 1995). In this regard, it was assumed that the data in this study have multivariate normality.

4.3. Exploratory Factor Analysis (EFA)

In this stage of the advanced data analysis, each step of applied exploratory factor analysis (EFA) and results of this study are presented throughout Section 4.3.1. to 4.3.7.

4.3.1. Analyzing Anti-image Correlation Matrix

First step of the exploratory factor analysis is to analyze the Anti-image correlation matrix (AIC). It is used for measuring of the sampling adequacy for all items related to variables. Measuring of the sampling adequacy is examined by inspecting diagonal values at the anti-image correlation matrix derived from SPSS.

To make certain of strong correlations among items and to support factorability, measuring of sampling adequacy values on the anti-image correlation should be higher than 0.50 (Field, 2009; Tabachnick & Fidell, 2001).

The anti-image correlation values derived from SPSS for the items in this study varied between 0.886 and 0.965. That is, all items used in the questionnaire are extremely all above recommended 0.50 values.

4.3.2. Applying Kaiser-Meier-Olkin (KMO) and Bartlett's Test

Measure of the sampling adequacy value of The Kaiser-Meier-Olkin reveals the variance ratio values among the designated variables generated from factors. Bartlett's test of sphericity tests whether the variables are unrelated or not. In order to determine data is appropriate for performing factor analysis, significance level should be less than 0.05.

Kaiser-Meier-Olkin (KMO) value above 0.6 is considered as a good factor analysis (Neill, 2012; Tabachnick & Fidell, 2001).

Field (2009) suggested a minimum of 0.5 values for KMO sampling adequacy value, but remarked values less than 0.6 are miserable. He states values for KMO are classified as moderate between 0.6 and 0.7 are classified as acceptable for values between 0.7 and 0.8, are great for values between 0.8 and 0.9 and excellent for values

higher than 0.9. Additionally, Thompson (2004) states that 0.6 or greater value of KMO is interpreted as satisfactory.

Table 4.5 shows a value of 0.925 KMO sampling adequacy derived from SPSS in this study provides an excellent criterion for factor analysis.

Table 4.5. *KMO and Bartlett's Test Results*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.925
Bartlett's Test of Sphericity	Approx. Chi-Square	5184.328
	df	190
	Sig.	0.000*

*$p < 0.05$.

In addition to having excellent KMO adequacy result, Bartlett's Test of Sphericity significance value is 0.000 for this study that should be below 0.05.

Consequently, these results ensured the suitability of factor analysis for this study.

4.3.3. Checking Extracted Communalities

Communality is called the amount of variance in each variable that is revealed by all factors in factor analysis.

Cretu and Brodie (2009) note that communalities calculate the variances percent defined by all factors jointly together (Tabachnick & Fidell, 2001). Thompson (2004) states that communalities can be used as a deciding tool of measured items for factor analysis. Furthermore, communalities can be interpreted as the reliability of items (Field, 2009; Thompson, 2004). Initial communalities and extraction communalities are estimates of the variance in each item referred by all factors.

The values of the Extracted communalities must be above 0.50 for each item in the exploratory factor analysis (Cretu & Brodie, 2009; Field 2009). Communalities under 0.50 are assumed as low communality indicating a considerable variance unidentified by the factors extracted and should be removed from the analysis (Neill,

2012). The initial extracted communality values are created in IBM SPSS. After analyzing the values, the extracted communality values are all in acceptable level for each item which ranges from 0.554 to 0.884.

4.3.4. Applying Extraction Method

Principal axis factoring method and principal component analysis method are two main approaches used as extraction method in exploratory factor analysis (Neill, 2012). Principal component method is popular and more practical when compared with principal axis factoring method (Neill, 2012). Therefore, principal component analysis method is preferred for the extraction method in factor analysis for this study.

4.3.5. Applying Rotation Method

IBM SPSS Statistics offers five types of rotation methods: varimax, direct oblimin, quartimax, equimax, and promax or no rotation.

Three of them are called orthogonal (varimax, quartimax, and equimax) rotation methods where the factors are supposed to be uncorrelated. Other two methods (direct oblimin and promax) are considered as oblique rotation methods where the factors are supposed to be correlated (Brown, 2009).

Brown (2009) states that orthogonal rotation method or oblique rotation method are preferred depending on whether factors are correlated or not. Moreover, Osborne and Costello (2009) recommend oblique rotations for the studies in the social sciences since correlations among factors are generally expected in the social sciences. Osborne (2015), states that oblique rotation has superior results than orthogonal rotations.

In this study, direct oblimin rotation method was applied.

4.3.6. Creating Pattern Matrix

Pattern matrix created in IBM SPSS Statistics is given in Table 4.6 with the values below 0.30 were suppressed to make it more interpretable (Neill, 2012).

After evaluation of the factor loadings values one ach factor, it is easily seen that there were no any values below 0.600.

The least factor loading value for personal attitude was 0.713, for self-efficacy was 0.701, for entrepreneurial intention was 0.710 and for locus of control was 0.806. Furthermore, the highest factor loading value for personal attitude was 0.860, for self-efficacy was 8.25, for entrepreneurial intention was 0.889 and for locus of control was 0.938. All values for each factor are high enough for factorization. There were no any factor loading value exceed 1.000.

Table 4.6. *Pattern Matrix*[a]

	Component			
	1	2	3	4
PA1				0.771
PA2				0.713
PA3				0.852
PA4				0.761
PA5				0.860
SE1		0.812		
SE2		0.825		
SE3		0.716		
SE4		0.805		
SE5		0.701		
EI1			0.774	
EI2			0.889	
EI3			0.835	
EI4			0.710	
EI5			0.752	
LoC1	0.910			
LoC2	0.938			
LoC3	0.873			
LoC4	0.806			
LoC5	0.814			

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.
a. Rotation converged in 6 iterations.

4.3.7. Determining and Defining Factors

Commonly two techniques are applied for determining and defining the number of factors to provide the best results for extracting the factors in principal components analysis; *Kaiser Criterion* and *Scree test* (Browne, 1968; Hakistian, Rogers, & Cattell, 19812; Neill, 2012; Tabachnick & Fidell, 2001; Tucker, Kooopman & Lin, 1969; Ziwick & Velicer, 1986).

The Kaiser criterion, proposed by Kaiser (1960), is a widely used popular employed method to determine the extracted components.

According to the Kaiser criterion, the number of components is equal to the eigenvalues greater than 1.0 (Browne, 1968; DeCoster, 1998; Habing, 2003; Neill, 2012; Tabachnick & Fidell, 2001).

The Scree test, another graphical method to decide the optimal number of factors, was proposed by Cattell (1966). The scree test is very simple to apply. The eigenvalues of the correlation matrix should be plotted in descending order in a basic line (DeCoster, 1998; Neill, 2012; Tabachnick & Fidell, 2001).

Cattell (1966) offers finding the point where the smooth decrease of eigenvalues appears before the last drop to level off to the right of the plot. As a general rule, factors located on the right side of the shallow slope have very small contribution in the solution (Cattell, 1966; Tabachnick & Fidell, 2001).

Table 4.7 provides the total variance explained values of rotated components, extracted components and initial eigenvalues of the correlation matrix created in SPSS.

In this context, four factors (components) were determined for this study by evaluating these two techniques with respect to eigenvalues of the correlation matrix and scree plot created in SPSS.

Generally, acceptable level for the total variance explained value is 50-75 % (DeCoster, 1998; Habing, 2003; Neill, 2012). The total variance explained value derived from SPSS for this study was % 73.426 for four factors.

Table 4.7. *Total Variance Explained*

Com-ponent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	10.176	50.878	50.878	10.176	50.878	50.878	7.625
2	1.895	9.473	60.351	1.895	9.473	60.351	5.966
3	1.383	6.914	67.265	1.383	6.914	67.265	7.167
4	1.232	6.161	73.426	1.232	6.161	73.426	7.460

Extraction Method: Principal Component Analysis.

Neill (2012) recommends minimum three items per factor and should at least two items per factor in analyzing factors. Moreover, O'Brien (1994) mentions two-indicator rule and three-indicator rule for identification of the factor. Three-indicator rule expresses three items per factor is adequate and two-indicator rule expresses two items per factor is sufficient to identify the factors. Therefore, there should be at least two items for each factor. In this study, all factors have five items each. This requirement is also met. Consequently, there were four factors (components) determined. Table 4.8 provides the factor names, IDs and number of items.

Table 4.8. *Identifications of Factors Defined for This Study*

Factor Number	Factor Name	Factor ID	Number of Related Items
1	Personal Attitude	PA	5
2	Self-Efficacy	SE	5
3	Locus of Control	LoC	5
4	Entrepreneurial Intention	EI	5

4.4. Confirmatory Factor Analysis (CFA)

This section provides the confirmatory factor analysis and results for the proposed structural model.

Confirmatory factor analysis in structural equation modeling examines whether the factors and related items comply with subjected theories (Everitt & Hothorn, 2011; Gerbing & Anderson, 1985; Neill, 2012; Thompson, 2004). The main aim of CFA is to recognize if identified items represent the related construct or not (Anderson & Gerbing, 1988; Hair et al., 2010; Tabachnick & Fidell, 2001).

In this advanced data analysis stage, IBM SPSS AMOS statistic software is preferred in CFA by providing the results of the model fit statistics, regression weights, factor correlations, and factor loadings of items.

4.4.1. Performing CFA Analysis

Model was drawn and run with the IBM SPSS AMOS given in Figure 4.1 with output values using SPSS data set as the factors of entrepreneurial intention (EI), personal attitude (PA), self-efficacy (SE), and internal locus of control (LoC), of interest with their related items.

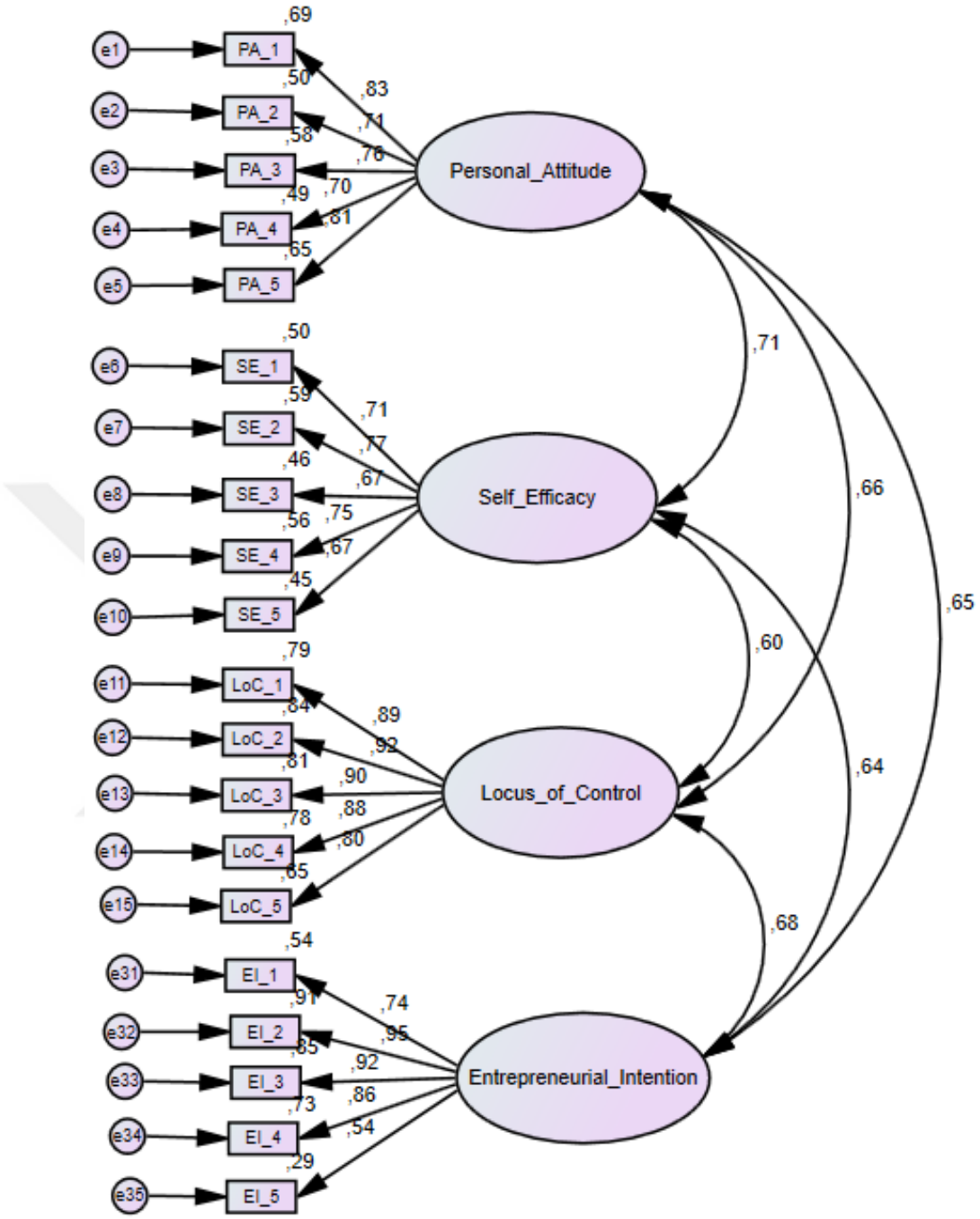

Figure 4.1. Structural Model drawn in AMOS

After analyzing scalar estimates values including regression weights, standardized regression weights, covariancess, correlations, variances and model fit results in initial model, it was seen that a set of covariancess between LoC_3 and

Loc_4, and EI_1 and EI_5 items should be implemented on the model to improve model fit indices values.

After implying covariancess on the initial model, final covarianced structural model was achieved. The structural model applied covariancess drawn in AMOS with final output values is presented in Figure 4.2.

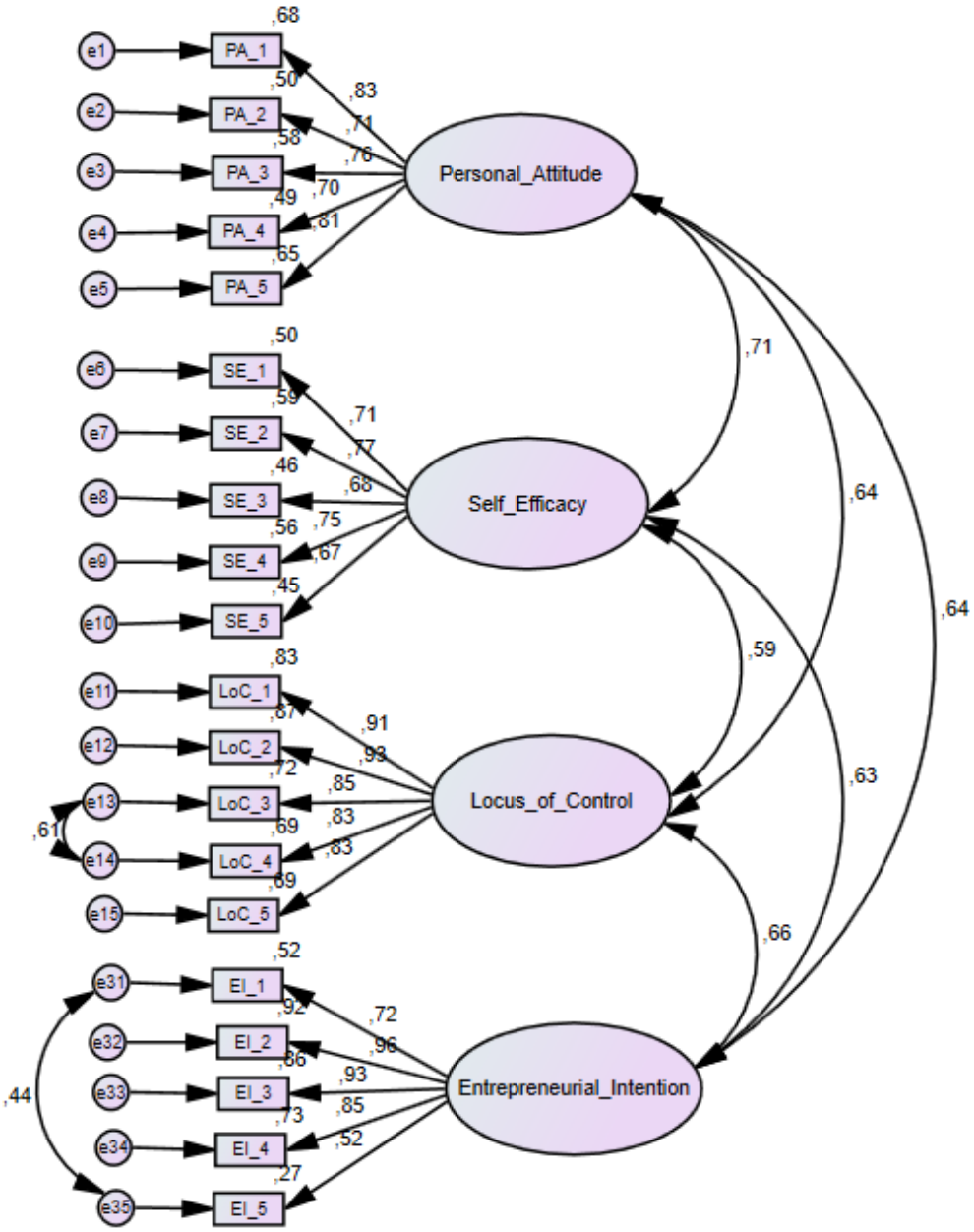

Figure 4.2. Structural Model with covariancess drawn in AMOS

There were no any item loading values less than 0.50 in standardized regression weights on the final structural model. Furthermore, there were no any values in the covariancess table generated in Modification indices output.

Table 4.9 presents model fit statistics of the covarianced structural model. All the model fit results are in the acceptable levels.

Once obtained the acceptable results in this analysis, discriminant and convergent validity will be examined as a next step in confirmatory factor analysis.

Table 4.9. *Model Fit Statistics of the Covarianced Structural Model*

Model Fit Index	Acceptable Levels	Model Fit Results	Level of Fit Results
CMIN/df	$\chi^2/df < 3$	$\chi^2/df = 2.145$	Moderate fit
CFI	CFI $\geq$ 0.90	CFI = 0.954	Good fit
SRMR	SRMR < 0.1	SRMR = 0.013	Good fit
AGFI	AGFI $\geq$ 0.90	AGFI = 0.915	Moderate fit
GFI	GFI $\geq$ 0.90	GFI = 0.959	Good fit
TLI	TLI $\geq$ 0.90	TLI = 0.939	Moderate fit
NFI	NFI $\geq$ 0.90	NFI = 0.919	Moderate fit
RMSEA	RMSEA < 0.08	RMSEA = 0.063	Moderate fit

4.4.2. Convergent and Discriminant Validity Analysis

Byrne (2006) defines convergent validity as an indicator in statistics that expresses structural relationship between items and items related to factors must converge in common (Hair et al., 2010).

The Composite reliability values that higher than 0.60 are considered as satisfactory and acceptable for the values above 0.70 (Bagozzi & Yi, 1988; Hair et al., 2010).

Table 4.10 presents the validity analysis results including average variance extracted (AVE) values, average shared variance (ASV) values, composite reliability (CR) values, square roots of AVE values, and maximum variance shared (MVS) values of structural model.

Table 4.10. *Convergent and Discriminant Validity of Factors*

Factors	C.R.	AVE	Square roots of AVE	MVS	ASV
Personal_Attitude	0,894202	0,629487	0,793402	0,351917	0,278901
Self_Efficacy	0,881185	0,5984102	0,773570	0,257315	0,215061
Locus_of_Control	0,939303	0,756461	0,869748	0,324690	0,281975
Entrepreneurial_Intention	0,893715	0,628705	0,792909	0,351917	0,311307

Composite reliability values of the all four factors are higher than the required value of 0.70 (Hair et al., 2010).

Additionally, average variance extracted values of each factor are less than their composite reliability values and also AVE values are higher than the suggested value of 0.50 for each variable. These results meet required values recommended for convergent validity (Hair et al., 2010).

Additionally, factor loadings for the confirmatory factor analysis should be above 0.60 (Bagozzi & Yi, 1988; Götz et al., 2010; Hair et al., 2010). All factor loadings, regression coefficients obtained from the IBM SPSS AMOS in this study are higher than the suggested value of 0.60 and there is no strong cross loadings.

Consequently, all factor loadings on each item in structural model were adequately high to ensure convergent validity.

Discriminant validity describes dissimilarity and interrelations of proposed model constructs that designated factors are not correlated each other (Cavana et al., 2001). Götz et al. (2010) describe discriminant validity as the unlikeness and dissimilarity of the factors in a model.

The average variance extracted values of each factor are greater than of their average shared variance values. This ensures the evidence of discriminant validity of the model (Farnell & Larcker 1981). Also another criterion of discriminant validity evidence was satisfied by checking the maximum variance shared values which were less than the average variance extracted values (Hair et al., 2010).

Additionally, square roots of the average variance extracted values should have higher than the correlations among factors to ensure discriminant validity (Thompson, 1997).

In order to check discriminant validity, Table 4.11 presents the correlation matrix of the square roots of average variance extracted values including correlations among factors under the diagonal of the correlation matrix computed for each factors

Table 4.11. *Correlation Matrix of the Square Roots of (AVE) Values*

Factors	Personal_ Attitude	Self_ Efficacy	Locus_of_Control	Entrepreneurial_ Intention
Personal_Attitude	**0,793402**			
Self_Efficacy	0,419178	**0,773570**		
Locus_of_Control	-0,555947	-0,460607	**0,869748**	
Entrepreneurial_ Intention	0,593226	0,507262	-0,569816	**0,792909**

The discriminant validity was ensured for this study, since all the correlations among factors are less than the square roots of the AVE values of each factor.

Consequently, both convergent validity and discriminant validity were ensured together.

4.5. Path Analysis of Structural Model

SPSS AMOS is applied for path analysis on the final structural model that comprised of seven variables based on hypothesized model in this study.

Table 4.12 summarizes the model fit results for the final structural model. The values of Chi-Square, CMIN/df, p value, Comparative Fit Index (CFI), Normalized Fit Index (NFI), Non-Normed Fit Index (NNFI) / Trucker-Lewis Index (TLI), Standardized Root-Mean-Square Residual (SRMR), Adjusted Goodness-of-Fit Index (AGFI), Root Mean-Square Error of Approximation (RMSEA), and Goodness-of-Fit Index (GFI), are all within the acceptable range. Therefore, it is appropriate to say that proposed structural model is fit in this study.

Table 4.12. *Model Fit Results*

Model Fit Index	Acceptable Levels	Model Fit Results	Level of Fit Results
CMIN/df	$\chi^2/df < 3$	$\chi^2/df = 1.980$	Good fit
Chi-Square	$p > 0.05$	$\chi^2 = 314{,}880$ with 2df and $p = 0.646$	Good fit
CFI	CFI $\geq$ 0.90	CFI = 0.967	Good fit
SRMR	SRMR < 0.1	SRMR = 0.017	Good fit
GFI	GFI $\geq$ 0.90	GFI = 0.931	Good fit
NFI	NFI $\geq$ 0.90	NFI = 0.937	Moderate fit
AGFI	AGFI $\geq$ 0.90	AGFI = 0.912	Moderate fit
TLI	TLI $\geq$ 0.90	TLI = 0.961	Good fit
RMSEA	RMSEA < 0.08	RMSEA = 0.058	Moderate fit

Path analysis is presented in Figure 4.3., indicates 65 % of the entrepreneurial intention among nascent entrepreneurs was estimated in the proposed final structural model.

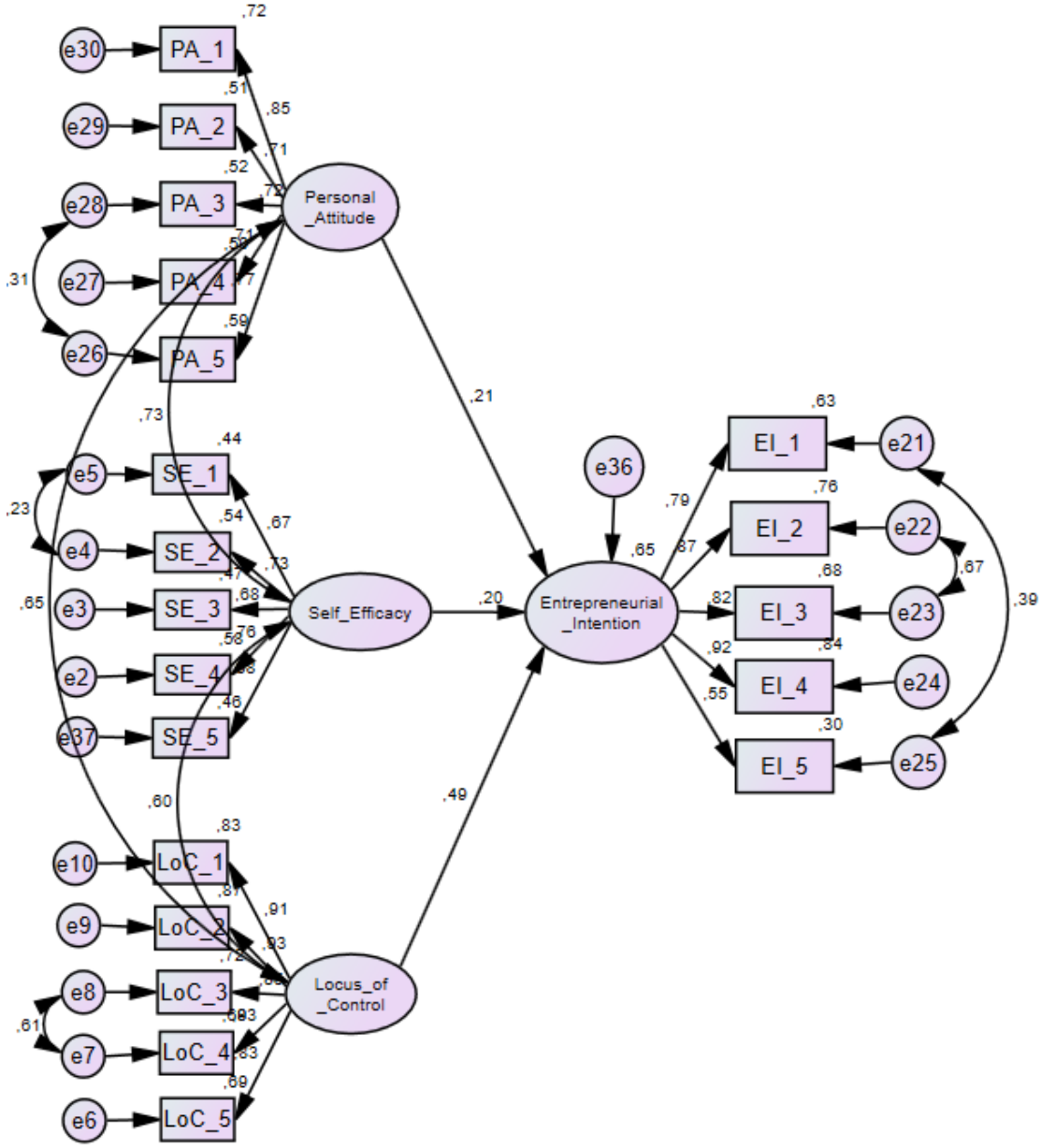

Figure 4.3. Path Analysis

The scalar estimates consisting of squared multiple correlations, regression weights, variances, covariancess, and standardized regression weights, outputs derived from SPSS AMOS are presented in Tables 4.13 to 4.18 respectively.

All indicator items in path analysis of the final structural model of each factor are significant in the AMOS output tables.

Table 4.13. *Regression Weights*

	Estimate	S.E.	C.R.	P
Entrepreneurial_Intention <--- Self_Efficacy	.191	.073	2.610	.009
Entrepreneurial_Intention <--- Locus_of_Control	.529	.070	7.572	***
Entrepreneurial_Intention <--- Personal_Attitude	.199	.075	2.652	.008
LoC_5 <--- Locus_of_Control	1.000			
LoC_4 <--- Locus_of_Control	1.124	.063	17.941	***
LoC_3 <--- Locus_of_Control	1.115	.060	18.543	***
LoC_2 <--- Locus_of_Control	1.131	.052	21.630	***
LoC_1 <--- Locus_of_Control	1.152	.055	20.806	***
SE_4 <--- Self_Efficacy	1.000			
SE_3 <--- Self_Efficacy	.904	.079	11.457	***
SE_2 <--- Self_Efficacy	.934	.077	12.205	***
SE_1 <--- Self_Efficacy	.779	.071	11.004	***
EI_5 <--- Entrepreneurial_Intention	1.000			
EI_4 <--- Entrepreneurial_Intention	1.107	.064	17.941	***
EI_3 <--- Entrepreneurial_Intention	1.031	.065	15.932	***
EI_2 <--- Entrepreneurial_Intention	1.137	.063	18.167	***
EI_1 <--- Entrepreneurial_Intention	.681	.057	11.880	***
PA_5 <--- Personal_Attitude	1.000			
PA_4 <--- Personal_Attitude	.898	.072	12.489	***
PA_3 <--- Personal_Attitude	.875	.057	15.386	***
PA_2 <--- Personal_Attitude	.943	.075	12.546	***
PA_1 <--- Personal_Attitude	1.124	.074	15.190	***
SE_5 <--- Self_Efficacy	.950	.086	11.384	***

Table 4.14. *Standardized Regression Weights*

	Estimate
Entrepreneurial_Intention <--- Self_Efficacy	.202
Entrepreneurial_Intention <--- Locus_of_Control	.492
Entrepreneurial_Intention <--- Personal_Attitude	.212
LoC_5 <--- Locus_of_Control	.829
LoC_4 <--- Locus_of_Control	.832
LoC_3 <--- Locus_of_Control	.849
LoC_2 <--- Locus_of_Control	.932
LoC_1 <--- Locus_of_Control	.910
SE_4 <--- Self_Efficacy	.763
SE_3 <--- Self_Efficacy	.682
SE_2 <--- Self_Efficacy	.734
SE_1 <--- Self_Efficacy	.667
EI_5 <--- Entrepreneurial_Intention	.791
EI_4 <--- Entrepreneurial_Intention	.869
EI_3 <--- Entrepreneurial_Intention	.823
EI_2 <--- Entrepreneurial_Intention	.915
EI_1 <--- Entrepreneurial_Intention	.548
PA_5 <--- Personal_Attitude	.771
PA_4 <--- Personal_Attitude	.708
PA_3 <--- Personal_Attitude	.718
PA_2 <--- Personal_Attitude	.711
PA_1 <--- Personal_Attitude	.851
SE_5 <--- Self_Efficacy	.678

Table 4.15. *Variances*

	Estimate	S.E.	C.R.	P
Self_Efficacy	.251	.034	7.424	***
Locus_of_Control	.194	.022	8.883	***
Personal_Attitude	.255	.033	7.689	***
e36	.079	.011	7.191	***
e2	.180	.019	9.441	***
e3	.236	.022	10.599	***
e4	.188	.019	9.745	***
e5	.190	.018	10.476	***
e6	.088	.008	10.897	***
e7	.109	.010	10.783	***
e8	.093	.009	10.561	***
e9	.037	.005	7.640	***
e10	.053	.006	8.896	***
e21	.181	.013	10.589	***
e22	.109	.010	8.740	***
e23	.183	.012	9.742	***
e24	.100	.009	6.552	***
e25	.050	.020	11.947	***
e26	.118	.017	9.943	***
e27	.121	.019	10.867	***
e28	.090	.017	10.550	***
e29	.168	.020	10.839	***
e30	.102	.015	8.193	***
e37	.237	.026	10.642	***

Table 4.16. *Squared Multiple Correlations*

	Estimate
Entrepreneurial_Intention	.646
PA_5	.595
PA_4	.501
PA_3	.515
PA_2	.502
PA_1	.725
EI_5	.301
EI_4	.838
EI_3	.678
EI_2	.755
EI_1	.625
LoC_5	.688
LoC_4	.693
LoC_3	.721
LoC_2	.869
LoC_1	.828
SE_5	.459
SE_4	.582
SE_3	.465
SE_2	.538
SE_1	.445

Table 4.17. *Covariancess*

	Estimate	S.E.	C.R.	P
Self_Efficacy <---> Locus_of_Control	.113	.018	7.441	***
Self_Efficacy <---> Personal_Attitude	.186	.023	7.967	***
Locus_of_Control <---> Personal_Attitude	.145	.018	7.930	***

Table 4.18. *Correlations*

	Estimate
Self_Efficacy <---> Personal_Attitude	.735
Self_Efficacy <---> Locus_of_Control	.604
Locus_of_Control <---> Personal_Attitude	.652

Table 4.19 shows the overall summary of path analysis. It indicates that personal attitude (PA), self-efficacy (SE), and internal locus of control (LoC), have significant effects on entrepreneurial intention among nascent entrepreneurs.

Paths summary table shows the paths between personal attitude and entrepreneurial intention; locus of control and entrepreneurial intention; entrepreneurial intention and self-efficacy were significant at probability level 0.05.

Table 4.19. *Paths Summary*

Path	Estimate	S.E.	C.R.	P	Result
Entrepreneurial_Intention <--- Self_Efficacy	.191	.073	2.610	.009	Accept
Entrepreneurial_Intention <--- Locus_of_Control	.529	.070	7.572	***	Accept
Entrepreneurial_Intention <--- Personal_Attitude	.199	.075	2.652	.008	Accept

4.6. Hypotheses Results

This study is aimed at investigating the effects of personal factors on entrepreneurial intention among nascent entrepreneurs in Turkey. Three personal factors, internal locus of control, personal attitude and self-efficacy were taken as independent variables and dependent variable was entrepreneurial intentions.

The path analysis results of proposed structural model indicate that there are relationships between personal attitude, self-efficacy, internal locus of control, and entrepreneurial intention among nascent entrepreneurs.

Research hypotheses results are presented in Table 4.20.

Table 4.20. *Hypotheses Results*

	Research Hypothesis	**Level of Support**
H_1	There is a relationship between personal attitude (PA) and entrepreneurial intention.	Supported
H_2	There is a relationship between self-efficacy (SE) and entrepreneurial intention.	Supported
H_3	There is a relationship between locus of control (LoC) and entrepreneurial intention.	Supported

4.7. Additional Analyses and Findings Based on Demographic Variables

In addition to the data analyses and results provided in previous sections, additional analyses and findings based on demographic variables are provided as the last section of this chapter.

In this section, independent samples t-test and ANOVA tests are applied for gathering data from 312 participants based on demographic variables (age, gender and education level).

An independent samples t-test was conducted to analyze the effect of gender variable on designated factors. Table 4.21 provides group statistics of gender variable on each factor. In all of the factors, mean scores of male's were higher than female's and standard deviations of male's were lower than female's.

Table 4.21 *Gender - Group Statistics*

Factor	Gender	N	Mean	Std. Deviation	Std. Error Mean
PA_mean	Female	122	4.4082	.64097	.05803
	Male	190	4.4674	.44423	.03223
SE_mean	Female	122	4.2393	.55545	.05029
	Male	190	4.3484	.46969	.03407
EI_mean	Female	122	4.4738	.55993	.05069
	Male	190	4.5116	.47025	.03412
LoC_mean	Female	122	4.2820	.54773	.04959
	Male	190	4.3368	.47700	.03460

The results of the independent samples t-test presented in the Table 4.22. In order to decide on the correct t-test to be used, Levene's test for equality of variances was examined on each factor. It was seen that the p values of Levene's test of each factor were greater than 0.05. Therefore, the "equal variances assumed" dimension was taken into consideration to evaluate the results of t-test for equality of means.

The results of the independent samples t-test indicate all significant (2-tailed) values are greater than 0.05. This results point out that gender variable has not a significant effect on any factor (Tabachnick & Fidell, 2001).

Table 4.22 *Gender - Independent Samples t-Test*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
PA_mean	Equal variances assumed	1.525	.218	-.963	310	.336	-.05917	.06146	-.18011	.06177
	Equal variances not assumed			-.891	195.258	.374	-.05917	.06638	-.19008	.07174
SE_mean	Equal variances assumed	.661	.417	-1.862	310	.064	-.10908	.05858	-.22433	.00618
	Equal variances not assumed			-1.796	226.984	.074	-.10908	.06074	-.22877	.01062
EI_mean	Equal variances assumed	1.232	.268	-.643	310	.521	-.03781	.05884	-.15358	.07796
	Equal variances not assumed			-.619	225.772	.537	-.03781	.06110	-.15822	.08260
LoC_mean	Equal variances assumed	1.250	.264	-.935	310	.350	-.05487	.05868	-.17033	.06058
	Equal variances not assumed			-.907	232.278	.365	-.05487	.06047	-.17401	.06426

Analysis of Variance (ANOVA) test was applied to analyze the effect of age groups and education level groups.

The descriptive statistics means scores, test of homogeneity of variances and anova results for age groups are presented in Table 4.23, Table 4.24 and Table 4.25 respectively.

Table 4.23 *Age Groups - Descriptives*

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
PA_mean	18-24	51	4.4196	.60432	.08462	4.2496	4.5896	1.40	5.00
	25-34	134	4.4612	.48942	.04228	4.3776	4.5448	2.00	5.00
	35-44	108	4.4444	.52691	.05070	4.3439	4.5450	1.40	5.00
	45-54	19	4.3895	.63761	.14628	4.0822	4.6968	2.20	5.00
	Total	312	4.4442	.52973	.02999	4.3852	4.5032	1.40	5.00
SE_mean	18-24	51	4.3176	.57575	.08062	4.1557	4.4796	2.20	5.00
	25-34	134	4.2955	.51253	.04428	4.2079	4.3831	1.60	5.00
	35-44	108	4.3148	.44697	.04301	4.2296	4.4001	2.00	5.00
	45-54	19	4.2947	.62314	.14296	3.9944	4.5951	2.00	4.80
	Total	312	4.3058	.50690	.02870	4.2493	4.3622	1.60	5.00
EI_mean	18-24	51	4.4353	.68435	.09583	4.2428	4.6278	2.00	5.00
	25-34	134	4.5075	.43849	.03788	4.4325	4.5824	2.60	5.00
	35-44	108	4.4926	.49402	.04754	4.3984	4.5868	2.00	5.00
	45-54	19	4.6105	.48750	.11184	4.3756	4.8455	3.00	5.00
	Total	312	4.4968	.50667	.02868	4.4404	4.5532	2.00	5.00
LoC_mean	18-24	51	4.3137	.53554	.07499	4.1631	4.4643	2.60	5.00
	25-34	134	4.3194	.47564	.04109	4.2381	4.4007	2.40	5.00
	35-44	108	4.3037	.50083	.04819	4.2082	4.3992	2.00	5.00
	45-54	19	4.3579	.67521	.15490	4.0325	4.6833	2.20	5.00
	Total	312	4.3154	.50568	.02863	4.2591	4.3717	2.00	5.00

Table 4.24 *Age Groups - Test of Homogeneity of Variances*

Factor	Levene Statistic	df1	df2	Sig.
PA_mean	.086	3	308	.968
SE_mean	.576	3	308	.631
EI_mean	2.137	3	308	.096
LoC_mean	.822	3	308	.483

Table 4.25 *Age Groups - ANOVA*

		Sum of Squares	df	Mean Square	F	Sig.
PA_mean	Between Groups	.126	3	.042	.149	.930
	Within Groups	87.143	308	.283		
	Total	87.270	311			
SE_mean	Between Groups	.032	3	.011	.042	.989
	Within Groups	79.877	308	.259		
	Total	79.910	311			
EI_mean	Between Groups	.456	3	.152	.590	.622
	Within Groups	79.381	308	.258		
	Total	79.837	311			
LoC_mean	Between Groups	.051	3	.017	.066	.978
	Within Groups	79.475	308	.258		
	Total	79.526	311			

Anova test results presented in Table 4.25 indicate that all significant values of anova test results for each factor are greater than 0,05 significance level. According to the anova test results, it can be inferred that there are no significant differences between age groups and all four factors (Tabachnick & Fidell, 2001).

The descriptive statistics means scores, test of homogeneity of variances and anova results for education levels are presented in Table 4.26, Table 4.27 and Table 4.28 respectively.

Table 4.26 *Education Levels - Descriptives*

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
PA_mean	Primary	71	4.5211	.39925	.04738	4.4266	4.6156	2.60	5.00
	High	151	4.4477	.52292	.04255	4.3636	4.5318	1.40	5.00
	Technical	29	4.5241	.32695	.06071	4.3998	4.6485	4.00	5.00
	University	55	4.3382	.71063	.09582	4.1461	4.5303	1.40	5.00
	Post	6	4.0333	.72019	.29401	3.2775	4.7891	2.60	4.60
	Total	312	4.4442	.52973	.02999	4.3852	4.5032	1.40	5.00
SE_mean	Primary	71	4.3239	.42273	.05017	4.2239	4.4240	2.20	4.80
	High	151	4.3033	.49738	.04048	4.2233	4.3833	1.60	5.00
	Technical	29	4.3724	.45269	.08406	4.2002	4.5446	2.60	4.80
	University	55	4.2909	.61079	.08236	4.1258	4.4560	2.00	5.00
	Post	6	3.9667	.84301	.34416	3.0820	4.8514	2.40	4.80
	Total	312	4.3058	.50690	.02870	4.2493	4.3622	1.60	5.00
EI_mean	Primary	71	4.5352	.47542	.05642	4.4227	4.6477	2.00	5.00
	High	151	4.4490	.47383	.03856	4.3728	4.5252	2.00	5.00
	Technical	29	4.4828	.56446	.10482	4.2680	4.6975	2.60	5.00
	University	55	4.6109	.54896	.07402	4.4625	4.7593	2.00	5.00
	Post	6	4.2667	.85479	.34897	3.3696	5.1637	2.60	4.80
	Total	312	4.4968	.50667	.02868	4.4404	4.5532	2.00	5.00
LoC_mean	Primary	71	4.3408	.48450	.05750	4.2262	4.4555	2.60	5.00
	High	151	4.3086	.46747	.03804	4.2334	4.3838	2.00	5.00
	Technical	29	4.3655	.46925	.08714	4.1870	4.5440	4.00	5.00
	University	55	4.2909	.62399	.08414	4.1222	4.4596	2.20	5.00
	Post	6	4.1667	.75277	.30732	3.3767	4.9567	3.00	5.00
	Total	312	4.3154	.50568	.02863	4.2591	4.3717	2.00	5.00

Table 4.27 *Education Levels - Test of Homogeneity of Variances*

	Levene Statistic	df1	df2	Sig.
PA_mean	1.380	4	307	.241
SE_mean	1.618	4	307	.169
EI_mean	1.229	4	307	.298
LoC_mean	1.609	4	307	.172

Table 4.28 *Education Levels - ANOVA*

		Sum of Squares	df	Mean Square	F	Sig.
PA_mean	Between Groups	2.238	4	.560	2.020	.091
	Within Groups	85.031	307	.277		
	Total	87.270	311			
SE_mean	Between Groups	.855	4	.214	.830	.507
	Within Groups	79.054	307	.258		
	Total	79.910	311			
EI_mean	Between Groups	1.489	4	.372	1.459	.215
	Within Groups	78.347	307	.255		
	Total	79.837	311			
LoC_mean	Between Groups	.291	4	.073	.282	.889
	Within Groups	79.235	307	.258		
	Total	79.526	311			

Anova test results presented in Table 4.28 indicate that all significant values of anova test results for each factor are greater than 0,05 significance level. Based on the anova test results, it can be concluded that there are no significant differences between education levels and all four factors (Tabachnick & Fidell, 2001).

CHAPTER 5
CONCLUSION

In this thesis, main purpose of the study was to examine the different factors influencing on entrepreneurial intention among nascent entrepreneurs.

As the last part of the study conclusions and main discussion of findings are provided in this chapter. Additionally, limitations of the study are identified with the future research considerations and contribution of the research is discussed.

5.1. Conclusion

This study concerns with the influencing factors on entrepreneurial intention among the nascent entrepreneurs where the participants were the attendees of entrepreneurship course in Turkey.

In this research nascent entrepreneurs refer to individuals who want to start a business or intend to do business after they finished the entrepreneurship course founded by government and want to get required financial capital according to their own business project approved by the government agency.

In today's competitive world, the importance given to the entrepreneurship has been increased. The problem of increasing the unemployment rate, the changing economic structure as the new economy grows stronger, and the general acceptance of entrepreneurial developments in economics and business are considered highly important reasons for attractiveness of entrepreneurship in the world. The entrepreneur owns all responsibilities for the success or failures of the entrepreneurial activity, but the consequences of this concern affect the whole society.

The social aspect of entrepreneurship in the increasingly competitive conditions supports success of the entrepreneurship. Today, the process of change is accelerated considerably. The pace of change is not only in technology, but also in economic and social areas.

Keeping up with this rapid change and increasing social welfare in the world is only possible by providing the necessary fundamentals for entrepreneurship. Entrepreneurship might be very important function for preventing unemployment, contributing to the development of science and technology and raising social welfare and quality of life.

In this study, it is investigated the impact of different factors of individual's entrepreneurial intention among nascent entrepreneurs. Different dimensions of personal factors have been studied in this research. Personal factors include personal attitude, internal locus of control, and self-efficacy. On the basis of theory of planned behavior (Ajzen, 1991), this study identifies the influence of personal factors on entrepreneurial intention.

According to data analyses results applied in this study three factors are determined to influence on the entrepreneurial intention among nascent entrepreneurs as: personal attitude (PA), self-efficacy (SE), and internal locus of control (LoC).

These all factors were analyzed quantitatively, and the structural equation modeling (SEM) was developed. Figure 5.1 represents the below listed relationships of entrepreneurial intention among nascent entrepreneurs:

- Personal attitude significantly affects Entrepreneurial Intention,
- Self-efficacy significantly affects Entrepreneurial Intention,
- Locus of control significantly affects Entrepreneurial Intention,

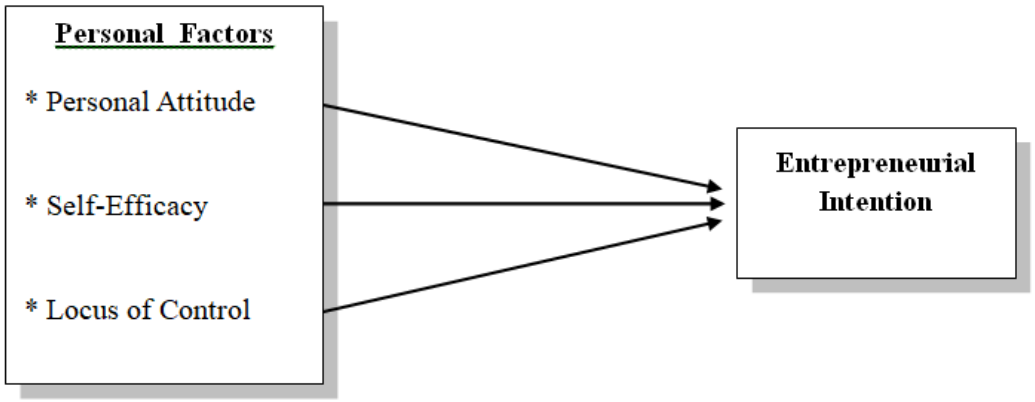

Figure 5.1. Structural Research Model

It is seen that all three independent variables have significant relation with the entrepreneurial intention. The result of this study is very much alike to previous researches that have been studied in other countries. It shows a supportive validity of personal factors have significant effects on the entrepreneurial intention among nascent entrepreneurs on the basis of Ajzen's (1991) theory of planned behavior.

In addition to SEM analysis, independent samples t-test and anova tests were applied on demographic variables including age, gender and education level of participants. According to the results of the independent samples t-test, it was concluded that gender variable has not a significant effect on personal attitude, self-efficacy, locus of control and entrepreneurial intention of nascent entrepreneurs. And also based on the anova tests results, it can be inferred that both education level and age variables have not effect significantly on personal attitude, self-efficacy, locus of control and entrepreneurial intention of nascent entrepreneurs. These analyses pointed out that there were no significant difference between demographic variables and designated factors among nascent entrepreneurs.

5.2. Discussion of Findings

In the modern world, entrepreneurship has an important role in development of countries, job growth, increasing economic prosperity and life standards of societies. New firms contribute to the economy through the jobs they create and by enhancing productivity resulting in increased wealth and growth (Parker & Belghitar, 2006).

New ventures are considered to be very important for national and global economies because they are potential source of economic growth, innovation, employment opportunities and economic prosperity by contributing to the economy through the job creations (Bosma, 2013; Bowen & De Clercq, 2008; Gartner et al., 2010; Liñán & Chen, 2009; Shane, 2000). Despite the importance of new ventures contribution to all economies, factors influencing on entrepreneurial intention among nascent entrepreneurs have received less attention (Fayolle & Liñán, 2014; Xavier et al., 2012).

In recent years, entrepreneurship has made a significant contribution to the development of countries, job growth, increasing the wealth and life standards of societies. In this case, establishing the entrepreneurship intention of people and the factors influencing entrepreneurial intention would give us specified information about entrepreneurship potential of societies and it would be guide for the other researches.

Nascent entrepreneurs are vital in the national and global economies because they are potential source of economic growth, innovation, employment opportunities.

Entrepreneurship has becoming very popular all over the world. The importance of examining the role of personal factors on entrepreneurial intention among nascent entrepreneurs is addressed in chapter two.

This study aimed at investigating the effect of personal attitude, self-efficacy, and internal locus of control factors on entrepreneurial intention among nascent entrepreneurs.

Personal Attitude shows a significant effect on entrepreneurial intention among nascent entrepreneurs. The result is consistent with the studies by Ajzen (1991), Küttim et al. (2014), Kolvereid and Isaksen (2006), Angriawan et al. (2012), Liñán and Chen (2009), Mueller (2001) , Mulebana (2014), Otuya and Martin, (2013), Veciana (2007), and Zampetakis et al. (2014).

Self-Efficacy shows a significant relationship with entrepreneurial intention among nascent entrepreneurs as a personal factor. The result is consistent with the studies by Basu and Virick (2008), Baum and Locke (2004), Drnovsek and Glas (2002), Kristiansen and Indarti (2004), Krueger and Brazeal (1994), Liñán and Chen (2009), Sesen (2013), and Wilson et al. (2007).

Locus of Control shows a significant relationship with entrepreneurial intention among nascent entrepreneurs as a personal factor. The result is consistent with the studies of different researchers including Begley and Boyd (1987), Beverland and Lockshin (2001), Brockhaus (1982), Brockhaus and Horwitz (1986), Chell (2008), Evans and Leighton (1990), Mueller and Thomas (2000), Pandey and Tewary (1979), and Perry (1990).

The results indicated that all factors have significant relation with entrepreneurial intention. Overall, the findings of this study helps for understanding entrepreneurial intention among nascent entrepreneurs.

5.3. Contributions of the Study

In recent years, entrepreneurship has made a significant contribution to the development of countries, job growth, increasing the wealth and life standards of societies. In this case, establishing the entrepreneurship intention of people and the factors influencing entrepreneurial intention would give us specified information about entrepreneurship potential of societies and it would be guide for the other researches. Given the importance of entrepreneurs in the economic growth, it is related to have knowledge of the effects of factors on entrepreneurial intention in creation of new ventures among nascent entrepreneurs. The insistent subject in this study has been that the existing literature on entrepreneurial intention is generally limited and underdeveloped among nascent entrepreneurs.

There is no single model that can be used to explain the factors of effect on entrepreneurial intention among nascent entrepreneurs. However, the insufficient development of the theory of entrepreneurship and its relation to other disciplines such as sociology, psychology, economic geography and others brings a good opportunity for integrating different scopes of literature which may result in the development of the entrepreneurship area.

Regarding methodological contribution, this study tries to handle some of the weaknesses of previous studies such as use of single method and small sample. For example, prior studies have mainly examined the determinants among students. This issue was also discussed and recommended to researchers as the future study of research on entrepreneurial intention by Fayolle and Liñán (2014).

After all, the methodology applied in this study and the outputs identified made contributions to the understanding of the personal factors and results that filling gaps in the entrepreneurship literature and this thesis will be the first research study on nascent entrepreneurs topic in The Council of Higher Education (YÖK) of Turkey.

This study also contributes to institutions related to entrepreneurship by presenting perceptions and insights at the applied level. It appears that entrepreneurship courses are likely to be more useful when applied to individuals with higher entrepreneurial intentions.

However, as the influencing factors and entrepreneurial intentions are changeable in time, all variables must be taken into account while focusing on nascent entrepreneurs who are more prone to start new ventures. For this reason, nascent entrepreneurs with higher entrepreneurial intentions should be able to reach scarce resources.

Practitioners and policy makers may want to think presenting a selection process that identifies such suitable candidates. If policy makers are concerned with increasing new business start-ups then they need to select and encourage those nascent entrepreneurs who have higher entrepreneurial intentions and are looking to start businesses within the short term.

Entrepreneurship institutions should make use of the findings of this thesis in improving the existing entrepreneurship projects to benefit from the potentialities of nascent entrepreneurs candidates as well as the general economy of Turkey.

5.4. Limitations and Future Research Considerations

In this thesis, there are some limitations which need to be acknowledged are presented in this section. They might have affected its result (Cresswell, 2013).

These Limitations may be caused by some relative issues such as questionable sample sizes, insincerity or reluctance of participants, insufficient measures, and measurement mistakes. Underlying these useful limitations for other researchers might be helpful to whom want to consider similar studies on individual entrepreneurial intention or nascent entrepreneurship.

In this study, influencing factors on entrepreneurial intentions among nascent entrepreneurs are examined. However, the data collection is restricted because the surveys were made only with individuals who attended entrepreneurship course in Adana city of Turkey. Therefore, data collection might be considered as one of the main limitations. Since, there are many nascent entrepreneurs or potential nascent

entrepreneurs within Turkey. The number of participants, the sample size, should be increased in future studies. Future studies can explore the impact of local economic environmental effects by enlarging the sample size form different regions. A longitudinal study will also help to explore the relationships between the start-up behavior and entrepreneurial intention of nascent entrepreneurs after finishing the entrepreneurial courses.

Another limitation is about the variables used in this study. The data were obtained from a series of variables in the printed form questionnaire. Gender might be important to consider as another potential variable. In this study, female and male data were not examined separately. It was combined in the analysis. Gender type might have a significant impact on the variables (Hindle, Klyver, & Jennings 2009). Further analysis of female versus male type impact should be undertaken to investigate based on theoretical considerations.

Family business type might be another potential moderating variable. The influence of family versus non-family business type on the results should be undertaken to examine in later studies. Additional insights may be obtained from investigating these possible variables based on theoretical considerations.

Furthermore, the data do not contain information on alternative qualitative measures of the cultural, economic and social environment which could enable to test the effect of various characteristics on different types of nascent entrepreneurs.

Entrepreneurship has been improving significantly in recent years in Turkey. The development of new business areas and the development of entrepreneurial activities based on new business models should be widespread throughout the country.

Turkish Statistics Institute (TUIK), reported that unemployment rate of Turkish young people is 24.5 percent (TUIK report, 2017). According to that TUIK report, one out of every four young people is unemployed in Turkey. It reveals that young people should be encouraged to become entrepreneurs to decrease the unemployment rate. In addition, Turkey’s medium and long-term high economic growth potential and demographic characteristics are expected to continue to make Turkey an attractive country for nascent entrepreneurs.

Aforetime, it was believed that an entrepreneur was an individual who was born as entrepreneur but currently now entrepreneurship is considered as able to be learned through training and formal education. Entrepreneurship is an economic activity as well as a cultural activity. Accordingly, some societies / cultures may be more entrepreneurial than others. A society's entrepreneurial ability determines its entrepreneurial culture. The cultural dimension of the entrepreneurship shows that entrepreneurial ability is gained over time. In this context, entrepreneurship training is very important. Within the education on entrepreneurship potential entrepreneurs will increase their self-confidence in their ability to create a new business. Economic, business and financial issues will be better understood. And also the desire to embark on enterprise will be boosted.

There are two main issues need to handle for boosting successful nascent entrepreneurs. First one is raising the number of individuals having entrepreneurial education. The other one is booming the number of individuals who have self-confidence to start a business having high entrepreneurial intention.

The role of entrepreneurship in social development has been well understood recently. The literature on entrepreneurship in the world up to recent years has focused mostly on small and medium sized enterprises. As the competition continues on a global scale, there is a rapid change in the technological, legal, political and cultural environment. In this framework, many companies in the world are faced with the challenge of activating their entrepreneurial potentials to survive and struggling with the difficult conditions of global competition.

In recent years, young and middle-class entrepreneurs have emerged in the world and have achieved successful results both in Turkey and in many countries of the world. High success among young generation entrepreneurs contributes to the development of entrepreneurship. Small business entrepreneurship plays important role when large enterprises perform inadequately due to the lack of adaptation in changing conditions. Given the importance of entrepreneurs in the economic growth, it is related to have knowledge of the effects of factors on entrepreneurial intention in creation of new ventures among nascent entrepreneurs.

The strengthening and expansion of an entrepreneur is in the presence of a sound ecosystem. Both public, private and government institutions, civil society organizations, and all stakeholders of this ecosystem take great responsibility. If the more support the entrepreneurship ecosystem receives, the more the experience, knowledge and material resources in the ecosystem are shared and benefited quickly.

In conclusion, entrepreneurship is under pressure by means of unfavorable economic and politic circumstances across the world. In this context, personal factors including entrepreneurial attitude, entrepreneurial self-efficacy and internal locus of control are important objectives influencing on entrepreneurial intention among nascent entrepreneurs should be fundamental concern.

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APPENDICES

Appendix-1. Some Selection of Recent Nascent Entrepreneurship Research

Author(s)	**Nascent Entrepreneurship Topic**	**Publication / Source**	**Year**
Aldrich & Martinez	*Evolutionary Perspective for the study of Entrepreneurship*	*Entrepreneurship Theory & Practice*	*2001*
Brennan et al.	*Nascent Academic Entrepreneurs*	*Journal of Small Business & Enterprise Development*	*2005*
Brush	*Gender Differences*	*Entrepreneurship Theory and Practice*	*1992*
Caliendo et al.	*Risk Attitudes of Nascent Entrepreneurs*	*Small Business Economics*	*2009*
Carter et al.; and Shane et al.	*Career Reasons*	*Journal of Business Venturing*	*2003; 1991*
Davidsson & Henrekson	*Determinants & Prevalence of Start-ups*	*Small Business Economics*	*2002*
Davidsson & Honig	*Social and Human Capital*	*Journal of Business Venturing*	*2003*
De Clercq et al.	*Nascent Entrepreneurs' Goal Commitment*	*Journal of Small Business and Entrepreneurship*	*2009*
Delanoë	*Nascent Venturing Outcomes*	*Journal of Small Business & Enterprise Development*	*2011*
Delmar & Davidsson	*Prevalence and Characteristics of Nascent Entrepreneurs*	*Entrepreneurship & Regional Development*	*2000*
Dimov	*Opportunity Recognition & Creativity*	*Entrepreneurship Theory & Practice*	*2007*
Diochon et al.	*Attributions of Nascent Entrepreneurs*	*Journal of Small Business & Entrepreneurship*	*2007*
Gartner & Shaver	*Nascent Entrepreneurship Panel Studies*	*Small Business Economics*	*2012*
Grossman et al.	*Emerging Networks of Nascent Entrepreneurs*	*Journal of Management*	*2012*
Hayek	*Control Beliefs & Positive Psychological Capital*	*Journal of Management Research*	*2012*
Honig	*Learning Strategies and Resources*	*Entrepreneurship Theory &Practice*	*2001*
Kim et al.	*Human & Financial Capital*	*Annual Meeting - American Sociological Association*	*2003*

Author(s)	Nascent Entrepreneurship Topic	Publication / Source	Year
Korunka et al.	*Entrepreneurial Personality*	*Entrepreneurship Theory & Practice*	*2003*
Li & Gustafsson	*Social class identity, prior experience affiliation and identification of innovative opportunity*	*Chinese Management Studies*	*2012*
Manolova et al.	*Entrepreneurial Expectancies &Growth Intentions*	*Entrepreneurship and Regional Development*	*2012*
Mueller	*Impact of Regional Dependence and Social Environment*	*Small Business Economics*	*2006*
Newbert & Tornikoski	*Resource Acquisition in the Emergent Phase*	*Entrepreneurship Theory & Practice*	*2013*
Parker & Belghitar	*Nascent Entrepreneur Failure & Success*	*Small Business Economics*	*2006*
Podoynitsyna et al.	*Risk Perception of Novice and Serial Entrepreneurs*	*Entrepreneurship Theory & Practice*	*2012*
Renko	*Early Challenges of Nascent Social Entrepreneurs*	*Entrepreneurship Theory & Practice*	*2012*
Renko et al.	*Expectancy Theory and Nascent Entrepreneurship*	*Small Business Economics*	*2012*
Reynolds et al.	*Prevalence of Nascent Entrepreneurs in the USA*	*Small Business Economics*	*2004*
Rodriguez & Santos	*Women Nascent Entrepreneurs & Social Capital*	*International Entrepreneurship Management Journal*	*2009*
Rotefoss & Kolvereid	*Business Start-up Process*	*Entrepreneurship and Regional Development*	*2005*
Schjoedt & Shaver	*Entrepreneurial Career Decision*	*Entrepreneurship Theory & Practice*	*2007*
Sequeira et al.	*Entrepreneurial Intentions & Self-efficacy*	*Journal of Developmental Entrepreneurship*	*2007*
Shane & Venkataraman	*Founder Success*	*Academy of Management Review*	*2000*
Van Gelderen et al.	*Pre-start-up phase success, and risk factors*	*Small Business Economics*	*2006*
Vivarelli	*Individual and environmental characteristics, and post entry performance of nascent ventures*	*Small Business Economics*	*2004*
Wennekers et al.	*Nascent Entrepreneurship & Level of Economic Development*	*Small Business Economics*	*2005*

Appendix-2. Questionnaire

Dear Participant, The purpose of this research is to determine the entrepreneurial intention. The answers you give to the questionnaire will not be explained clearly depending on the person or institution and the data will be used for scientific purposes only. We ask for your complete response and thank you for your participation. Please indicate in the following phrases and in which areas you are attending by placing an ''X'' in the adjacent boxes.		Completely Disagree	Disagree	Undecided	Agree	Completely Agree
1	For me, being an entrepreneur is to provide jobs to people.					
2	For me, being an entrepreneur is to earn high income.					
3	For me, being an entrepreneur is to be innovative and creative.					
4	For me, being an entrepreneur is to compete.					
5	For me, being an entrepreneur is to be part of my own business.					
6	I am able to obtain sufficient funds for future growth.					
7	I manage expenses.					
8	I control business costs.					
9	I see new market opportunities for new products/services.					
10	I tolerate unexpected changes in business conditions.					
11	I am ready to do what I need to be an entrepreneur.					
12	I am willing to make every effort to establish and maintain my own business.					
13	I am committed to establish a business of my own in the future.					
14	I have serious plans to establish my own business.					
15	One day I will establish my own business.					
16	When I make plans I am almost certain to make them work.					
17	People generally get what they deserve.					
18	For me, getting what I want is not a result of luck.					
19	Being successful is a result of working hard.					
20	I get what I want from life because I work hard for it.					

21. Gender : □ Female □ Male

22. Age :

23. Education level : □ Primary School □ High School □ Technical High School □ University □ Post Graduate

CIRRICULUM VITAE

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2015-2018	Adana Science and Technology University (Management Information Systems)	Adana-TURKEY
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1989-1993	Turkish Air Force Academy (Industrial Engineering)	Istanbul-TURKEY

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2011-2014	Ready Garment Retail Company (Director)	Istanbul-TURKEY
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