

LEBANESE AMERICAN UNIVERSITY

Entrepreneurial Intentions of Undergraduate Students:
A Case Study of One Higher Educational Institution

By

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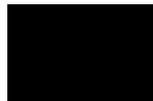
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Dedication

To every genuine person empowering others to become their best.

To every woman empowering another woman to become successful.

To my precious children:

Mahdi, Thalia, and Maher

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Entrepreneurial Intentions of Undergraduate Students:
A Case Study of One Higher Educational Institution
Lara Al Arab

Abstract

It is generally accepted that the educational system of universities has to provide an academic environment that is beneficial to graduate students to meet the challenges of the workplace. The aim of this study was to explore the prevalence of entrepreneurial intention (EI) and the impact of entrepreneurship education among Lebanese undergraduate students from an American style university. The study follows a mixed methods approach in which qualitative and quantitative data counterpart each other in order to strengthen data collected and overcome the weakness of the other as the main research questions addressed. Three instruments were used for data collection. The Theory of Perceived Behavior v.3.1 questionnaire was adopted. Data from the semi structured interview with three faculty members, and a focus group interview with 10 education students were cross checked to enhance reliability of findings. The qualitative and quantitative data analyses generated results that were grounded within the frame work of Theory of Perceived Behavior and impact of entrepreneurial education. The results show that there are entrepreneurial intentions which confirm the effectiveness of entrepreneurship education on enhancing entrepreneurial intention. The findings indicate that there is a strong entrepreneurship intention among the American style university undergraduate students. Accordingly, a more favorable context to effectively integrate entrepreneurial undergraduate courses.

Key words: Entrepreneurship, Entrepreneurship Intention, Theory of Planned Behavior, Demographic Factors, Entrepreneurship Education, Edupreneurship.

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List of Abbreviations

ANOVA Analysis of Variance

ATB Attitude Toward the Behavior

EDU Education

EE Entrepreneurship Education

EI Entrepreneurship Intention

F F-distribution variable

f Number of times score.

GEM Global Entrepreneurship Monitor

IRB Institutional Research Board

M Mean

N Population Size

n Sample Size

PBC Perceived Behavioral Control

PT Personality Traits

p-value The Attained level of Significance.

R² r-square Multiple correlation coefficient

SME Small and Medium Enterprises

SN Subjective Norm

SPSS Statistical Package for Social Science

t Student's t variable = t-distribution

TEA Total Entrepreneurial Activity

TPB Theory of Planned Behavior

TRA Theory of Reasoned Action

Chapter One

Introduction

A century ago, Herbart Spencer advocated utilitarian education that prepares students for immediate gainful employment by providing them with professional and vocational education (Spencer, 1984). According to Spencer, the aim of education is to prepare students for practical life instead of focusing on learning the classics, history, and similar subjects. The rationale is that societies constantly evolve into more complex ones requiring complex tasks that education should prepare students for at schools and universities to give them a competitive edge.

Currently, entrepreneurial skills are promoted as seen, for example, on the British Council website indicating the relevance of this research:

Through entrepreneurship activities, learners can gain key entrepreneurial skills such as critical thinking, problem solving, communication, risk taking, and team work. Entrepreneurship can offer alternative pathways for young people, improving their skills, employability and life chances while supporting wider economic and social development. ("The value of enterprise and entrepreneurship education", 2017).

Moreover, many future oriented policymakers advocate the integration of entrepreneurial values at school curricula, in which their efforts are starting to pay off. According to

Eurydice (2016), the Education Information Network in Europe, entrepreneurship education (EE) in schools is currently promoted in many European countries. As outlined by Eurydice (2016), Sweden is one of the countries with a specific, nation-wide strategy concerning the implementation of EE in general education. In 2011, the Swedish curriculum underwent a major revision and adaptation towards the new challenges of education and, for the first time, explicitly coined the term “entrepreneurship”, requiring schools to promote entrepreneurial teaching and learning. The Swedish National Compulsory Curriculum (CC) includes the following paragraph (SNAE, 2011, p.11):

The school should stimulate pupils’ creativity, curiosity and self-confidence, as well as their desire to explore their own ideas and solve problems. Pupils should have the opportunity to take initiatives and responsibility, and develop their ability to work both independently and together with others. The school in doing this should contribute to pupils’ developing attitudes that promote entrepreneurship.

Most importantly, entrepreneurial skills focus on the needed 21st century soft skills needed at the workplace. As the United Nations report highlights that not only soft skills such as “persistence, networking and self-confidence” are developed through entrepreneurship education, but also hard skills including knowledge, business planning, financial literacy and managerial skills are competencies and skills (Unctad.org, 2014, p.13). Moreover, the UN report (2018) on Entrepreneurship for Sustainable Development confirmed that EE “is critical for strengthening skills development” (p.7). This was again asserted in the EntreComp report (2016) which stated that entrepreneurship “as a competence applies to all spheres of life” (p.10). Thus, it empowers citizens to cultivate their personal

development, to dynamically impact to social development, to choose career paths as employee or as self-employed, and to start-up in order to become impactful change makers in different fields (Bacigalupo, Kampylis, Punie, & Van den Brande, 2016)

In general, entrepreneurial experience and/or education benefit youth's new skills development which are helpful to many challenges at all aspects of life. As a report from the United Nations Conference on Trade and Development states "The non-cognitive skills, such as opportunity recognition, innovation, critical thinking, resilience, decision making, teamwork, and leadership will benefit all youth whether or not they intend to become or continue as entrepreneurs" ("Harnessing Youth Entrepreneurship: Key to a better Future", 2017).

In the same way, the Organization for Economic Cooperation and Development (OECD) published an educational report in 2013 entitled "Supporting Graduate Entrepreneurship in the Culture and Creative Industries" which emphasizes the benefits of entrepreneurship education and start-up support. The report explains that entrepreneurship education and start-up support should be nurtured and cultivated at higher education among the student body, for the more students receive entrepreneurship education not only leads to more successful business start-ups, but most importantly students benefit by acquiring skills that make them more "employable". Thus, students will learn to identify opportunities and risk management (OECD, 2013). Similarly, Nauffal & Skulte-Ouais (2018) highlight the role of higher education institutions in Lebanon and the region in guiding students to better recognize the value of 'soft skills'.

They also suggest that additional aspects of the liberal arts education tradition “should be included in university training as part of the core curriculum or at least as extra-curricular offerings”. Furthermore, they assert that “higher education sector should seek to better balance employers’ and society’s needs today with preparing university graduates who will drive innovation in industry and public life in the future” (Nauffal & Skulte-Ouais, 2018). This is also made clear in the European Commission report (2008) “Entrepreneurship is a competence for all, helping young people to be more creative and self-confident in whatever they undertake” (p.3).

Accordingly, the objective of this research study is to explore the entrepreneurial intention among undergraduate students in an American system university and the impact of education and training on intention. Entrepreneurial intention is generally defined as the state of mind leading an individual’s attention and action toward entrepreneurial behavior such as building new business concept and undertaking an entrepreneurial career (Fayolle, Linán, & Moriano, 2014). Entrepreneurs are individuals with innovative and creative problem-solving skills able to realize any business opportunity (Kruger, 2004). Entrepreneurship education can increase entrepreneurship intention for self-employment for students in any major.

This chapter consists of background of the study, problem statement, research objective, research questions, and significance of this study.

1.1.Overview and Research Problem

1.1.1. Millennials and Employability

To understand millennials first I need to define the term. The word Millennials refers to the generation of people born between the early 1980s and the early 2000s. Perhaps the most commonly used birth range for this group is 1982-2000. The Millennial Generation is also known as Generation Y, because it comes after Generation X who are people between the early 1960s and the 1980s (Brack & Kelly, 2012). Second, millennials share many common characteristics.

Apparently, millennials are different from the previous generations in their perspective of success on a personal and professional level. In general, as described in *Maximizing Millennials in the Workplace* report, they are “continuous learners, team players, collaborators, diverse, optimistic, achievement-oriented, socially conscious and highly educated” (Brack & Kelly, 2012). In addition, millennials seek to constantly enhance their skills’ sets. They don’t work only for financial benefits, but they seek personal and social improvement and contentment. Accordingly, they opt for jobs that offer flexible schedules. This has led many employers to take into consideration these facts to look for ways to harness millennials’ strengths (Brack & Kelly, 2012). It is also worth highlighting that although entrance to university has increased significantly, general knowledge is needed to be successful in life and more specifically at career life; thus, education is not the only element leading to a successful life (Deal et al, 2010). Most importantly, millennials have an entrepreneurial mindset which is characterized with a sense of responsibility, a sense of accomplishment, and engagement in the workplace (Myers &

Sadaghiani, 2010). Therefore, academia and the workplace should be prepared in order to maximize the impact of the millennial generation in the workplace.

1.1.2. The Arab Millennial and Employability

The Arab millennial population has been increasing in the past decades. It is expected to add another 110m people by 2025—an average annual growth rate of 1.8%, compared with 1% globally. In 2010 the proportion of Arabs aged 15-24 peaked at 20% of the total population, and this number of young Arabs will keep growing to reach 58m in 2025. The Arab millennials contribute to the Arab economies, yet the high rate of unemployment is becoming a dominant issue as the shortage in jobs is increasing (Millennials in the Middle East and North Africa survey, 2014, p.152). As such, the unemployment reached 25.2% for males and 47.5% for females with ages between 15 and 24 in the Arab region (World Bank, 2016). Accordingly, unemployment as well as low levels and quality of education have led to social and economic repercussions. Similarly, Deloitte's Millennial 2017 report explored almost 8,000 millennials' views across 30 countries and confirmed that the predominant unemployment issue continues to burden 25%, and ranks third of the 18 items measured (Deloitte, 2017). These results are a wake-up call, and actions to encourage self-employment and entrepreneurship as an alternative to unemployment is to be stimulated to decrease the high unemployment rate among Arabs and more specifically Lebanese.

The Arab Youth Survey (2017) explored attitudes towards several topics among Arab youth in 16 countries in the Middle East and North Africa. Ten topics were targeted ranging from education, employability, security, and politics. The survey team

interviewed 3,500 Arab youth from February 7 to March 7, 2017 with Arab men and women aged 18 to 24. Ten key findings emerged from the largest survey in the MENA region which covered the six Gulf Cooperation Council states (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE), North Africa (Algeria, Egypt, Libya, Morocco, and Tunisia) the Levant (Iraq, Jordan, Lebanon and Palestinian Territories) and Yemen. One of the alarming findings of this survey is that Arab millennials consider unemployment as the biggest problem holding back the Middle East. The unemployment anxiety scale has dramatically increased among the young Arabs. It has increased by 9 points to become 51 per cent; hence, one in two young Arabs are unsure of their job prospects. This is aligned with their lack of confidence in their national governments' ability to deal with unemployment. The survey results also show that 55% of the millennials in Lebanon are the most concerned about being jobless, Lebanon also has the lowest trust rate towards the government's support. This goes hand-in-hand with young Arabs' lack of confidence in their education system. The lack of employment opportunities in the Arab world has been exacerbated by the mix match between the skills that the higher education institutes prepare students with and the marketable skills required for jobs in the future. Most young Arab people who expressed on this survey their disappointment towards their educational system are from North Africa, Levant, and Yemen. Alarming, Arab youth in the Levant-Lebanon is among these countries- are the most concerned where 41% expressed pessimism in the educational reform to integrate skills and knowledge to prepare them for the jobs of the future (The Arab Youth Survey, 2017).

Previous surveys have also tackled the issue of youth unemployment; 64% of those below 35 strongly agree that unemployment is a significant issue, and 36% of those below 35 believe that their education has not prepared them for the job market (“Bayt.com”, 2014). The problem has been evident more strongly in Lebanon than in the other MENA region area; it is expected that the economic crisis would impact young people much more than adults because of their higher tendency for temporary work and the fewer opportunities to enter the job market for their first job (Backeberg & Tholen, 2018). However, what do experts, policy makers, and researchers share as one common solution?

Klaus Schwab the Founder and Executive Chairman of the World Economic Forum asserts that:

Entrepreneurship and education are two such extraordinary opportunities that need to be leveraged and interconnected to develop the human capital required for building the societies of the future. Entrepreneurship is the engine fueling innovation, employment generation and economic growth (Volkman, Wilson, Mariotti, Rabuzzi, Vyakarnam, & Sepulveda, 2009).

In other words, self-employment and entrepreneurship should be nurtured through education and activities in order to better the economy of any country.

This is also evident in the Deloitte’s Millennial survey (2017) that sheds light at the optimism towards business, for 74% believe business has the potential to solve the challenges that concern the society; accordingly, innovative, well-educated, and entrepreneurial millennials should indeed defy unemployment challenges if they have the

spirit and curiosity to think outside the box, and the courage to meet and adapt to the challenges facing them.

Dirk Meyer, President and CEO, AMDP also promotes entrepreneurship in his message during the Fourth World Forum and he calls to cultivate educational cultures within companies, governments and communities, so that the “entrepreneurship pipeline is to be filled for generations to come” (Volkman et al., 2009).

Thus, as studies show entrepreneurship can prepare the Arab millennials to be active in developing their skills to match their desired career path allowing them to plan their career choices according to the market rather than face unemployment.

1.1.2.1. Lebanese Millennials and Entrepreneurship

The Global Entrepreneurship Monitor (GEM) annually publishes information about the entrepreneurial activity in The Early-Stage Entrepreneurial Activity (TEA) Index by country. In Lebanon, the level of early stage entrepreneurship is high across all levels of education and across all income ranges. TEA expresses the number of people who are in the preparation stage of starting a new venture plus those that are already running a new firm for less than 42 months (Bosma & Levie, 2009). It is important to highlight that Lebanon scores the sixth highest in terms of early-stage entrepreneurial activity of the countries categorized as efficiency-driven, and the eighth highest across all countries surveyed. Most countries (covered in GEM) have entrepreneurial population between 5% and 20%. These figures point out the fact that entrepreneurship makes a considerable contribution to the workforce. The GEM report also concluded that the percentage of

working age population in Lebanon who saw good opportunities to start a business significantly increased in 2016, (from 46% to 60%) and that their entrepreneurial intention rate is 41% (Akhrass, Hill, Solorzano, & Ramadan, 2016).

Additionally, GEM 2016 report states that early-stage entrepreneurs are most prevalent in the 25-34 age group confirming a general assumption of the ages of university graduates who start their own ventures. Such fact implies that university graduates at this age range have high probability to start up a business. Accordingly, prior to any curriculum reform initiative to nurture entrepreneurial mindset, activities, and facilities at university level, it is important to investigate the entrepreneurial intention of university students. It is worth stating that youth whether or not they intend to become or continue as entrepreneurs will develop at university non-cognitive skills, such as opportunity recognition, innovation, critical thinking, resilience, decision making, teamwork, and leadership skills (Irepos.unijos.edu.ng, 2008).

1.1.3. Importance of Entrepreneurship Education

There has been a major boom of entrepreneurship education in many industrialized countries in the past two decades (Matlay & Carey, 2006). This may be “indicative of widespread governmental belief in the positive impact that entrepreneurship can have on the socio-economic and political infrastructure of a nation” (Matlay, 2008). Accordingly, public policy makers consider entrepreneurship education as a major promoter of economic development, and therefore advocate entrepreneurship education to increase entrepreneurial activity (Fayolle, Gailly, & Lassas-Clerc, 2006). The European Commission (2008) advocates the integration of entrepreneurship into university

curricula. Its Expert Group report on Entrepreneurship Education emphasizes that the “important role of education in promoting more entrepreneurial attitudes and behaviors..., is widely recognized” (Irepos.unijos.edu.ng, 2008, p.10).

Ever since the first entrepreneurship course was offered at Harvard University in 1947, entrepreneurship education has started to receive scholars’ attention. The past years have witnessed the rapid booming of entrepreneurship education. Entrepreneurship courses has rocketed in the US for instance in the period from 1979 to 2001 (Katz, 2008) and are being taught in more than 2000 universities in the US (Cone, 2008), in England (Levie, 1999), Spain and The Netherlands (Koch, 2003). Entrepreneurship has also become one of the fastest-growing subjects at universities (Solomon et al., 2002), not only taught in the school of business, but are also offered to engineering, social science and arts students (Kuratko, 2005).

The importance of entrepreneurship education is evident in many studies (Henry et al., 2005; Levie and Autio, 2008; Fox and Pennington, 2009).

1.2.Statement of Purpose

This study aims to explore the entrepreneurial intention of undergraduate students rather than their entrepreneurial activities. It focuses on the factors which trigger their entrepreneurial intention, and their awareness towards entrepreneurial career. This is based on the following reasons:

First, entrepreneurial intention is the best predictor of entrepreneurial behavior. It’s evident in many social sciences findings that a person’s intention to perform (or not to

perform) a behavior is an important determinant of that action (Ajzen, 2005). Psychologists show that the intention is crucial to understand a behavior and it is the best predictor of planned behavior (Ajzen, 2005; Bird, 1988). The primary intention, thus, has a significant role in triggering an entrepreneurial behavior (Krueger et al., 2000). *Second*, past and recent entrepreneurship research focuses on entrepreneurial intention (Autio et al., 2001; Fayolle et al., 2006; Fayolle & Gailly, 2005; Kolvereid & Moen, 1997; Luthje & Franke, 2003; Peterman & Kennedy, 2003; Tkachev & Kolvereid, 1999; Linãn et al, 2004).

Finally, I am interested in how undergraduate students perceive entrepreneurship as a personal career alternative. Therefore, the purpose of this study is to explore factors affecting undergraduate students' entrepreneurial intention, the level of their entrepreneurial intention, and students' awareness of entrepreneurship as a career choice as well as the impact of the education and training on the entrepreneurial intention among the students. The study also explores whether students in education have entrepreneurial intentions.

This will hopefully help me gain more insight into how university administration and faculty could integrate entrepreneurship courses and encourage entrepreneurial activity through different projects at the higher education institutes.

1.3. Research Context

The study was conducted at an American Style university in Lebanon. This university is a leading, nonsectarian, private higher education institution which operates under a charter

from the Board of Regents of the University of the State of New York and is accredited by the New England Association of Schools and Colleges. More than 8,500 students are enrolled at two of its branches located in Beirut and Byblos in the fall of 2017 semester. 51% females and 49% males are enrolled at both campuses. Also, 89% of its students are undergraduates. Thus, it is more appropriate to investigate the undergraduate entrepreneurial intention in order to reach more reliable and significant results. It offers both undergraduate and graduate programs. It has seven schools: The School of Arts & Sciences, the School of Architecture & Design, the School of Business, the School of Engineering, the School of Medicine, the School of Nursing, and the School of Pharmacy. The university has also established the Institute of Family and Entrepreneurial Business (IFEB) in the year 2000. It is a pioneer in addressing the topic of entrepreneurship in Lebanon and the Middle East. Its mission is “committed to academic excellence, student centeredness, civic engagement, the advancement of scholarship, the education of the whole person, and the formation of leaders in a diverse world” (University document).

Moreover, the university’s strategic plan draws a clear roadmap to the year 2022 and includes three major pillars, two of which are related to the purpose and importance of this thesis. Pillar 2 is about the pedagogical innovation and integrated delivery and means to expand these through course planning, classroom learning, and multi-dimensional assessment. The third pillar states that the university seeks to strengthen the already current community of entrepreneurial culture by facilitating different available services in all areas of expertise within the university. Thus, it is suitable for this thesis study to select this university specifically due to the above listed facts.

1.4. Research Questions

In order to achieve the above purpose, the following research questions are addressed:

RQ1. Do undergraduate students possess entrepreneurial intention towards self-employment and perceive entrepreneurship as their career choice?

RQ2. How are the undergraduate students' demographic factors affecting their entrepreneurial intention?

RQ3. How relevant is the curriculum offered at this American system university in promoting students' interest in entrepreneurship?

1.5. Study Rationale

In the light of the above, in order to promote entrepreneurial activities and integrate entrepreneurship education in Lebanese universities, it is essential to investigate the entrepreneurial intention of the undergraduates; thus, it is appropriate for this current research to explore the entrepreneurial intention of the undergraduate students at higher education institution.

Many features related to entrepreneurship such as innovation, creativity, self-confidence, risk-taking, readiness for change, and solving problems in various ways are very important to deal with the dynamic economic, social, and political challenges. Indeed, there is a need for entrepreneurship education in the MENA region more specifically Lebanon. Therefore, entrepreneurship education and training is of high importance to foster entrepreneurial activities and produce entrepreneurial persons (Matlay, 2008).

Lebanese millennial's contributions in entrepreneurship stimulate the economic growth of Lebanon. Moreover, a review of the literature revealed that there are numerous research studies investigating the Entrepreneurial intentions of university students. However, there was not much research in the MENA region and none in Lebanon about the topic. Thus, researching the entrepreneurial intentions of undergraduate university students in Beirut helps identify the antecedents of entrepreneurial intentions among students. It is essential to know what drives students' decision towards self-employment.

It is hoped that the findings of the research contribute to the growing body of knowledge on entrepreneurship in the Lebanese context, especially with regard to its attitudinal dimension. Universities can use that information in evaluating how their offerings match their students' needs. They can also compare their offerings to those of other universities in the country and the rest of the world.

1.6.Division of the Study

This thesis is organized in 6 chapters. Chapter one is an introduction to the study purpose and context. Chapter two presents an overview of the literature on the topic of entrepreneurship and supports the rationale of this study. Chapter three describes the methodology used to conduct the study including the research design, data collection and analysis methods. Chapter four reports the results of data analysis. Chapter five consists of the discussion of the study findings. In chapter six, conclusions are drawn, limitations are listed, and suggestions for further research are stated.

Chapter Two

Literature Review

This chapter provides a review of the international literature on entrepreneurship. The review includes four main parts: (1) definitions of key terminologies, (2) review on entrepreneurship, (3) entrepreneurship education, and (4) entrepreneurship intention theories. This chapter first discusses the definitions of three key concepts: the entrepreneurship phenomenon, entrepreneurial intention and entrepreneurship education, and then shifts the focus to the key theories and models of entrepreneurship are reviewed. The below Figure 1 illustrates the map review of entrepreneurship and entrepreneurship education.

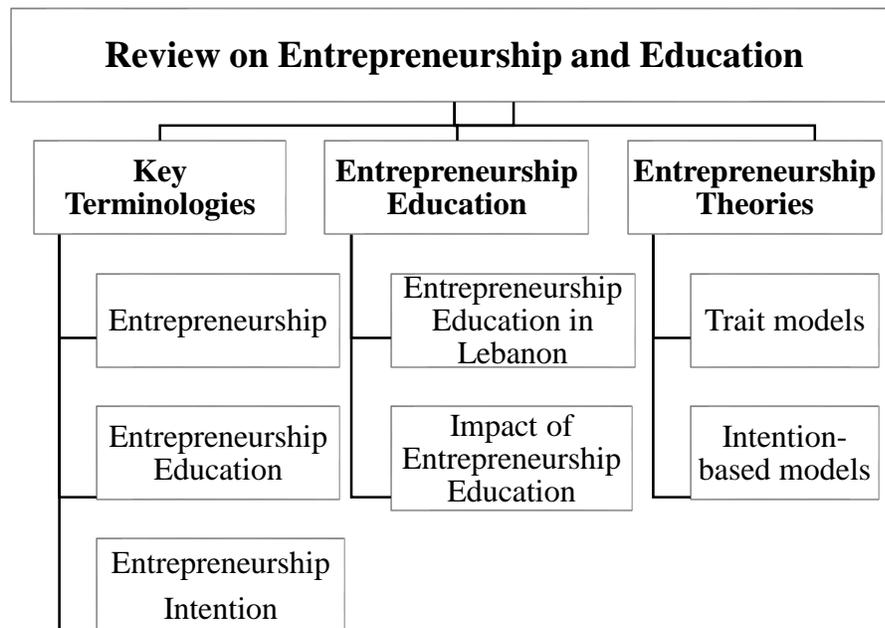


Figure 1. Main Concepts Derived from the Reviewed Literature

2.1.Key Terminologies

2.1.1. Definition of Entrepreneurship

The purpose of this study is to investigate factors affecting undergraduate students' entrepreneurial intention. To understand the entrepreneurship intention of the undergraduate students, it is necessary to clarify some terms.

Entrepreneurs are usually referred to as self-employed people. According to Schumpeter (1934), an entrepreneur is an innovator who breaks an existing state of equilibrium to create progress. However, there is no consent among entrepreneurship experts due to defining it from different fields of study. For instance, an economist refers to an entrepreneur as the person who makes the combination of resources to make them valuable. According to a psychologist, the entrepreneur is typically driven by several factors such as needs to obtain or attain something, to experiment and to accomplish targeted goal. On the other hand, a businessman thinks of an entrepreneur as a threat, an aggressive competitor or someone who creates wealth for others as well as finds better ways to utilize resources, reduce waste, and provide jobs to others (Hisrich, Peters & Shepherd, 2005). However, Kuratko (2005) considered that entrepreneurship is not only to generate new business, but is also a continuous innovation process. Thus, everyone has the potential to become entrepreneur especially for those who have undergone educational process at university level (Gelard & Saleh, 2011; Keat et al., 2011). This confirms the purpose of this thesis in focusing on the intention.

Since there is a lack of universally accepted definition of this phenomenon, it is necessary to summarize the various perspectives of entrepreneurship (Jones & English, 2004).

The term entrepreneurship has a history that dates back to 1732, when the Irish economist Richard Cantillon used the word in reference to individuals willing to take financial risk in carrying out a new project or venture (Minniti & Lévesque, 2008). The active form of entrepreneur, "entreprendre", can be translated as "to undertake or start something" (as cited in Minniti et al., 2008). Researchers and "economists such as Mill (1870), Say (1857), Knight (1921), Schumpeter (1934), Kirzner (1973, 1997), Baumol (1990, 2002) are among the most influential contributors to our understanding of entrepreneurial behavior..." (as cited in Minniti et al., 2008, p. 603). Innovation is the driving force to create new products, new production and operations methods, new sources, new business models and new markets. In this sense, entrepreneurship is highly related to the ability to produce something new (Timmons, 1989). The ability to recognize an opportunity overlooked by others is thus crucial for entrepreneurs. Other commentators, for example, Cunningham and Lischeron (1991) understood entrepreneurship in terms of a variety of activities including setting up, raising funds, sourcing, and managing a new company. Vesper and Gartner (1997) perceived entrepreneurship as a business entry through creating a new firm or acquiring an existing one. Entrepreneurship is the process by which individuals pursue opportunities regardless of the resources they currently control (Barringer & Ireland, 2010). Entrepreneurship is the art of turning ideas into a business (Barringer & Ireland, 2010); Cromie (2000) understood entrepreneurship as a process aiming at starting a new company, while Kuratko (2005) considered that entrepreneurship is not only to generate new business, but a continuous innovation process.

Another aspect of the definition is related to whether entrepreneurship is the result of nature or nurture. Some experts believed entrepreneurs are born, not made. However, many studies have reached a consensus confirming that entrepreneurs are not genetically inherited (Barringer & Ireland, 2010). Anyone can become an entrepreneur.

Despite different concerns of the phenomenon, the hub of the entrepreneurial process is the recognition of business opportunities. In this way, Shane and Venkataraman (2000) argued that identification and exploitation of business opportunities and its outcomes are the key to entrepreneurship.

Similar to Tan, Williams, and Tan (2005), Kao (1993) defined entrepreneurship as “the process of doing new and or something different for the purpose of creating wealth for the individual and adding values to society” (p.69). This understanding reflects the social function of entrepreneurship that provides benefits to the public rather than merely pursuing individual profits. This links to the concept of social entrepreneurship, which refers to innovative activity with a social objective in either for-profit sector or in non-profit sector, or in hybrid structural forms mixing these two sectors (Dees, 1998). Moreover, Hisrich and Peters (2002) claimed that entrepreneurship is highly linked to some common aspects such as creativity, independence and risk taking. In short, the above understandings on entrepreneurship are mainly surrounded by the concepts of innovation, business identification and exploitation, and the benefits and values to the society. The concept of entrepreneurship related to innovation and business opportunity identification is highly linked with entrepreneurship education and intention.

Briefly, the explored entrepreneurship definitions describe the different perspectives of the entrepreneurship experts. However, in this thesis I define the entrepreneur as an individual with innovative and creative problem solving skills able to realize any business opportunity by following a process to succeed in establishing a start-up with strong foundations. I believe that anyone is an entrepreneur and with appropriate entrepreneurship educational program the person's entrepreneurial intention will increase. As such students' entrepreneurial intention, as well as knowledge and skills will be developed with the help of entrepreneurial education.

2.1.2. Definition of Entrepreneurship Intention (EI)

Bird (1988) proposed that entrepreneurial intention refers to individuals' states of mind that aimed at creating new venture, developing new business concept or creating new value within existing firms. It is an important factor in facilitating a new venture establishment and has significant impact on the venture's success, survival and growth. He suggested that intentional process often begins based on an entrepreneur's personal needs, values, wants, habits and beliefs.

According to Ajzen (1991), intention is the immediate antecedent of behavior. He claimed that behavior is not performed mindlessly but follows reasonably and consistently from the behavior-relevant information and behavior reinforced by rewarding events and weakened by pushing events.

Many would like to be self-employed as they perceive that entrepreneurship is a suitable career path for them (Davidsson, 1995) and is a way for them to accomplish their personal goals, pursue own ideas and realize financial rewards (Barringer & Ireland, 2010).

Entrepreneurial intention is defined as willingness of individuals to perform entrepreneurial behavior, to engage in entrepreneurial action, to be self-employed, or to establish new business (Dell, 2008; Dohse & Walter, 2010). It usually involves inner guts, ambition and the feeling to stand on one's feet (Zain, Akram & Ghani, 2010). An individual may have potential to be entrepreneur but not make any transition into entrepreneurship unless they have such intentions (Ismail, Khalid, Othman, Jusoff, Rahman, Kassim & Zain, 2009).

In conclusion, Entrepreneurial intention is the elementary construct used in research on entrepreneurship (Bird, 1988; Carr & Sequeira, 2007; Krueger et al., 2000; Wilson et al., 2007) and it has been used as a dependent variable in many studies (Autio et al., 2001; Davidsson, 1995; Kolvereid, 1996; Tkachev & Kolvereid, 1999; Souitaris et al., 2007). Most researchers in the field of entrepreneurial intention confirm that the intention significantly predicts entrepreneurial behavior, and can predict entrepreneurial intentions (Ajzen, 1991; 2005). Thus, the factors influencing the entrepreneurial behavior do influence intention, which intentions are perceptions-based, they are learnable (Krueger & Brazeal, 1994). Therefore, nurturing the entrepreneurial intentions through entrepreneurship education is imperative in promoting entrepreneurship. Hence, this gives place to the development of the aim and research questions of this study.

2.1.3. Definition of Entrepreneurship Education (EE)

Entrepreneurship Education is a process of transmitting entrepreneurial knowledge and skills to students to them exploit a business opportunity. Since the 1950s, interest in entrepreneurship education has grown rapidly and entrepreneurship has recently become a vital domain of business education (Solomon & Fernald, 1991). Accordingly, many entrepreneurial experts have discussed the importance of entrepreneurship education to be integrated at the different educational, and community contexts. Similar to the different perspectives of entrepreneurship definition, experts presented different methods and perspectives concerned with entrepreneurship education.

According to Hood and Young (1993), entrepreneurship education is to teach people to start new businesses successfully and operate the businesses profitably, and thus facilitates the economic growth. Bechard and Tolohous (1998) argued that entrepreneurship education is a program or course that aims to introduce business knowledge and new business creation and to train individuals to start up. Moreover, Gottlieb and Ross (1997) stated that entrepreneurship education is related to creativity and innovation, whereas Kourilsky (1995) understood entrepreneurship education in relation to the identification of business opportunity, resources allocation, risk management, and new venture creation.

Moreover, Davidsson (2004) defined entrepreneurship education as a program teaching students how business opportunities are identified, evaluated and pursued by whom and with what approaches. This includes the teaching contents, the target audience, and competencies to deal with entrepreneurial activities.

As a result, entrepreneurship education should be offered not only to individuals interested in entrepreneurship, but also to those who have not yet established their any interest in entrepreneurship. To increase intention towards entrepreneurship, entrepreneurial education programs/courses should equip students with entrepreneurial knowledge and skills, and develop their entrepreneurial intentions. In the light of the above, it is essential to investigate the entrepreneurial intentions of students, which will offer important insights into designing effective strategies and guidelines for entrepreneurship education.

2.2. Entrepreneurship Education

2.2.1. Entrepreneurship Education in Lebanon

According to the GEM report, current and prospective entrepreneurs are being provided, through tertiary and vocational education system with the best talent and expertise. Besides the bachelor's and master's programs in technology-driven subjects and in the oil industry, more Lebanese universities are focusing on increasing their innovation, entrepreneurship, and small and medium-sized enterprises (SMEs) management programs. The Adnan Kassar School of Business at LAU is one example that has had an SME emphasis within its business degree for many years, and now has a dedicated Family Business Center. Moreover, universities are forming partnerships with accelerators and incubators to create centers for excellence in business and entrepreneurship (AlHussaini & Hill, 2017).

2.2.2. Impact of Entrepreneurship Education

A big number of entrepreneurship researchers have argued the need for the evaluation of entrepreneurship education and training in order to design effective entrepreneurship

education courses (Nabi, Liñán, Fayolle, Krueger, & Walmsley, 2017). Accordingly, the impact of education on entrepreneurial intentions has been studied and results show significant differences in terms of attitudes and intention levels of students who take part in entrepreneurship education programs and those who do not (Liñán &, 2014).

The positive impact of entrepreneurship education is further complemented by meta-studies of entrepreneurship education (Bechard & Gregoire, 2005; Dickson, Solomon, & Weaver, 2008; Mwasalwiba, 2010). Robinson & Sexton (1994) also concluded in their study that there is a strong relationship between education and the probability of becoming an entrepreneur and the probability of being a successful entrepreneur. Moreover, according to Dickson et al., (2008), there was a significant and positive correlation between participation in entrepreneurship educational programs and intention towards entrepreneurship. In the same line, McMullan and Gillin (1998) argued that individuals who took entrepreneurship courses processed stronger intention to set up an own company at some point in their life than those who did not attend the courses. Similarly, Fayolle et al. (2006), developed a model based on TPB to measure the effectiveness of an entrepreneurship education program in terms of entrepreneurial attitudes and intentions. The model included the characteristics of an entrepreneurship education program, such as institutional setting, audience, type of programs, objectives, contents, teaching and training methods and approaches. The study showed that the participants had significantly higher levels of entrepreneurial intention after completing the entrepreneurship program. It also found that the program was effective and increased the students' intention to start up.

One longitudinal study showed that entrepreneurship education significantly increases the start-up rate. Researchers studied the start-up rate after the participants completed the entrepreneurship program/course more than 3 years, and they found that the start-up rate of those who received entrepreneurship education was 35% which was much higher than that of the control group (17%) (Henry, Hill, & Leitch, 2008). This is further supported by Levie and Autio (2008) who claimed that entrepreneurship education encourages entrepreneurship activity. Is backed up their claim by evidence from 7 years of GEM (Global Entrepreneurship Monitor) data from 232 year-country observations in 54 countries which proved their assumption i.e. entrepreneurship education significantly improves actual and potential entrepreneurial activities. Another study of Fox and Pennington (2009) showed that entrepreneurship education positively impacts the economic improvement by the creation of start-ups which in turn create more jobs to solve the unemployment issue. The results reveal that 35% of 142 students has started their own businesses after completing an entrepreneurship course, and the average number of years that business has lasted was 3.54 years. Nevertheless, the 50% of the students who did not start up a business had a strong intention towards entrepreneurship.

It is vital to highlight the importance of EE for non-business disciplines. EE is not only limited to boosting start-ups, and new jobs creation, rather it also benefits students in humanities by improving their self-management and being part of social entrepreneurship, which is an evolving area of growth providing more opportunities to impact the social and community contexts. In addition, entrepreneurship for the creative arts and design students will improve their creativity and creative working by preparing graduates to work as self-

employed people, or creating small enterprises and ventures (European Commission, 2008).

As a conclusion, the above literature revealed that entrepreneurship education has a significant impact on the decision of participants in engaging in entrepreneurship and in their future business success.

2.3. Entrepreneurship Theories

The aim of this section is to review important intention theories in order to select the most appropriate theory for the theoretical framework underlying the research questions. This framework offers insight into the variety of research questions posed in this thesis.

Throughout the years, many intention theories have emerged. These theories are divided into two major schools. The first group of researchers argued that the personal, sociological, demographic factors (Reynoldset, Storey, & Westhead 1994) influence the intention to become an entrepreneur. These models are under the umbrella of *Personality Trait Models* (Cunningham & Lischeron, 1991; Herron & Robinson, 1993). These theories claim that the personality traits of entrepreneurs play a major role in the intention towards entrepreneurship. They explain that the personality of entrepreneurs exerts significant effect on business creation and management as it may direct one's decision making (Chandler & Jansen, 1992). Nevertheless, another group of researchers criticized the trait models theories which argued that entrepreneurship is the process to create a startup, and this should be realized by studying the activities, processes, and outcomes instead of focusing on personal characteristics (Gartner, 1988; Van de Ven, 1984).

Accordingly, the research focus shifts to another perspective. Kruger et al. (2000) summarize the claim that entrepreneurship is planned and it is more feasible to investigate the process of the entrepreneurial decision. Therefore, it is appropriate to focus on entrepreneurial intention as the predictor of entrepreneurial behavior. Hence, these intention-based models (Ajzen, 2005) have recently been adopted to explain entrepreneurial behaviors. It is considered that individuals have to concentrate on the cognitive processes influencing their perception of self-capability, control, and intentions. In brief, the intention-based models better describe the entrepreneurship process than the earlier traditional trait models do. In the following part, a brief explanation of these models is provided to reach and illustrate the decision in adopting the most appropriate model for this research.

2.3.1. Trait Model

The trait model claims that the personality traits define individual differences. Personality traits are defined as “characteristics of individuals that exert pervasive influence on a broad range of trait-relevant responses” (Ajzen, 2005). This model considers personality traits as the determining factors of behavior leading an individual to consistently perform in a relative way across several circumstances. Originally, Schumpeter developed the trait model from innovation theory. Schumpeter (1934) claimed that the creation of new combination which is innovative in nature is the main role of entrepreneur. The author also claimed that “entrepreneurs differ from non-entrepreneurs not by differences in knowledge or perception but by the performance of the innovative act itself” (p.88). Accordingly, Schumpeter believed that motivational differences impact one’s

participation in entrepreneurial activity. The author identified a set of “traits” which influences one’s motivation to become entrepreneurially, such as self-centeredness, and joy of creating.

In a similar fashion, other psychologists supported and further developed Schumpeter’s theory. For instance, Mishra & Zachary (2011) investigated the reason entrepreneurs are more risk-taking. They based their viewpoint on the economic influence of entrepreneurship which identified the motives leading to the engagement of a person in entrepreneurial activities. In general, the trait model assumes that entrepreneurs have certain traits distinguishing them from others (Obschonka & Stuetzer, 2017). Advocates of this theory have identified many personality psychological related traits to examine the difference between entrepreneurs and non-entrepreneurs. These traits are also called entrepreneurial traits/characteristics. Some of these traits are ‘achievement motivation’, ‘locus of control’, ‘risk-taking propensity’, and ‘tolerance of ambiguity’, ‘self-confidence’, ‘innovation’, ‘energy level’, ‘need for autonomy’ and ‘independent’, and many others (Frank, Lueger & Korunka, 2007). the level of ‘need for achievement’, ‘risk-taking propensity’, ‘locus of control’, and ‘creativity’. Thus, they assume that the higher the level of the person’s traits, the higher it is to engage in entrepreneurial activities.

In summary, the trait model's goal is to identify individuals with an entrepreneurial profile or to identify the successful entrepreneurs who can realize entrepreneurial success.

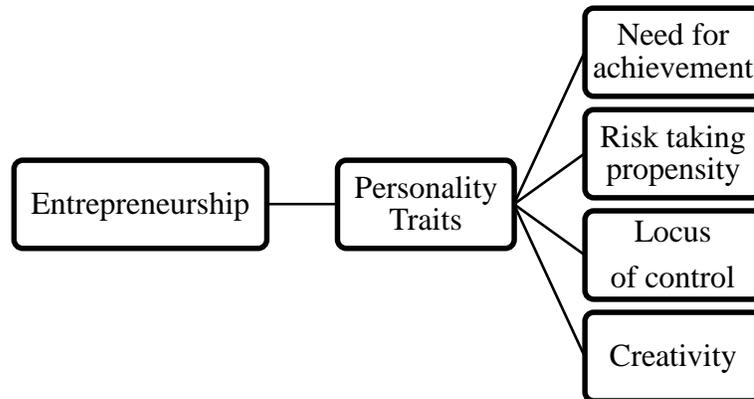


Figure 2. The Trait Model

2.3.2. Intention Models

In recent years, many intention models have emerged as important approaches in realizing the relationship between individuals and their behaviors in the entrepreneurship phenomenon (Ajzen, 1991; Bird, 1988). In general, this approach argues that the intention is a strong predictor of entrepreneurial action (Ajzen, 1991; Ajzen & Fishbein, 1980). Ajzen (1991) states that there is a significant correlation between intentions and the probability of the intended behavior. Research shows that the intention explains about 30% of variance in behavior and this figure is much higher compared with only 10% provided by personality traits (Ajzen, 1987). Similarly, it has been shown that entrepreneurial behavior is the result of entrepreneurial intention (Bird, 1988; Krueger & Brazeal, 1994). It is worth mentioning that the intention models have been the source of many studies on entrepreneurship. In this section, the key entrepreneurial intention models

are briefly listed, and I focus on the Theory of Planned Behavior (TPB) for it is the most appropriate model to be adopted as the theoretical basis of this thesis.

2.3.3. Summary of Intention models

There have been six major models adopted in the research field since the 1980s. These models are:

1. Entrepreneurial Event Model (EEM) (Shapero & Sokol, 1982)
2. Entrepreneurial Intention Model (EIM) (Bird, 1988)
3. Revised EIM with self-efficacy (Boyd & Vozikis, 1994)
4. Theory of planned behavior (TPB) (Ajzen, 1991)
5. Economic-Psychological Model (EPM) (Davidsson, 1995)
6. Structural Model of Entrepreneurial Intention (SMEI) (Luthje & Franke, 2003).

These intention models explain the understanding of the entrepreneurship in comparison with the trait models, for they describe entrepreneurs' cognitive processes. However, according to Liñán and Fayolle (2014), three models mainly serve as a guide to an understanding of the development of entrepreneurial intentions: Bird's (1988) model for implementing entrepreneurial ideas; Shapero and Sokol's (1982) model of the entrepreneurial event; and Ajzen's (1991) theory of planned behavior (TPB).

2.4. Theory of Planned Behavior

Theory of Planned Behavior (TPB) is derived from Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975). According to Ajzen (1991), TPB can explain any behavior

that includes planning as in entrepreneurship. The TBP model is a function of three determinants (Ajzen, 1991):

1. *Attitude toward Behavior* (ATB) is the degree of the person's feelings -positive or negative- towards a behavior of interest. It depends on the person's perception of the behavior's expected outcomes i.e. behavioral beliefs.

2. *Subjective Norms* (SN) is the belief about whether significant others think he or she will implement the behavior. It reflects the person's perception of the social environment surrounding the behavior

3. *Perceived Behavioral Control* (PBC) is the individual's perception of performance, whether the behavior is easy or difficult (Ajzen, 1991). Thus, the behavior increases when individuals perceive they have more facilities and confidence (Ajzen, 1985; Åstebro, Herz, Nanda, Weber, 2014).

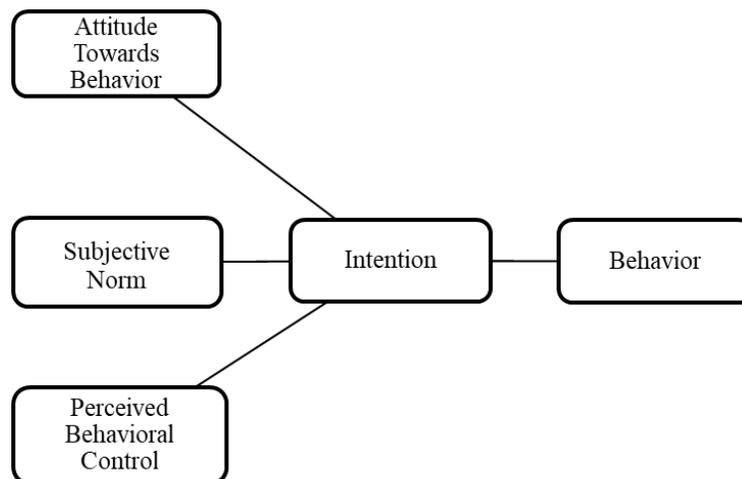


Figure 3. Theory of Planned Behavior. Adapted from “The theory of planned behavior,” by Ajzen, I. (1991), *Organizational Behavior and Human Decision*

Processes, 50, p. 179-211.

2.4.1. TPB in Entrepreneurship

Most research on entrepreneurial intention adopt the TPB (Autio et al., 2001; Fayolle et al., 2006; Gelderen, Brand, Praag, Bodewes, Poutsma, & Gils, 2008; Gird & Bagraim, 2008; Krueger et al., 2000; Souitaris, Zerbinati, & Al-Laham, 2007; Veciana, Aponte, & Urbano, 2005). Kolvereid (1996b) used the TPB to investigate 128 Norwegian undergraduate business students' employment choice. The results showed that attitude toward entrepreneurship, subjective norm, and perceived behavioral control significantly influence their entrepreneurial intention, as well as the demographic influence for the three constructs. Similarly, Tkachev and Kolvereid (1999) surveyed 512 Russian university students to examine their entrepreneurial intentions and found that the three antecedents significantly influence the students' entrepreneurial intentions. In addition, following the same conceptual framework and adopting the TPB, Autio et al. (2001) examined the factors that influence the entrepreneurial intention among university students from Finland, Sweden, USA and the UK. Their results showed that TPB was vigorous through the different samples from these countries and that the PBC was the most important determinant of entrepreneurial intention.

Moreover, Liñán and Chen (2006) in another study attempted to measure the entrepreneurial intention of two different samples of students: one of them European (from Spain) and the other South Asian (from Taiwan). The aim of this study was to test the adequacy of the Entrepreneurial Intention model (Liñán et al., 2005) using a cross cultural approach. The targeted sample was senior university students of business and economics.

An exploratory factor analysis was adopted to evaluate the data obtained from the surveys in order to check the correspondence of the indicators used (attitudes toward the behavior or personal attraction, perceived social norms, and perceived behavioral control or self-efficacy) with their theoretical constructs. In the same line, Gird and Bagraim (2008) examined TPB among final-year commerce students at two universities in the Western Cape. The results showed that TPB significantly explained the entrepreneurial intentions of the students and previous entrepreneurial experience significantly influence intention through its three antecedents.

Therefore, in order to investigate the students' entrepreneurial intention, I adopted the TPB model because it provides further detailed information about the formation of entrepreneurial intention. Besides that, as described in the previous section, it has received wide range of empirical support. After comparing the different intention models, TPB is the best model which provided a clearer picture of how the entrepreneurial intention forms. It gives a more detailed basis for me to study the entrepreneurial intention of students in the context of entrepreneurship. Thus, the TPB model is appropriate to be used as the theoretical basis of this thesis.

2.5. Conclusion

This chapter discussed three key terminologies: entrepreneurship, entrepreneurial intention, and entrepreneurship education then presented a review of studies on entrepreneurship education impact. Also, this chapter reviewed the major theories of entrepreneurship. Major research on entrepreneurship are centered by two theories: the trait models and intention-based models. Intention to act at different personal and social

levels is the predictor of entrepreneurial behavior. In this chapter, in order to decide on selecting the most appropriate model, I listed the six intention models and focused on the Theory of Planned Behavior model. The focus on this model was due to having more rigorous empirical studies confirming its compatibility.

Chapter Three

Methodology and Procedure

This chapter presents the research approach, design, and the procedures used to fulfill the purpose behind conducting this study. The study is conducted to investigate and examine factors leading to undergraduate students' entrepreneurial intention and the level of their entrepreneurial intention and to discover students' awareness towards entrepreneurial career. Thus, the research purpose will be fulfilled through three research questions:

RQ1. Do undergraduate students possess entrepreneurial intention towards self-employment and perceive entrepreneurship as their career choice?

RQ2. How are the undergraduate students' demographic factors affecting their entrepreneurial intention?

RQ3. How relevant is the curriculum offered at this American system university in promoting students' interest in entrepreneurship?

Table 1. *An Overview of the Methodology of this Study.*

Procedural Element	Description
Research design	<ul style="list-style-type: none"> ▪ Exploratory study using mixed methods: quantitative and qualitative
Participants	<ul style="list-style-type: none"> ▪ Sequential design ▪ A total of 6801 undergraduate students from an American system university participated in the survey. The participants included students from two campuses of the same university. The participants are from different majors. ▪ Three faculty members fostering the entrepreneurship mindset at university
Instruments	<ul style="list-style-type: none"> ▪ 10 undergraduate Education students ▪ Online Survey ▪ Semi Structured Interviews ▪ Focus Group Interview
Data collection	<ul style="list-style-type: none"> ▪ Pilot study was conducted to ensure content's clarity. ▪ The questionnaires were administered online through students' university emails. ▪ 131 completed questionnaires were received with a general response rate of 2%. ▪ Semi structured interviews are conducted with three faculty members; their answers were recorded ▪ Focus Group interviews were conducted with Ten Education undergraduate students.
Data Analysis	<ul style="list-style-type: none"> ▪ Reliability and validity of the measurements used in the survey are tested ▪ Descriptive information (e.g., means and standard deviations) ▪ ANOVA and T-test ▪ Coding interviews ▪ Triangulation

3.1. Research Design

It is important in any study to determine the research design for it ensures that the study endorses the purpose and methodology of research (Creswell, 2014). As such, this is an exploratory study using mixed methods: quantitative and qualitative.

I adopted the exploratory design, for this thesis aims at the discovery of things that are not based on any firm hypothesis at the beginning. In addition, the mixed methods approach uses both the quantitative and qualitative approach within a single research project to focus on the relation between the approaches. This link between the two approaches requires a comparison which promotes accuracy and validity; it is “inclusive, pluralistic, and complementary” (Johnson & Onwuegbuzie, 2003). The use of mixed methods also helps in triangulating findings: the *quantitative approach* presents quantitative data in the form of numbers which aims at providing objective measurement of observed events, whereas *qualitative approach* presents qualitative data in the form of text or pictures that provide the basis of interpretations of the meaning they convey (Fraenkel, Wallen, & Hyun, 2012). I used a *sequential design* because according to Fraenkel et al. (2012) in an exploratory study the role of the researcher is first to collect the qualitative data, and then to use the findings to give clearer directions to quantitative data collection. Thus, this data is used to “validate or extend the qualitative findings”.

Therefore, I based my research on the interviews with three experts and 10 undergraduate students and then collected the quantitative data from an online questionnaire addressed to all the university’s undergraduate students.

The use of the several data sources helps create greater credibility in findings. Consequently, methodological triangulation is used in this study. This refers the collection of data in various ways to check if the information gained from one method can confirm that from another method (Hussein, 2015). By using triangulation to analyze the collected data, the credibility of outcomes is increased.

3.2. Participants and Sampling Methods

The major population of this thesis includes undergraduate university student and faculty members in particular, a sample of 6801 undergraduate students from the two campuses registered during the academic year of 2018 Ire targeted in this study. Particularly those enrolling in all schools except the medical school. The targeted population was students registered during the academic year of 2018.

A convenient and purposive sampling technique was adopted for this study. Convenience sampling refers to the selection of cases which are the easiest to access under given condition (Etikan, Musa, & Alkassim, 2016); thus, I could easily gain access to the research site and participants.

The purposive sampling technique was also used to enable me to collect data that serves the research's purpose and objectives of discovering and gaining insight and understanding of a particular chosen phenomenon (Burns, 2000). Purposive sampling is used to ensure that the chosen faculty members are experts in the topic of entrepreneurship and are able to provide in depth insight into the issues addressed, in a similar way, the undergraduate Education major students were selected to provide thorough answers on different questions related to entrepreneurship intention in order to compare this data to that from students in all other majors.

After receiving the Institutional Research Board and Department of Institutional Research and Assessment approval, the online questionnaire was disseminated via email to 6801 undergraduate students in the two campuses. Data was collected over a period of 4 weeks during the fall semester of 2018. Although three reminders were sent to students, only 131 questionnaires were filled.

Furthermore, face to face interviews with three faculty members were conducted. Using purposive sampling technique was adopted here and only those who were perceived to have a specific profile needed for the study are included. This helps me understand the specific phenomenon to be studied (Fraenkel et al., 2012). The experts selected for this study have been working in promoting entrepreneurial education and awareness since early 2000s at this university. Two of these faculty are full time professors at the school of business, and the third faculty is the assistant vice president (AVP) for Outreach and Civic Engagement at the university. The first two professors teach entrepreneurship courses, and have a number of publications on the topic of entrepreneurship. One of the professor's research is mainly centered around entrepreneurial development and success, particularly among small family businesses in Lebanon. Also, she leads the Institute of Family and Entrepreneurial Business at the university. The second is an assistant professor of management who has taught entrepreneurship and innovation courses. He also participated in designing an entrepreneurship course that caters for the needs of engineering and pharmacy students. The latter faculty has been training the students participating in the Harvard World Model United Nations and heading the study abroad and student exchange programs. In addition, he has given workshops about educational leadership,

negotiations, emotional intelligence, team building and project management, strategic thinking and educational management.

Similarly, for the focus group interview, purposive sampling was adopted. Focus groups have a number of advantages. They give a deeper understanding of the phenomenon, and new insights, and help gain an understanding of students' entrepreneurial intention (Fraenkel et al., 2012). Hence, ten students from the department of Education were interviewed. A small number of these students are entrepreneurs and are running their startups, while others have never had any knowledge or experience in entrepreneurship.

3.3. Instruments

The triangulation method was used in this study in which both quantitative and qualitative methods would lead to congruent understanding of the phenomenon being studied, and to ensure validity and reliability (Fraenkel et al., 2012). One of the strengths of using this design is that the two methods will supplement each other and will compensate for each other's respective weaknesses (Fraenkel et al., 2012). Accordingly, using different data collection methods from both approaches helps in bearing the complementary strengths of the different data collection methods. Thus, in investigating students' entrepreneurial intention, three instruments are used: an online questionnaire filled by students, semi-structured interviews with selected faculty, and focus group interviews with Education students.

3.3.1. Questionnaire

An online questionnaire was administered on an online platform which is a web application used for data collection through web surveys. It was sent to undergraduate

students via their university email addresses in the two campuses to investigate their entrepreneurial intention. Questionnaires are adopted in the study because they provide students with confidentiality when sharing their opinions (Fraenkel et al., 2012; Creswell, 2014). Moreover, online surveys have many advantages in terms of cost finance, convenience, speed of responses, multimedia interface, mobile administration (using portable devices), and reduced data entry (Fraenkel et al., 2012).

I adopted the Entrepreneurial Intention Questionnaire (EIQ). This specific EIQ v.3.1 version is a newly developed questionnaire based on TBP to entrepreneurship after I received a written electronic approval of permission from Francisco Liñán (refer to appendix D), who is the author of several studies on entrepreneurial intention and has developed the mostly adopted EIQ instrument in many researches tackling the same topic. Liñán, Urbano, and Guerrero (2011) have ensured that it has been carefully cross-checked with those instruments used by other researchers, such as Kolvereid (1996), Chen, Greene, and Crick (1998), Kickul and Zaper (2000), Krueger, Reilly, and Carsrud (2000), Veciana, Aponte, and Urbano (2005) Kolvereid and Isaksen (2006). Along the whole construction process, Ajzen's (1991, 2001, 2002) work has been carefully revised to solve any discrepancy that might have arisen between the different instruments. Liñán et al., (2011) highlight that EIQ v.3.1 includes balanced scales, which are usually made up of Likert-type items. In a balanced scale all the item stems are positively worded; however, half of the items measure in one direction of the trait whereas the other half measure in the opposite direction (Thompson, 2009). Accordingly, two encompassing scales have been constructed. In both cases, Liñán et al. (2011) have included items that were combined and randomly ordered to minimize response-set bias and the halo effect, two common drawbacks of entrepreneurship

research instruments. Linán et al. (2011) clearly explain that the instrument includes items A1–A20 to measure the four central constructs of the theory of planned behavior: Entrepreneurial intention (A4, A6, A9-reversed (rev)-, A13, A17 and A19-rev-), attitude towards the behavior (A2-rev-, A10, A12-rev-, A15 and A18), PBC (A1, A5-rev-, A7, A14, A16-rev-, A20) and subjective norms (A3, A8, A11). On the other hand, social values regarding entrepreneurship were measured by an 8-item scale (C1–C8). Three of these items measure the valuation of entrepreneurship in the closer environment of the respondent (C1, C4 and C7); they have called this construct closer valuation. The remaining items measure perceptions regarding general social valuation of entrepreneurship (C2, C3-rev-, C5-rev, C6, C8-rev-) (Linán et al., 2011).

In brief, the questionnaire comprises five sections. The first section includes questions related to Entrepreneurial Activity which includes the constructs of the TPB: ATB, PBC, SN. The second section of the questionnaire is used to investigate students' education and work experience. The third section of the questionnaire is used to measure students' entrepreneurial knowledge. The fourth section tackles students' entrepreneurial objectives. The fifth section requests' students' demographic information: gender, age, degree, parents' education, parents' occupation, number of household members, and monthly income.

To ensure the validity of this questionnaire, it was piloted before its administration. The piloting details are explained later in this chapter.

3.3.2. Semi Structured Interviews

In-depth one-to-one semi-structured interviews with three experts in entrepreneurship were carried out to gain better insight about their perception of the entrepreneurial

intention and activities of university students. Semi-structured interview is when the interview consists of a number of guiding questions which are open to changes along the way (Mutch, 2005). According to Mutch, these interviews are conducted one to one to gain in-depth understanding of participants' perspectives. This method is an effective tool for my data collection since my purpose is to learn what interviewed experts think about student's entrepreneurial intention, and impact of entrepreneurship education. The interviews originally included several questions, yet few modifications and alterations from the original questions can occur during the interview (Mutch, 2005). Hence, I developed several questions based on the TPB constructs and entrepreneurship education.

The interviewees were sent an email requesting their consent to conduct the interviews. After sending their approval and setting an appointment to conduct these interviews, I met with each faculty member and voice recorded their interviews that took approximately 30 minutes with each interview.

3.3.3. Focus Group Interview

The focus group interview questions were derived from the research questions. They included questions to investigate their entrepreneurial activity and knowledge, and their entrepreneurial intention (refer to Appendix C).

I moderated one focus group interview with 10 undergraduate students from the Education Department. After the students I asked if the interview can be recorded and after signing the consent forms, the interviews were audio recorded. It was essential to record this session in order to keep track of the discussions, and to capture

what was said by the students to reduce uncertainty or confusion (Frankel et al., 2012; Merriam, 2009). The focus group interviews took place in a classroom.

The session took less than 60 minutes. Consequently, this not only allowed time for a thorough reflection on the questions, but also didn't cause students to feel fatigue or become distracted.

In order to conduct this interview effectively, I first explained the rules of the focus group discussions at the beginning of the session, then asked the students to express their opinions freely and build on each other's comments. Most importantly, I did not interject in such a way to judge or evaluate the students' information, yet acted as a facilitator in guiding the discussion (Burns, 2000).

There are a number of advantages in using focus group interviews. First, they permit discussion and discussion of ideas among participants (Frankel et al., 2012) as well as interaction with me (Stewart, Shamdasani & Rook, 2007). Second, the focus groups allow better depth and insight into the research question and help in the contextualization of quantitative data (Lamb, 2012). Third, the purpose of the focus group interviews is to collect more information from students and allow each student to explain their ideas. Fourth, the group of 10 students who discussed the questions together allowed I to obtain feedback and collectively gather more valuable data (Frankel & Wallen, 2008).

Table 2 below shows how the instruments used in this study are aligned with the three research questions:

Table 2 *Instruments used to answer research questions*

Research Question	Instrument		
	<i>Online Survey</i>	<i>Focused Group Question</i>	<i>Interview with Experts</i>
1) Do undergraduate students possess entrepreneurial intention towards self-employment and perceive entrepreneurship as their career choice?	<ul style="list-style-type: none"> ▪ Entrepreneurial Activity Section ▪ Attraction Towards Section ▪ Value Society adds Section ▪ Entrepreneurial Ability Section 	<ul style="list-style-type: none"> ▪ Describe any Entrepreneurial Activity that you have been engaged in. ▪ How did the idea of taking part in the entrepreneurial activity start? ▪ How did you materialize this idea? 	<ul style="list-style-type: none"> ▪ What are the major reasons behind LAU students' entrepreneurship intention? ▪ What role does the perception of one's own chances and capability to successfully start one's own company play?
2) How are the undergraduate students' demographic factors affecting their entrepreneurial intention?	<ul style="list-style-type: none"> ▪ Personal Data Section 	<ul style="list-style-type: none"> ▪ How did you get involved in the entrepreneurship activity? Why? 	<ul style="list-style-type: none"> ▪ What role does the family and social background of students play when it comes to self-employment?
3) How relevant is the curriculum offered at this American system university in promoting students' interest in entrepreneurship?	<ul style="list-style-type: none"> ▪ Education and Experience Section ▪ Entrepreneurial Knowledge Section ▪ Entrepreneurial Objectives section 	<ul style="list-style-type: none"> ▪ How did you get involved in Entrepreneurship ? ▪ What did you gain from this experience? ▪ In what way has it influenced you? 	<ul style="list-style-type: none"> ▪ To what extent can entrepreneurship classes change students' intention to start their own business?

3.4. Piloting

The instruments were piloted to ensure their validity. Four questionnaires were completed by students to determine the validity, clarity and simplicity of the used tools. The students were randomly selected and asked to fill the questionnaires and

add any comments related to unclear items. Their feedback was then reviewed to identify the number of items that were left blank. The students did not add any comment or recommend changes; thus, no modifications were done on the questionnaire following the review. In addition, once the questionnaire was ready to be sent online, it was sent to one undergraduate student to be piloted. Similarly, no recommendations were added; hence, this ensured the questionnaire's clarity and simplicity.

As for the interviews, the questions were reviewed by one of the faculty professors who did not recommend any changes.

Briefly, after making sure that the instruments are aligned with the research questions and the aim of the study, the use of the three instruments helped find common association among data from the 3 data sources which improves the validity and reliability of the study.

3.5. Validity and Reliability

To confirm validity and reliability of the inferences drawn from the collected data, I used different instruments for triangulation. Reliability and validity are both essential for the study's accuracy and credibility. According to Fraenkel et al. (2012), validity refers to "the appropriateness, meaningfulness, correctness, and usefulness" of the collected data. Reliability refers to "the consistency of inferences over time, location, and circumstances" (Fraenkel et al., 2012). Accordingly, the use of triangulation in the study leads to the increased confidence in research data, and provides a clearer understanding of the problem (Thurmond, 2001). In general, triangulation is beneficial in minimizing bias and increasing validity (Frankel & Wallen, 2008). The use of these instruments are said to be valid if they measure what they are supposed to measure.

3.6. Ethical Considerations

Several ethical considerations were taken into consideration while conducting this research study. These ethical issues were addressed in compliance with the regulations of the Institutional Review Board (IRB) where the permission for conducting this research was obtained. I was sure to respect the participants' privacy, confidentiality, and anonymity. The participants were asked to sign a consent form to participate in this study and were given the choice to drop out from the study at any point. In this study, no psychological or physical harm was incurred on any of the participants.

In relation to the students participating in the questionnaires, they were asked to complete the online form anonymously. Their participation was not mandatory, they had the choice to leave items empty if they were not comfortable filling them and they were made aware that they could terminate their participation at any stage in the study. The questionnaire included a cover page that explains the purpose of the study and assures participants that their participation is voluntary and that the data collected will remain confidential and will be used only for the purpose of this research (refer to appendices A, B and C).

Regarding interviews, voluntary participation was stressed. Upon their acceptance, participants were aware of the consent policy that was approved by the IRB, and approved participating in the focus group interview session. Similarly, the interviewed faculty members have also signed a consent form which includes the aim of the study and the privacy and confidentiality policy. Moreover, they were informed of their right to withdraw from participating in the study.

Furthermore, a written electronic permission from Francisco Liñán was requested to be able to use the EIQ v.3 in this study which was approved. A copy of the permission is added to the appendices of the study (refer to appendix D).

In brief, I was certain to complete the research with respect and concern for the dignity and welfare of the individuals who participated (Fraenkel & Wallen, 2012).

3.7. Data Collection Procedure

3.7.1. Online Questionnaire

After obtaining the IRB approval, I sent an electronic written request to the Department of Institutional Research and Assessment in order to create an online link for the EIQ v.3 survey in order to be disseminated via email among all undergraduate students at this university. After creating the link and finalizing the content of the email (see appendix A), all participants received the questionnaire on the same day. The online questionnaire was disseminated via email to 6801 undergraduate students in the two campuses. Data was collected over a period of 4 weeks during the fall semester.

3.7.2. Semi structured Interviews

The 3 faculty members who agreed on participating in the study signed an informed consent form confirming that they participated purposefully in the study. I scheduled a meeting with each faculty member in order to meet and conduct the interview in their office at the university campus. The content of the semi-structured interviews is formally prepared in order to guide the process of the interview, yet flexibility was encouraged to give space in adding details or sharing further insights and concerns about entrepreneurship intention and entrepreneurship education. Interviews were conducted face-to-face which helped the interviewees feel relaxed and at ease. The

interviews I recorded after gaining permission from the faculty members. Each interview lasted between 25 and 45 minutes. Later, the interviews I saved and uploaded to ATLAS.ti version 8 for data analysis purposes.

3.7.3. Focus Group Interview

The focus group session was scheduled to collect further qualitative data in the middle of the Fall semester 2018. The interview took place in one of the classes with previous professor's authorization where students shared their answers and opinions. The group of 10 interviewed undergraduate Education students included 1 male and 9 female participants.

Being the moderator of this session, I ensured that all participants are comfortable and engaged with the discussion, and that their opinions are being heard. Most importantly, I tried my best in ensuring that active participants do not overpower passive participants during the discussion.

I recorded the interview after having the students' consent and ensured confidentiality of the process. The interview took 60 minutes. It was saved and uploaded to ATLAS.ti version 8 for data analysis purposes.

3.8. Data Analysis

In the attempt to answer the research questions, data is analyzed based on side-by-side comparison of all data collected quantitatively (e.g. Questionnaires) and those collected qualitatively (e.g. interviews). During the analysis process I compared findings through presenting one set of results and then the other in a discussion (Creswell,2014) Thus, quantitative data is presented and followed by qualitative

results which either confirm or reject the statistical results or vice versa (Creswell, 2014). In this study, data collected through each method are separately analyzed, then, outcomes are triangulated for validation or rejection.

3.8.1. Quantitative Analysis

3.1.1.1. EIQ Analysis

After collecting the online data, raw data was sent via email to proceed to the next step. The data are run into SPSS v.23 to organize and later analyze in order to provide an indication of the relationships that exist between the variables. Descriptive statistics, T-Tests, ANOVA, Regression analysis, and Pearson Correlation analysis of variables were analyzed and compared to the qualitative data collected.

3.8.2. Qualitative Analysis

I used ATLAS.ti to analyze the collected qualitative data. ATLAS.ti is a software and qualitative research tool for coding and analyzing transcripts and field notes, building literature reviews, data management, creating network diagrams, and data visualizations (ATLAS.ti, 2018). Each interview was saved in a separate file and added to the ATLAS.ti primary document field. For the analysis, variables of the study are used as the basis of the coding process using ATLAS.ti version 8. Next, I coded all the data through creating words that refer to each category under study (Fraenkel et al., 2012). Coding in this study relied on constructs and dimensions measuring entrepreneurial intention of undergraduate students, which are derived from the literature. Coded data was grouped under themes (Fraenkel et al., 2012) which are entrepreneurship intention, role model, entrepreneurship education, entrepreneurship activity, entrepreneurship knowledge.

Finally, analyzed information was synthesized for triangulation in order to reach a conclusion. The analysis of data and the results of finding are further discussed in details in the following chapter

3.9. Conclusion

In conclusion, this chapter presented the detailed methodology in terms of research design, sampling methods, instrumentation, piloting, data collection, data analysis, validity and reliability and ethical considerations. The subsequent chapter comprises findings of the data collected from the three instruments.

Chapter Four

Results and Data Analysis

This chapter presents the analysis of data collected from a questionnaire filled by undergraduate students at an American style university, semi structured interviews with faculty members, and focus group interviews with undergraduate Education students.

Section one reports the quantitative data, including the profiles of participants. Also, the different variables of entrepreneurship intention are reported. Accordingly, the results include two parts. The *first* part presents data results from t-test, and ANOVA. In this part, I analyzed and reported on the effects of different demographic factors on the entrepreneurial intentions of the participants. Five demographic factors are reported in this part including age, gender, year of study, work experience, and role model. In the *second* part, I provided additional information and insights on the role of entrepreneurial activity, attraction towards employment choices, values society put on entrepreneurs, entrepreneurial abilities, education and experience, entrepreneurial knowledge, and entrepreneurial objectives.

Section three reports the results of the qualitative data. The purpose of this section is to present results on the influence of the entrepreneurship education components, family background, entrepreneurial experience and knowledge on students' entrepreneurial intention

4.1. Quantitative Data

4.1.1. Demographic Factors

4.1.1.1. Gender and Age

The questionnaire was sent to the two campuses of the American Style University. Among the 131 respondents, a greater number of students (57 %) are enrolled in the Beirut campus, whereas 43 % of students are enrolled in the Byblos campus. Also, 58.8 % of them are male students, while about 41% are females. The average age of all the respondents was 20 years old (> 65%), and half of them had work experience (>51%). These figures approximately resemble the general characteristics of undergraduate students at the studied American style university. Thus, the sample can be considered representative.

4.1.1.2. Education and Experience

Academic education data reveals that most of the respondents are enrolled at the School of Arts and Sciences (37%), 27% at the School of Business, 11% at the School of Architecture and Design, 19% at the School of Engineering, and few respondents are pursuing degrees at the School of Pharmacy 6%. In addition, 67% of the students are graduating within two years. In terms of employability, about half of the students had work experience (48%), whereas only few are self-employed (16%).

4.1.1.3. Entrepreneurial Knowledge

Based on our findings, the majority of undergraduate students 75% personally know an entrepreneur, while few 25% do not. It is also worth highlighting that around 69% of all respondents had friends or parents who had entrepreneurial experience, while about 30.7% of the respondents did not. Besides that, only 20% of respondents are

knowledgeable about business associations, support bodies, and other sources of assistance for entrepreneurs.

4.1.2. Theory of Perceived Behavior (TPB) Comparisons: Relationship between Demographic factors and entrepreneurial intentions

The effects of demographic factors on the entrepreneurial intentions of the undergraduate students were compared. The five demographic factors involved are the undergraduates' age, gender, employment experience, degree, and role model. T-test and ANOVAs were used to test the effect of the demographic factors. ANOVAs are used to test the factors consisting of more than two categories, such as age, year of study, and work experience. As a result, the data can be used for ANOVA.

4.1.2.1. TPB with Gender

Table 3

Means and standard deviations from TPB Scale

	Gender	N	Mean	Std. Deviation	Std. Error Mean
EI	Female	54	31.2778	7.92754	1.0788
	Male	77	30.5065	7.92668	0.90333
ATB	Female	54	29.6111	5.48554	0.74649
	Male	77	28.4935	5.24059	0.59722
PBC	Female	54	27.9074	6.73842	0.91698
	Male	77	26.7273	6.68785	0.76215
SN	Female	54	15.3704	3.7077	0.50455
	Male	77	16.2597	3.43895	0.3919
TPB	Female	54	104.1667	20.03935	2.72701
	Male	77	101.987	19.21724	2.19001

The above results (see table 3) reveal that females (N=54, M=31.28, S.D=7.93) scored higher than males (N=77, M=30.51, S.D=7.93) on entrepreneurial intentions.

Similarly, females outperformed ($M=29.61$, $S.D= 5.49$) males ($M=28.50$, $S.D= 5.24$) on attitudes toward behavior. Furthermore, females outperformed ($M=27.90$, $S.D=6.74$) males ($M= 26.72$, $S.D= 6.69$) on perceived behavioral control. Descriptives also reveal that females underperformed ($M=15.37$, $S.D=3.70$) on the subjective norms, in comparison to males ($M=16.26$, $S.D=3.44$). Overall, it is evident that females performed ($M=104.17$, $S.D=20.04$) better on the questionnaire of theory of perceived behavior, in comparison to males ($M= 101.99$, $S.D=19.22$). This indicates that females generally scored high on their entrepreneurial drive and intention, and are more passionate about starting their own businesses.

4.1.2.2. TPB and EI with Age

EI and Age

A Pearson's product-moment correlation was run to assess the relationship between age (see table 4 below for age distribution) and entrepreneurial intention in a sample of undergraduate students. There was a small positive correlation between age and entrepreneurial intentions, $r(131) = .197$, $p = .024$, with age explaining 3.8% of the variation in entrepreneurial intentions, a value determined by the coefficient of determination.

Table 4

Age Distribution

Age	<i>n</i>	%
17	3	2.3
18	31	23.7
19	19	14.5
20	33	25.2
21	25	19.1
22	11	8.4
23	3	2.3
24	2	1.5
25	1	0.8
27	1	0.8
28	1	0.8
34	1	0.8

TBP with Age

A Pearson's product-moment correlation was run to assess the relationship between age (see table below for age distribution) and TPB scores in a sample of undergraduate students. There was a small positive correlation between age and TPB scores, $r(131) = .244$, $p = .005$, with age explaining 5.9% of the variation in TPB scores, a value determined by the coefficient of determination. This indicates that there is a positive relationship between age and entrepreneurial intention, such that as age increases so does entrepreneurial intention.

4.1.2.3. TBP and EI with Gender

Gender and EI

Due to the nominal nature of the rest of our variables, I ran several One-Way ANOVA tests to examine whether between-group differences are evident between demographic

variables and entrepreneurial intention. A One-Way ANOVA was run with Gender as the Independent Variable and EI as the Dependent Variable. No significant group differences were found in EI, thus I will solely rely on the descriptives. From the descriptive statistics, it is evident that Females scored higher on EI (N=54, M=31.3, S.D= 7.93) than males (N=77, M=30.51, S.D= 7.93). Therefore, females adopt a greater entrepreneurial intention than males do.

Gender and TPB

A One-Way ANOVA was run with Gender as the Independent Variable and Entrepreneurial Activity (TBP scores) as the Dependent Variable. No significant group differences were found; thus I will solely rely on the descriptives. From the descriptive statistics, it is evident that Females scored higher (N=54, M=104.17, S.D=20.04) than males (N=77, M=101.99, S.D= 19.22). This indicates that females are more likely to establish a business independently, and are greater risk takers than males. Thus, they are more likely to benefit from entrepreneurship education, in comparison to males.

4.1.2.4. TPB with Employment Experience

A One-way ANOVA test was run to determine if there were differences in TPB scores between different years of employment experience. The ANOVA was significant; $F(2,128)=4.54, p=.012$. Post-hoc LSD tests revealed that there was a significant difference in scores on the Theory of Perceived Behaviors (TPB) questionnaire between individuals with 0 years of experience and 1-2 years of experience; $p=.028$. As individuals had increased amount of work experience (1-2 years), there was an observed significant mean increase of 8.09 (95% CI, .87 to

15.31) in scores. Similarly, there was a significant difference between individuals with 0 years of experience and those with 3+ years of experience ($p=.011$), whereby there was a mean increase of 13.08 (95% CI, 3.12 to 23.05) in TPB scores. Thus, the greater the years of work experience, the larger one's intent to pursue entrepreneurial work.

4.1.2.5. TBP and EI with Parent's Educational Background

A One-Way ANOVA revealed no evidence of group differences between father's educational backgrounds and EI. However, descriptives revealed that individuals whose fathers had a primary school degree scored higher on EI (M=32.94, S.D=7.430) than those with a university degree (M=31.00, S.D= 7.94), Secondary education (M= 31.16, S.D= 8.46), vocational training (M=25.50, S.D=4.23) and other (M=27.75, S.D= 7.42). Similarly, there were no significance between group differences between mother's educational backgrounds and EI. Descriptives revealed that individuals whose mothers had vocational training scored higher on EI (M=35.12, S.D=6.03) than those with a university degree (M=30.00, S.D= 8.16), Secondary education (M= 32.00, S.D= 7.00), primary education (M=33.80, S.D=7.51) and other (M=27.17, S.D= 9.24). Non-significant differences were also observed when examining evidence of between group differences between father's educational backgrounds and TPB scores. Descriptives also revealed that individuals whose fathers completed primary school scored highest on overall entrepreneurial activity scores (M=108.25, S.D=19.96), whereas those from "other" educational backgrounds scored the lowest (M=90.62, S.D=17.78). Furthermore, individuals whose mothers achieved primary school also reported higher scores on overall entrepreneurial activity (M=114.40, S.D=18.69),

whereas those with “other” educational background scored the lowest (M=92.50, S.D=19.00).

Is family education predicting TPB?

A linear regression (using the Stepwise method) established that mother’s educational level could statistically significantly predict overall TPB scores, $F(1, 129) = 5.97$, $p=.016$. Mother’s educational level accounted for 3.7% of the explained variability in TPB scores (scale A scores). The regression equation was: entrepreneurial intentions = $115.103 + (-3.70x$ (mother’s educational level). Therefore, mother’s educational level is a significant predictor of TPB scores, although it is important to note that it is not explaining a great amount of variance.

4.1.2.6. TPB and Family Occupation

The occupations that fathers had were: self-employed or entrepreneurs (N=67), worked in the private sector (N=32), public sector (N=14), retired (N=7), unemployed (N=4), and other (N=7). It is apparent that most fathers are self-employed or entrepreneurs. Individuals whose fathers are unemployed scored the highest on entrepreneurial intentions (M=38.25, S.D=3.50), whereas those with fathers in the private sector scored the lowest (M=28.15, S.D=9.77). Individuals whose fathers were unemployed also scored the highest on ATB (M=32.25, S.D=2.63), whereas those with fathers in the private sector scored the lowest (M= 27.44, S.D=6.89). Additionally, individuals whose fathers are unemployed scored highest on PBC (M=31.00, S.D=9.80), and those who are in the private sector scored the lowest (M=26.19, S.D=7.39). Individuals whose fathers are in the “other” sectors scored highest on SN (M=16.71, S.D=3.20) and those with retired fathers scored the least (M=14.86,

S.D=2.97). Overall, individuals whose fathers are unemployed had the greatest score on Entrepreneurial Activity (M=117.25, S.D=19.62), whereas those with fathers in the private sector scored the lowest (M=97.09, S.D=25.23).

Moreover, a One-Way ANOVA revealed no evidence of group differences between father's educational backgrounds and EI. However, descriptives revealed that individuals whose fathers had a primary school degree scored higher on EI (M=32.94, S.D=7.430) than those with a university degree (M=31.00, S.D= 7.94), Secondary education (M= 31.16, S.D= 8.46), vocational training (M=25.50, S.D=4.23) and other (M=27.75, S.D= 7.42). Similarly, there were no group differences between mother's educational backgrounds and EI. Descriptives revealed that individuals whose mothers had vocational training scored higher on EI (M=35.12, S.D=6.03) than those with a university degree (M=30.00, S.D= 8.16), Secondary education (M= 32.00, S.D= 7.00), primary education (M=33.80, S.D=7.51) and other (M=27.17, S.D= 9.24). Non-significant differences are also observed when examining evidence of group differences between father's educational backgrounds and TPB scores. Descriptives also revealed that individuals whose fathers completed primary school scored highest on overall entrepreneurial activity scores (M=108.25, S.D=19.96), whereas those from "other" educational backgrounds scored the lowest (M=90.62, S.D=17.78). Furthermore, individuals whose mothers achieved primary school also reported higher scores on overall entrepreneurial activity (M=114.40, S.D=18.69), whereas those with "other" educational background scored the lowest (M=92.50, S.D=19.00).

4.1.2.7. Family Household Members

Of the 131 participants, 48 had 6-7 individuals living in their household, followed by 36 with 8-9 individuals in their household, 36 people with 10+ individuals in their household, and 11 participants with 1-5 individuals living in their home.

4.1.2.8. Household income

The majority of participants (N=28) had a total monthly household income of 4000-7000 dollars. Twenty-seven individuals had an income of 1000-2000 dollars, 27 individuals had an income of 2000-4000 dollars, 20 had an income of above 10000 dollars, 17 individuals had an income of 7000-10000 dollars, and 12 individuals had an income of 500-1000 dollars. There is a significant difference in TPB scores between individuals with a household income of \$2000 or less and those with \$7000 and above; $p=.021$. As individuals earned a greater household income of \$7000 and above, there was an observed significant mean increase of 10.30 (95% CI, 1.58 to 19.02) in TPB scores. Similarly, there was a significant difference in scores between individuals earning \$2000-\$7000 and those earning greater than \$7000 ($p=.048$), whereby there was a mean increase of 8.16 (95% CI, .08 to 16.24) in TPB scores as individuals earned more. Thus, the greater the household income, the greater one's score on the TPB questionnaire.

4.1.2.9. EI and Household income

A one-way ANOVA was conducted to determine if EI was different for groups with different household incomes. Household incomes were divided into four separate groups; 2000 dollars or below (N=39), 2001-7000 dollars (N=55), 7001-over (N=37).

EI scores increased from the 2000\$ and below ($M = 29.38$, $SD = 7.85$), to 2001-7000 ($M = 30.04$, $SD = 8.32$) to 7001-over ($M = 33.51$, $SD = 6.80$) income groups, in that order. The ANOVA revealed significant group differences, $F(2, 130) = 3.16$, $p = .046$. Tukey Post-hoc tests revealed that there are only marginally significant differences in EI scores from those with an income of 2000-below to those with a household income of 7001-over, with a mean increase of 4.13, 95% CI [-.10, 8.36].

4.1.2.10. TPB and Household income

A one-way ANOVA was conducted to determine if TPB scores are different for groups with different household incomes. TPB scores increased from the 2000\$ and below ($M = 99.08$, $SD = 19.97$), to 2001-7000 ($M = 101.22$, $SD = 21.31$) to 7001-over ($M = 109.38$, $SD = 14.48$) income groups, and in that order. Welch's ANOVA revealed significant group differences, Welch's $F(2, 82.47) = 4.15$, $p = .019$. Games-Howell post-hoc tests revealed that there was an increase in entrepreneurial intention scores from those with an income of 2000-below to those with a household income of 7001-over and with a mean increase of 8.16, 95% CI [-.73, 17.06].

4.1.3. TPB and Participants' Education

LSD Post hoc tests showed that there was a significant difference on TPB scores between individuals who studied Business and those in Arts and Sciences, whereby there was a significant ($p < .001$) mean increase of 4.04 (95% CI, 1.65 to 6.42) in TPB scores, indicating that Business students performed better on this survey. In other words, students studying Business are more likely to be successful entrepreneurs and business owners.

4.1.4. TPB and Role Model

The majority of participants personally knew an entrepreneur (N=98), whereas the rest did not (N=33). The t-test revealed that there were significant group differences between the scores of those who knew entrepreneurs in their direct network and those who didn't; $t(71.70)=2.56, p=.013$. These values were reported as Levene's test for homogeneity of variances was violated; $F(129)=4.28, p=.04$. More specifically, individuals who knew an entrepreneur scored higher (M=12.78, S.D=3.69) in comparison to those who didn't (M=11.21, S.D=2.82). Furthermore, a greater number of individuals knew entrepreneurs in their indirect network (N=98) than those who didn't know any entrepreneurs in this social circle (N=33). Those who knew entrepreneurs in their indirect network performed better (M=21.95, S.D=5.34) than those who didn't know any (M=19.30, S.D= 5.00). The independent samples t-test revealed that there were significant differences between these two groups; $t(129) = 2.50, p=.012$. Additionally, Levene's test for homogeneity of variances was met; $F(129) = .21, p=.65$.

4.1.5. Do Attraction towards being an Employee (B1) and Attraction toward being an Entrepreneur (B2) scores predict TPB (Entrepreneurial Activity) scores?

Table 5

Hierarchical Multiple Regression Predicting Entrepreneurial Activity Scores from B1 and B2 scores

Variable	Entrepreneurial Activity			
	Model 1		Model 2	
	B	β	B	β
Constant	117.77		48.05	
B1	-4.64	-0.37	-0.123	-0.01
B2			9.63	0.68
<i>R</i> ²	0.141		0.47	
<i>F</i>	21.16		56.27	
<i>Change in R</i> ²	0.141		0.33	
<i>Change in F</i>	21.16		78.64	

Note. *N*=131 **p*<.05, ***p*<.001

A hierarchical multiple regression was run to determine if the addition of B1 scores and then B2 scores improved the prediction of Entrepreneurial Activity above B1 scores alone. See Table 5 above for full details on each regression model. The full model of B1 and B2 scores to predict Entrepreneurial Activity scores was statistically significant, $F(2,130) = 56.27, p < .001$; adjusted $R^2 = .684$. B1 scores significantly predicted Entrepreneurial Activity scores; Adjusted $R^2 = .134, F(1,129) = 21.16, p < .001$. The addition of B2 scores to the prediction of Entrepreneurial Activity led to a statistically significant increase in R^2 of .327, $F(1, 128) = 78.65, p < .001$. This indicates that one's attraction towards being an employee and an entrepreneur are significant predictors of their entrepreneurial activity, and the intention to become an entrepreneur. Notably, 72.5% of students ($N=95$) seriously considered

entrepreneurship as a career path, whereas, only 27.5% (N=36) did not opt for entrepreneurship as career path.

4.1.6. Comparisons of Scales

4.1.6.1. Entrepreneurship Activities and Abilities

A linear regression established that entrepreneurial abilities/skills sets could statistically significantly predict entrepreneurial activity, $F(1,129) = 112.42, p < .001$ and entrepreneurial abilities accounted 46.2% of the variance in entrepreneurial activity, as revealed by the Adjusted $R^2 = .462$. The regression equation was: $\text{entrepreneurial activity} = 35.90 + (2.12 \times \text{entrepreneurial abilities/skill sets})$. Therefore, entrepreneurial abilities are significant predictors of entrepreneurial activity. These results indicate that the greater one's entrepreneurial ability, the more likely they will engage in entrepreneurial activities.

4.1.6.2. Entrepreneurship Intentions and the Values Placed by Society

A simple linear regression was run to establish the relationship between entrepreneurial intentions and the values society puts on entrepreneurship. The regression model established that the values placed by society was a significant predictor of entrepreneurial intentions; $F(1,129) = 4.79, p = .031$. This model accounted for 2.8% of the variances in entrepreneurial intention. The regression equation was: $\text{entrepreneurial intentions} = 4.14 + (.039 \times \text{values society puts on entrepreneurship})$. Therefore, the values placed on individuals by society was a significant and positive predictor of entrepreneurial intentions. This indicates that the greater the value society

places on entrepreneurial abilities, the more likely individuals will engage in entrepreneurial activities.

4.1.6.3. Entrepreneurial Activity and Age

A multiple linear regression established that entrepreneurial abilities/skills sets and age could statistically significantly predict entrepreneurial activity, $F(2,128) = 61.55$, $p < .001$. Furthermore, these two variables accounted for 48.2% of the variance in entrepreneurial activity. The regression equation was: $\text{entrepreneurial activity} = 9.83 + (2.05 \times \text{entrepreneurial abilities/skill sets}) + (1.40 \times \text{Age})$. Therefore, age and entrepreneurial abilities were significant predictors of entrepreneurial activity.

4.2. Qualitative Data

Both qualitative interviews supported the results revealed by the quantitative analysis: students with pre-existing intention of becoming an entrepreneur (based on previous entrepreneurial exposure) are more likely to be encouraged or motivated to follow an entrepreneurial career. In the case of high previous entrepreneurial activity and ability, entrepreneurship classes probably rather take on a confirming role, since they provide a structured process and clear steps to explain what really means to be an entrepreneur. Briefly, both data confirmed that the greater one's entrepreneurial ability, the more likely they will engage in entrepreneurial activities. Similarly, the greater the value society places on entrepreneurial abilities, the more likely individuals will engage in entrepreneurial activities. In addition, age and entrepreneurial abilities were significant predictors of entrepreneurial activity.

4.2.1. Semi Structured Questionnaire

The semi structured questionnaire given to the faculty members and the assistant to the vice president asked for information on four different areas: entrepreneurship courses offered and their content, students' entrepreneurial intention, the impact of entrepreneurial courses on students, and the benefits of entrepreneurial courses for students in the school of education. The three faculty agreed on many points under each of these topics. However, one expert had a different reflection on one of the topics discussed during the interview.

4.2.1.1. Entrepreneurial Courses

The first part of the interview tackled the type of courses and activities the interviewees have been teaching in their departments. Thus, this section will illustrate their relationship to entrepreneurship and how their work has aided the growth of entrepreneurship education in the university. Two of the faculty members give entrepreneurial courses for business students at the graduate and undergraduate level. The third faculty member leads the civic and outreach engagement department. The courses ranged from introductory courses to more advanced courses. They are also very active in the entrepreneurial community through their participation in different educational and business conferences, platforms nurturing the entrepreneurial mindset and activity in Lebanon and the MENA region. Notably, they also work alongside other faculties at the university to create entrepreneurial courses that cater for disciplines other than business. One of the lecturers is the director of the entrepreneurship and family business institute at the university, an institute that offers workshops and organizes yearly activities and seminars on topics related to family businesses and corporate governance. These courses are only offered at the school of

business. However, one of the lecturers stated that the school of engineering and pharmacy have collaborated with the school of business to design an entrepreneurship course that caters to the needs of pharmacy and engineering students; in order to prepare them to independently open their own business, or to have the suitable skills to survive the job market's needs.

Additionally, the civic and outreach engagement department has been nurturing leadership and entrepreneurial culture through many programs and initiatives and inviting successful entrepreneurs to share their stories with students. These are open to all of the university's students where they are encouraged to enroll and participate in any program, initiative, or lecture without any financial fees.

4.2.1.2. Students' Entrepreneurial Intention (TPB)

The second part of the interview attempted to discover the factors influencing the students' entrepreneurial intention. The questions were divided into three parts dealing with the TPB theory. The first question aimed to understand students' attitude towards entrepreneurial behavior; the second, the subjective norms which is the person's beliefs about whether peers and people of importance to the person think he or she should engage in entrepreneurship; and the third the perceived behavioral control referring to a person's perception of the ease or difficulty of performing an entrepreneurial activity. As they answered the questions, it became more evident that their answers confirmed the quantitative results as explained in each of the following sections.

Attitude towards the Behavior (ATB): The three interviewees agreed that there are certain personality traits that students should possess to succeed in entrepreneurship. The major characteristics that they highlighted are risk taker, perseverance, resource

allocator, creativity, innovator, problem solver, and opportunity grabber. More importantly, all three interviewees agreed that the students who attended their classes have a great desire to become self-employed and start their own business. This desire, however, increases as the students become involved in entrepreneurship activity, attend entrepreneurship courses, and know about successful entrepreneur stories. One faculty member stated that "learning does definitely give a new lens on entrepreneurship"

Subjective Norms (SN): All the experts emphasized the importance of the significant others, such as members of the family, close friends, and other important people in the student's choice to follow a career as an entrepreneur. They stated that social pressure seems to affect the formation of students' entrepreneurial intention. One example is peer pressure's influence on their entrepreneurial intention. To exhibit this, one faculty specified that "the course and the teaching method and assignments will mitigate" the values society puts. Moreover, unlike one of the experts, the two faculty members agreed that parents' occupation and financial support increases the student's intention towards entrepreneurship. The first stressed that "entrepreneurship is not about having money; our failure concept is related to peer pressure". However, one expert explained that the Lebanese difficult social economic situation is playing a negative role in encouraging many students to open their own business.

Perceived behavioral control (PBC): PBC significantly impacts the entrepreneurial intention of students as the three experts stated. One emphasized that there is a "huge misconception about entrepreneurship" which many think it's a more difficult to be an entrepreneur than to be employed. Another explained that millennials now perceive the world as their family; thus, entrepreneurship is their "name of the game".

4.2.1.3. Demographic Factors

Age is one of the factors that they mentioned when discussing the students' entrepreneurial intention. The two lecturers agreed that undergraduate students' age is correlated with the intention towards entrepreneurship, and ability to succeed in their startup venture. However, the assistant to the university's vice president emphasized that "it starts at grade 6". One of the faculty members explained that the other factor which plays a role in increasing the students' EI is education. Business students are more aware of the process of starting up their independent business. However, one expert asserted that "it's the age of experimentation and entrepreneurial age"; hence, all students have the intention towards entrepreneurship. Parents' education and occupation are two factors that two of the experts listed as indicators towards increased entrepreneurial intention of undergraduate students. Furthermore, one of the faculty members highlighted that having "a big income" increases the intention towards entrepreneurship.

4.2.1.4. Impact of Entrepreneurship Education on Students' Entrepreneurial Intention

The third part of the interview tackled the importance and the impact of EE on undergraduate students' EI. All the individuals interviewed in the field of entrepreneurship education confirmed the relation between education and entrepreneurial intention as well as several other factors. These demographic factors are age, education, role model, and parents' occupation. They all affirmed that entrepreneurship education is important for the development of entrepreneurial intentions among students. Accordingly, entrepreneurship education can escalate

students' awareness about self-employment as a career choice. One expert described entrepreneurship courses as a "hype" that is leading universities to teach it across all disciplines, which increases students' chances to succeed in starting their own business. In addition, another expert stressed the importance of entrepreneurship education, for "entrepreneurial curricula are a must among all disciplines" in higher education. In brief, they all shared the same answer; not only do entrepreneurship courses increase students' awareness and knowledge, but they also increase their intention towards entrepreneurship. Therefore, they do confirm that education has a positive impact on students' entrepreneurial intention.

4.2.1.5. Importance of Integrating Entrepreneurship Education in the Department of Education

Entrepreneurial intentions among students, regardless of their field of study, increases with their exposure to entrepreneurship activity and knowledge through entrepreneurial courses as all respondents confirmed. All faculty members highlighted the importance of entrepreneurship education at the school of education. Table 6 below summarizes the faculty opinion on the importance of entrepreneurship education at the school of education, and their answers evidently resonate the same assertion.

Table 6

Faculty Opinion

Faculty 1	Faculty 2	Faculty 3
Entrepreneurship for education students is very beneficial. To make education better, students exposure to how to bring the opportunity in business. It will help them find a solution to a problem. Changing the demand on supply; finding a problem in education to introduce/or existing to solve.	Education pedagogue should challenge their methods. It is the most important state of mind.	EE should be among all disciplines. ALL schools should provide EE. Students at the school of education taking EE courses will help them provide solutions to educational problems. Anyone can create a business for any discipline.

4.2.2. Focus Group Interview

The interview of the focus group aims at exploring their entrepreneurial knowledge and activity, the factors influencing their entrepreneurial intention, and their views on integrating entrepreneurial courses at the school of education. During the interview students clearly discussed their experience, knowledge, and attitudes. It is important to note that some questions were elaborated upon and added during the interview to gain a better understanding of the shared answers.

4.2.2.1. Entrepreneurial Knowledge and Activity

To begin with, all respondents are undergraduate education students who never took any entrepreneurship course at any academic level. However, among the seven students three had their own entrepreneurial activity at high school level, which

continued as a financial support or as a passion. For instance, one of the students used to sell handmade jewelry, and another student sold cookies. These examples represent entrepreneurial activity. One student mentioned she has the intention to start a ballet dancing school, where another interjected to also share her intention to open an after school tutoring since she already tutors students for extra pocket money. Therefore, very few had previous exposure to entrepreneurial activities.

4.2.2.2. Factors influencing their entrepreneurial intention

TPB

All of the students' answers showed that the impact of ATB, SN, and PBC play a role in the formation of entrepreneurial intention. Thus, when students evaluate entrepreneurship positively, they are more enthusiastic to pursue a self-employed career. Besides this, their perceived ease to fulfilling entrepreneurial activities seems to play a role in their career choices, as some of the students had negative attitudes about entrepreneurship. These students showed negative attitudes towards entrepreneurship by describing this specific career choice as “unstable”, “risky”, and “stressful”, whereas the other students perceived it as an “independent” and “rewarding” choice. Thus, SN and role models influence their EI.

4.2.2.3. Demographic Factors

During the interview, I observed that the role of family background influenced their EI. Mostly all students had a parent or relative who was self-employed and whose experience has either positively or negatively influenced their intention towards entrepreneurship. One student's father works in insurance, which had a negative

influence on the student's perception of self-employment as they described it as "stressful". On the other hand, another student expressed the advantages of being self-employed by describing it as "less demanding than being part of company with strict rules and regulations". Furthermore, parents' occupation played a role in developing their entrepreneurial intention. For example, students who had self-employed parents or relatives were more positive in discussing their EI. In addition, prior employment experiences influenced the respondents' EI. Most were not employees and did not have any employment experience, yet five of them were self-employed. The self-employed students were private tutors, jewelry designer, and ballet teacher. They all had a business idea they wanted to advance. One of them stated that her family was supportive and helped in providing recommendations for branding, location, and recruiting students. The others also shared the same intention towards opening their business. They explained the process enthusiastically and were eager to learn more about the process to succeed in opening their own business. Their previous experience intensified their entrepreneurial intention. It is also important to indicate that the female students were more fervent towards pursuing entrepreneurship; when they were answering the question of whether they would choose self-employment, they all agreed that it's a better employment choice, whereas the male student did not support entrepreneurship as a career choice. Thus, it seems that gender influenced their motivation towards pursuing entrepreneurship as a career.

4.2.2.4. Importance of Entrepreneurship Education

When asked if they would register in an entrepreneurship course, all seven students replied positively. They all agreed that taking an entrepreneurial course can help them lead projects successfully. They also added that these courses should be offered in both

the undergraduate and graduate level. One student added that entrepreneurship courses should not be theoretical, but also hands on with practical tools to start up a successful business. In general, all favored the idea of having a course in entrepreneurship and even asked whether there are entrepreneurial activities for them to take part in.

Therefore, as stressed in chapter one, this study suggests that understanding the consequence of specific components related to entrepreneurship intention is important to design an effective entrepreneurship course or program. Hence, this will provide students an entrepreneurial sense in the learning process and improve their perceptions about entrepreneurship. Briefly, entrepreneurial intention is also increased through education.

4.2.3. Comments related to the Quantitative and Qualitative Data addressing the three Research Questions

Based on the above data analysis, each of the research questions was addressed as follow:

4.2.3.1. RQ1. Do undergraduate students possess entrepreneurial intention towards self-employment and perceive entrepreneurship as their career choice?

This question is investigating and exploring the EI of undergraduate levels. The data resulting from the qualitative interviews validated the quantitative results. On the quantitative level, attraction towards being an employee and being an entrepreneur were both statistically significant predictors of Entrepreneurial Activity. This indicates that as one's attraction towards becoming an entrepreneur and an employee increases, then their entrepreneurial activity will also increase. This was also evidenced by the

answers of faculty members and education students, and specifically through their assertion that most of the students they taught have the desire to become self-employed. This was also echoed during the focus group interviews as most of the students shared their attractiveness towards EI in the way they expressed their current entrepreneurial activities and future plans. Thus, data results from the three instruments confirm that students' entrepreneurial intention and activity is determined by their attraction towards being an entrepreneur and employee.

4.2.3.2. RQ2. How are the undergraduate students' demographic factors affecting their entrepreneurial intention?

It is important to note that the qualitative and quantitative results relevant to this question do not aim at determining any relationship between demographic factors and EI, they merely shed light on how demographic factors impact students' EI. It is also important to highlight that this section is considered important since it paves the way for the third question which tackles in depth the evaluation and the entrepreneurship education impact on students' EI.

The quantitative data collected show that females are more entrepreneurial than males, which was also the case in the focus group. However, the faculty members did not relate EI to gender. In relation to age, data collected from the three instruments revealed that the younger the students are, the more they are to start up their business. When tackling the impact of role models, the three instruments confirmed that knowing a person from their close social circle (i.e. a family member) increases their chances of becoming an entrepreneur. Thus, this indicates that the greater the value society places on entrepreneurial abilities, the more likely students will engage in

entrepreneurial activities. Most importantly, the quantitative and qualitative tools assert that entrepreneurial activity and knowledge data play a significant role in encouraging EI. This is a significant finding that leads to the third question which investigates the role of entrepreneurial education in increasing EI. Therefore, societal values can largely influence the entrepreneurial mindset, which can either dissuade or persuade students to pursue self-employment as a career choice.

4.2.3.3. RQ3. How relevant is the curriculum offered at this American system university in promoting students' interest in entrepreneurship?

The third research question of the current study aims at exploring the impact of integrating an entrepreneurship curriculum to promote entrepreneurship. This research question is an integral part of the current study since the main aim of the study. The aim of this study is to explore the role of entrepreneurial education in enhancing students' entrepreneurial intention, in order to offer self-employment tools and skills that can prevail in the face of unemployment.

From the responses to the questionnaire, it is evident that Business students performed better on this survey, which indicates that studying Business prepares students to be successful entrepreneurs and business owners. In other words, courses offered related to the process of creating successful business will propose self-employment and independence. This also means that the intention to start a new business in the predictable future, after leaving university, will increase. The importance of entrepreneurship education was also addressed on the qualitative level as faculty members and the focus group confirmed the results of the importance of

entrepreneurial activities and prior knowledge on instilling entrepreneurial drive within students. Additionally, the quantitative results showed that entrepreneurial abilities/skills sets are statistically significant predictors of entrepreneurial activity. Therefore, we may conclude that exposing students to entrepreneurial activities early on, and through an entrepreneurship curriculum at the university level, can instill entrepreneurial intentions within students and provide them with proper tools to pursue self-employment. In turn, this necessitates the integration of entrepreneurial courses within the undergraduate program at universities.

4.3. Conclusion

This chapter presented findings addressing the research questions regarding (1) students' entrepreneurial intention, (2) the influence of demographic factors, and (3) the question about the influence of entrepreneurship courses. Results from each used instrument were presented in details.

Chapter Five

Discussion of Findings

5.1. Introduction

This chapter discusses the findings of the study by comparing them to those in the literature review and theoretical framework. The chapter then ends with a brief documentation of the implications for practice as well as suggestions for future research.

5.2. Discussion of the Main Findings in Comparison with the Literature Review

5.2.1. What is the Relationship of between Gender and Age of the Undergraduate University Students and their Entrepreneurial Intentions?

Studies have shown that in order to examine the entrepreneurial behavior of the students, it is important to have an understanding of their gender and age. Thus, the current study considered these variables and examined their influence on entrepreneurial behavior. For instance, it was documented that more male students were enrolled at the American Style University compared to the female students. Also, more than half of the students are 20 years old, out of which half had work experience.

5.2.2. What is the Relationship of between Education and Experience of the Undergraduate University Students and their Entrepreneurial Intentions?

Furthermore, it is crucial to assess the influence of education and experience on the entrepreneurial intentions of undergraduate students. In this study, the distribution of the students' courses was documented. Results revealed that more students were enrolled at the School of Arts and Sciences, School of Architecture and Design, School of Engineering and School of Pharmacy, and in that order. Additionally, findings showed that almost half of the enrolled students had work experience, whereas very small percentages are self-employed. This result was especially important because entrepreneurship goes hand in hand with self-employment in most instances (Zhang, Duysters & Cwoodt, 2014).

5.2.3. What is the Relationship of between Entrepreneurial Knowledge of the Undergraduate University Students and their Entrepreneurial Intentions?

From the findings, it was evident that a majority of the undergraduate students knew something about entrepreneurship. Besides that, most of them had parents or friends with experience in entrepreneurship. Nonetheless, it was disappointing from the findings that a very small section of the undergraduate students knew about support bodies, business associations and other relevant sources that could provide the entrepreneurs with the assistance that they may require.

The study findings revealed a relationship between entrepreneurial education and entrepreneurial intentions in the students. More precisely, entrepreneurship education could significantly escalate entrepreneurship intentions of the students. Education

equips students with coherent knowledge about the importance of being self-employed as a valid career choice.

The findings of this study also show that the majority of the respondents had been able to start their entrepreneurial undertakings while still at high school level. For instance, some of these students used to sell cookies and others jewelry. Notably, they still used these activities to boost their income while at the university. Researchers agree that entrepreneurship can be learnt through improvement and reform of educational system to integrate entrepreneurial intention (Ertuna & Gurel, 2011). Self-employment startups can be leveraged through the education system in Lebanon, if reformed to nurture creativity, innovativeness and self-dependence of students.

5.3. Discussion of the Findings Based on the Theoretical Framework of the Study

5.3.1. Theory of Planned Behavior

The Theory of Planned Behavior is meant to explain all possible behaviors from which individuals are able to exert self-control (Montano & Kasprzyk, 2015). The main aspect of the model is behavioral intent and, more importantly, the behavioral intentions. Behavioral intentions are influenced by the attitudes about the likelihood that a certain behavior will have the expected outcome, as well as subjective evaluation of the benefits and risks of that same outcome.

5.3.1.1. Theory of Planned Behavior and Gender

The findings of this study show that in so far as the applicability of theory of planned behavior is concerned, females performed better than men on the aspect of entrepreneurial intentions. In other words, females were better at demonstrating

entrepreneurial intentions compared to their male counterparts. These findings indicate that a difference lies in the entrepreneurial intentions of females and males (Krueger, 2007; Liñan & Chen, 2009). In terms of perceived control, females continued to outperform their male colleagues even though they underperformed on subjective norms. The results justify why females score highly on their aspects of entrepreneurial intention and drive besides being passionate about starting their own businesses. These findings are in disagreement with the results of previous studies (Brush, 1992). In addition, unemployment is recently the reason for a growing number of women to start their own businesses. In general, these findings and perspectives point to the importance of recognizing that a “one size fits all” approach to entrepreneurial curricula is to be reconsidered, and that gender-sensitive programming is needed. However, female undergraduate students attained higher scores on entrepreneurial intention compared to the male undergraduate students. Therefore, I should encourage more female students to enroll in courses that are likely to bolster their entrepreneurial opportunities than male students.

5.3.1.2. Theory of Planned Behavior and Entrepreneurial Intentions with Age

The results of this study showed that there is a positive relationship between entrepreneurial intentions and age. Notably, the majority of the students enrolled at the university had an average age of 20 years. Hence, it is possible that very few of them had entrepreneurial intentions considering that a small section of the respondents was self-employed. However, this finding indicates that there are more old entrepreneurs compared to the young entrepreneurs with multiple reasons to explain that. Since the sample of respondents was from a very young age, it is safe to deduce that they lack

capital and sufficient knowledge for implementing their entrepreneurial ideas. Therefore, the integration of entrepreneurial courses can help the undergraduate students realize self-employment as a career choice to meet the challenges of employability (Liñán, Moriano & Jaén, 2016).

5.3.1.3. Theory of Planned Behavior and Entrepreneurial Intentions with Gender

The findings of this study also demonstrated that females achieved higher levels of entrepreneurial intentions compared to the males. In other words, more female undergraduate students would pursue courses that are likely to provide them with the foundation for implementing their entrepreneurial intentions compared to the male students. This result could also be vital in real life situations. For instance, individuals who are looking for potential entrepreneurs should consider bringing females on board because of their openness and willingness to embrace entrepreneurial undertakings. On the basis of theory of planned behavior, the findings justified that females were seemingly more likely to establish their independent businesses as contrasted to men (Kautonen, Gelderen & Fink, 2015). That implies that there is a large possibility that they could benefit from entrepreneurial education and related support resources compared to their male counterparts.

5.3.1.4. Theory of Planned Behavior with Employment Experience

From the results that were documented in this study, it is evident that as people became more experienced in their job undertakings, their chances of demonstrating entrepreneurial intentions increased. Almost half of the undergraduate respondents of

this study had work experience. Also, very few of them were self-employed. This explains why there were few students who showed entrepreneurial intentions in the institution. Furthermore, I expected these students to demonstrate higher levels of entrepreneurial intentions because they had more years of work experience. This is expected because the more a person is experienced in various type of work, the higher his or her chances of justifying entrepreneurial intentions. Our findings supported this hypothesis, as there was an observed increase in the scores on the theory of planned behavior as work experience increased, indicating that the greater the work experience the larger the intentions of individuals to pursue entrepreneurial work.

5.3.1.5. Theory of Planned Behavior and Entrepreneurial Intentions with Parent's Educational Background

From the findings of this study, undergraduate students whose fathers had only a primary school education scored higher on their entrepreneurial intentions, followed by those with fathers who reached secondary education, and lastly those who reached vocational study levels. This was different with mothers whereby undergraduate students whose mothers had vocational training scored higher in terms of entrepreneurial intentions, followed by those with a university degree, secondary education, and lastly primary education. This shows that the level of education of the mother is an important predictor of the scores that were recorded on theory of planned behavior, even though a greater amount of variance is not explained. Role models play an important role in increasing the entrepreneurial intention as many studies suggest (Autio et al., 2001). Linán et al. (2011) highlighted that closer valuation where social perceptions are relatively positive increases the intention towards entrepreneurship.

That is, the perceived support for the start-up decision depends more on social valuation which is confirmed in the findings of this study.

5.3.1.6. Theory of Planned Behavior with Family Occupation

The results of this study show that undergraduate students whose fathers were unemployed scored higher in terms of their entrepreneurial intentions compared to those with employed fathers. The same trend was observed on the scores of theory of planned behavior, where undergraduate students whose fathers were not employed scored higher than their colleagues whose fathers are employed. The finding is especially important because it provides insight into the differences in entrepreneurial intentions between people with employed and unemployed family members. Essentially, it is justifiable that unemployed people find it ideal to embrace entrepreneurial activities because they can perceive such decisions as the basis for adding up to their sources of income (Han, 2015).

5.3.1.7. Theory of Planned Behavior and Household Income

From the findings of this study, it is evident that household income has an impact on the entrepreneurial intentions of the undergraduate students who are used as respondents. The results revealed that students from families with a high household income scored higher on entrepreneurial intentions compared to their colleagues from families with low household income. This suggests that there is a large likelihood that people from high income families will embrace entrepreneurial undertakings, as contrasted to those from households with low income. As compared to previous other studies (Linán et al., 2011), those belonging to families or social groups in which entrepreneurship is highly valued will have a greater EI. Therefore, it is suitable to

cultivate EI through the introduction of EE at university (Guzman & Santos, 2001; Aldrich & Kim, 2007; Burton, Sørensen, & Dobrev, 2016).

5.3.1.8. Theory of Planned Behavior and Education of the Participants

The results that were gathered from this study demonstrated that there was a significant difference between individuals who study Business and those who study Arts and Sciences, such that students who business scored the highest on TPB, as contrasted to their counterparts who pursued other courses. This shows that individuals pursuing entrepreneurial-related courses were more likely to embrace entrepreneurial undertakings compared to their colleagues who were pursuing other courses. Therefore, the results allow us to assume that entrepreneurs usually pursue entrepreneurial-related courses.

5.3.1.9. Theory of Planned Behavior and Role Models

The findings of this study showed that there are significant differences in TPB scores between students who personally knew an entrepreneur and those who did not, such that those who knew entrepreneurs in their direct network scored higher than those who didn't. This reveals that being in close contact with somebody who is an entrepreneur will likely instill feelings of entrepreneurial intention, and will reinforce individuals to pursue this career path. Students whose role models are entrepreneurs scored higher on theory of planned behavior scores and entrepreneurial intentions. Additionally, the results proved that these students had higher intentions of becoming employers in the future; something that increased their scores on entrepreneurial

intentions (Aldrich & Kim, 2007). It is therefore recommended that such considerations be made while creating a team of entrepreneurs in the future.

5.3.1.10. Entrepreneurial Abilities and Society

A multiple linear regression was used to conduct an analysis on the aspect of entrepreneurial skills/abilities sets and community values. The model was responsible for 47.3% of the variances that could be associated with entrepreneurial undertakings. From the obtained results, it was evident that societal values had impact on the ways individuals perceived the field of entrepreneurship. More specifically, undergraduate students from societies that value the aspect of entrepreneurship had higher chances of justifying entrepreneurial intentions as contrasted to their colleagues who come from societies where entrepreneurship is not highly valued. As subjective norm reflects the perceived social pressure to start up, it is highly related to cultural values (Ajzen, 2001; Kristiansen & Indarti, 2004). Hence, if one is looking to hire potential entrepreneurs, it is recommended that he/she should consider individuals who come from communities that embrace entrepreneurial values; doing so provides him/her with better chances of succeeding with the implementation of entrepreneurial ideas.

5.4. Entrepreneurial Education

The findings also show the importance of entrepreneurial courses in schools and their effects on the learners as well as on students' entrepreneurial intentions and courses that are being offered.

5.4.1. Entrepreneurial Courses

Findings revealed that the interviewees had been engaged in many entrepreneurial courses, in which they had been encouraged to pursue entrepreneurship. This explains why students who have taken entrepreneurial-related courses have higher chances of being entrepreneurs, in contrast to colleagues who pursue other courses. The schools of engineering and pharmacy now collaborate with the school of business to come up with an entrepreneurial course that suits their students. They did this with the aim of providing students, who are taking engineering and pharmacy courses, with background knowledge for implementing their entrepreneurial intentions in the future; entrepreneurial knowledge is important for all undergraduate students. It helps students start and subsequently run their businesses. Meanwhile, findings also show that the designing and integration of courses that support entrepreneurial undertakings in undergraduate students is an important factor that could be used to enhance entrepreneurial intentions in learners. This finding confirms the conclusion of Dickson et al., (2008), which states that entrepreneurship education is related to becoming an entrepreneur. Entrepreneurship can be learnt through improvement and reform of educational system to integrate entrepreneurial intention. Self-employment startups can be leveraged through the education system in Lebanon, if reformed to nurture creativity, innovativeness and self-dependence of students.

Regarding attitudes towards entrepreneurship behaviors, the findings of the study show that there are various personality traits that the learners should have if they are to succeed in their entrepreneurial undertakings. These traits include, but are not limited to: opportunity grabber, problem solver, innovation, creativity, allocator of resources, perseverance, and risk taker. Also, findings show that the desire of the

students to enhance their entrepreneurial intentions increased significantly after taking entrepreneurial courses as well as after understanding stories of entrepreneurs.

On subjective norms, the results that were gathered showed the importance of significant others like close friends, family members and other groups of individuals in helping undergraduate students learn more about entrepreneurship as a career. Additionally, it was found that social pressure had effects on the development of entrepreneurial intentions in students. For instance, the students agreed that peer pressure influenced their willingness and openness to take part in entrepreneurial undertakings.

The aspect of perceived behavioral control also affected the entrepreneurial intentions of the learners. In fact, it became justifiable that there is a misconception about the true definition of entrepreneurship, such that some people think it is more difficult to become an entrepreneur than choosing to be employed. Therefore, there is consistency with previous researchers (Krueger et al., 2000; Lin & Lee, 2004). Although, the three constructs of intention are not always equally important in the TPB model (Ajzen, 2005), they may share the covariance among one another (Ajzen, 2011; 2005). Thus, the relationship among the three antecedents may not be independent (Lin & Chen, 2009).

5.4.2. Demographic Factors

Findings also show that entrepreneurial intentions of the students were positively correlated with age. In other words, as students grow old, their entrepreneurial intentions and willingness to start a business venture and succeed also increases. Besides age, education of the students was also an important demographic factor that

could impact the entrepreneurial intentions of the students. It was consistently noted that students who pursued entrepreneurial-related courses had higher chances of being entrepreneurs in the future as contrasted to their colleagues who pursued courses like engineering and pharmacy. Other demographic factors that Ire used to aid the documentation of results of this study included parents' occupations and education as well as family income. However, the demographic factors influence has limitations (Robinson, Stimpson, Huefner & Hunt, 1991), it has indirect influence on students' EIs through one or more of the three TPB constructs (Ajzen, 2011).

5.4.3. Entrepreneurial Courses at the School of Education

Although there are some universities in Lebanon that have started to offer a dedicated entrepreneurship courses; nonetheless, the experience of introducing these courses is yet to mature, and hence there is a need to consider the contents of the courses and delivery pedagogy in a way to encourage entrepreneurial mindset and activity including risk-taking, need for achievement, strong desire to succeed and alertness. More specifically these courses should be offered in the school of education. The integration of the entrepreneurship courses is appealing to education students and the entrepreneurship experts' recommendations to foster the EI through well designed courses catering for educators to be.

5.4.4. Importance of Entrepreneurship Education for Educators/Teachers

The importance of private initiatives in the field of education seems to have been realized by the Government of Lebanon, and today the Lebanese education system is being transformed with the entry of educational entrepreneurs. Educational entrepreneurship or edupreneurship is about creating or building learning capacity

leading to educational change and reform. Examples of edupreneurship can be unique learning programs, e-learning software and apps, or gamification of learning a particular content area. Internationally, Khan Academy, MangaHigh, Invincible Me, Coursera, udeMy, Mindchamp Teaching Solutions, Edraak, Teach Me Now and many other education startups have been decreasing the educational need gap in the globe. In Lebanon, there are many successful educational startups that have even been internationally recognized. The Little Engineer, Kamkalima, Cherpa.io, SpicaTech, Synkers, KidsGenius, Moubarmij are few examples of the Lebanese educational initiatives with a successful business model that have been providing different solutions to the Lebanese and international public and/or private educational sector.

The founders are edupreneurs mostly with a background in education coming from the teaching sector who wish to introduce a new innovative idea or solution into their area of work by taking it to the next level of professionalism and industry. Thus, the portmanteau word combining the two worlds: entrepreneurship and education.

Nieswandt (2017) refers to Drucker's (1986) definition entrepreneurs as the ones who "create something new, something different; they change or transmute values," as such an "edupreneur" innovates in order to positively affect the outcome for a child, or potentially for many children (p. 22). Accordingly, an edupreneur/educational entrepreneur is an education-focused entrepreneur who may working the for-profit or non-profit arenas (or both); some, but not all, edupreneurs are former teachers or administrators. Edupreneurs are entrepreneurs who enter into the field of public or private education with intent to serve or improve educational endeavors or learning outcomes (Nieswandt, 2017).

The product or service of edupreneurship aim is to improve the education of the student, school, or district. Hence, the main goal of educational entrepreneurship is basically to the progress and success for the student, and not solely the pursuit of financial gain (Nieswandt, 2017).

The best edupreneurs are the ones who understand education and its appertaining systems and cultures; thus, some of the most effective entrepreneurs are mostly teachers. Teachers have profound experiences in pedagogy and classroom practices, and they understand the science and art of instruction which are described at the many competing needs within the school. Also, they are the experts having the enormous understandings of the educational system itself; most importantly, they extremely feel the need to improve and better student progress (Nieswandt, 2017).

Moreover, researchers found that educational entrepreneurs are those individuals who are willing to disrupt, transform, or radically alter how education is provided. They are “innovative thinkers” who “are helping schools and school districts transform into high achieving and results-driven organizations” (Www2.ed.gov, 2018). These entities partner with schools, connecting their work with the public school system.

5.4.5. Edupreneurship is the Future of Education

The focus of edupreneurship can energize learning, leading to a “workforce of creative, curious, and self-directed lifelong learners who are capable of conceiving and implementing novel ideas”. Individuals both inside and outside the schools sense the opportunity to attain real, deep, and lasting change through these improvements. “We are in a period of profound transformation,” and time is of the essence Futurists and

practitioners alike cite the need to move from standardized to individualized learning outcomes (Nieswandt, 2017).

To date, education entrepreneurs have created many “new operational modes to change the way schools do business” (Www2.ed.gov, 2018). Focusing on the K-12 system, entrepreneurs have proposed and enacted changes in human capital, delivery of instruction, and leveraging of innovation (Www2.ed.gov, 2018).

5.5. Conclusion

This chapter has provided a platform for discussing study findings by comparing them to the literature review. The discussion was also based on the developed theoretical framework.

Chapter Six

Summary and Implications

This chapter presents a summary of the study and findings as well as the implications for practice and the limitations. Finally, suggestions for practice for future research are proposed. The details are depicted in the following five sections.

6.1. Summary of the Thesis

The purpose of this study was to inform us about the relationship between entrepreneurial intention and each of the following: effect of attitudes toward the behavior, subjective norms, perceived behavior control, entrepreneurship education and demographic factors. It targeted undergraduate students in private American system university. Adopting the TBP model modified by Linán et al. (2009), I investigated the students' intentions. To improve the credibility of the quantitative data and delve into the impact of entrepreneurial education on entrepreneurial intention, two qualitative tools were adopted. The findings showed the significance of TBP, demographic factors, and education on the undergraduate students' entrepreneurial intentions. Accordingly, and based on the findings of this study, I list below the implications, limitations, and recommendation for future studies.

6.2. Implications of the Study

The study findings are useful in providing implications for practice. These implications target three main stakeholders: government and policy makers, university leaders, and academics.

6.2.1. Government and Policy Makers

The positive relationship of entrepreneurship education with entrepreneurial intention is useful for policy makers at the Lebanese Ministry of Education, as it can allow them to establish formal entrepreneurial courses in all higher education institutions; in turn providing a better entrepreneurial environment and facilitating new venture creations in Lebanon. Once they have the knowledge about entrepreneurship, this will encourage them to be self-employed (Gelard & Saleh, 2011). In order to facilitate new venture creations for younger generations, the government should provide the funds and supporting infrastructures, as well as remove the impediments of the entrepreneurial career path (Bagheri & Pihie, 2011). Circular 331 is an example of this type of support, which is the Lebanese government's intervention in August 2014 through Banquet Du Laban's injection of 400 million dollars into the Lebanese enterprise market. This Circular secures 75 percent of the banks' investments in the knowledge economy through direct startup equity investment or indirect startup support entities. Also, their aim is to move Lebanon towards a knowledge-based economy and eventually create job opportunities to battle the high unemployment rate. BDL Circular 331 intention is to reverse the trend of Lebanon's university graduates leaving the country to look for jobs elsewhere. This intervention has been supporting many companies to bring their innovative ideas to life not only through the financial aspect, but also by supporting

boot camps and training programs that would help entrepreneurs develop further information and skills.

6.2.2. University

Universities can integrate entrepreneurial education at an early stage in order to increase awareness of students about entrepreneurship (Schoweten, Kemp, & Omta, 2004). Consequently, this will help shape their attitudes toward the behavior and enhance their perceived behavioral control and personality traits. The findings provide insight for university program instructors in designing and enhancing their entrepreneurship course subjects as to be proactive enough and practical-oriented with the aim of sustaining students' interest in entrepreneurship (Ismail et al., 2009). Universities can organize more entrepreneurial-related activities or programs and workshops that can enhance students' perceived behavioral control. Examples of such projects include: business proposals, managing small businesses on campus or during flea markets, providing opportunities for students to be involved in managing their own businesses and get business experience (Ismail et al., 2009). The developed questionnaires can be distributed to students who are enrolling in a tertiary study to gain understanding of their internal factors, such as personality traits and attitudes that lead to entrepreneurial intention. As a result of this, students will be less confused when selecting courses of interest to them.

6.2.3. Academics

This study provides the scholar with detailed information about the entrepreneurial intentions among undergraduates in higher learning institution. By investigating entrepreneurial intention, researchers can easily identify the entrepreneurial activity.

Regarding the theoretical model, researchers are able to contribute to the literature about theory of TPB. Researchers can conduct the confirmation testing to ensure the consistency of TPB in a different time period. Around 52% of entrepreneurial intentions can be explained by component of TPB (attitude toward the behavior, subjective norm and perceived behavioral control). The proposed theoretical framework may be referred to by other researchers in future studies.

6.3. Limitations of the Study

There were few limitations associated with this research. These limitations provide platforms for future studies, and will be presented below.

6.3.1. Sampling Location

There is only one higher learning institution included in this study and the sampling location was only in Beirut and Byblos. Therefore, the research outcomes are unable to represent the opinions of all students as there are many higher learning institutions situated in Lebanon. I should expand the sampling location to include universities throughout Lebanon to obtain research outcomes with high accuracy. This expansion will allow the results to be more generalizable to the entire Lebanese population.

6.3.2. Target Respondents

Our sample consisted of only undergraduate students, and the sample size was limited to only 131 respondents. The small sample size may not represent the opinion of all undergraduates from other faculties. Additionally, undergraduates from all faculties should be taken into consideration to get better insight into entrepreneurial intention. Besides, this study only highlights the entrepreneurial intentions of undergraduate students, and this refrains us from generalizing our findings to different age groups.

Thus, opinions from individuals of different age groups and senior students should be considered.

6.3.3. Time Constraints

Since entrepreneurial intention is the best predictor of entrepreneurial behavior, this research study only examined the entrepreneurial intention but not the actual action, as it not easy or time-efficient to quantify action because this requires a longer time and more data. Therefore, I was not able to conduct this sort of longitudinal study about action due to time restrictions.

6.4. Recommendations for Future Studies

Future researchers should conduct the research in public and private higher learning institutions all over Lebanon in order to increase the reliability of their findings and achieve more accurate feedback. There were only 131 respondents in this research, so future researchers should aim at a larger sample size of respondents to better represent the opinion of whole undergraduates' population, from private and public institutions as mentioned.

This research is exploratory in nature, and it requires a large amount of information or data to clarify the ambiguous situation. Thus, future researchers can use another combination of data collection methods, like documents and observations. Such tools can increase the participation of respondents and interviewers can get more opinions from multiple perspectives.

There are only few factors tested in this study, future researchers can include other variables such as family business background (Ahmed et al., 2010) and prior business experience (Drost, 2010).

This study focused on entrepreneurial intention, not actual entrepreneurial action. Thus, to assess the effectiveness of entrepreneurship courses/programs, the most explicit way could be to measure the impact of educational components on entrepreneurial intention and, finally, actual start-up actions. Therefore, future research could address research questions related to the “learning process” in entrepreneurship. Researchers could investigate the effect of time on the entrepreneurial learning process. Regarding this, there are two cases. In case one, scholars could investigate the effect of entrepreneurship education on entrepreneurial intention, and the second case is about the actual venture creation.

6.5. Conclusion

This study has investigated the variables (attitude toward the behavior, subjective norm, perceived behavior control, demographic factors, and entrepreneurship education) that impact students' entrepreneurial intention. The limitations and recommendations are stated to support future researchers. It is important to conduct future research with in-depth knowledge on this topic, for entrepreneurship has a very important position in the rapidly changing socio- economic scenario in the world, and entrepreneurs play an important role in supporting the development of any nation as they will indeed help to reduce the unemployment rate.

In conclusion, researchers hope that this study will hopefully provide university students with useful knowledge to understand how one's personal behavior will have an effect on intention to become an entrepreneur, and mostly how entrepreneurial education will impact their career orientation.

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Appendices

8.1. Appendix A

8.1.1. Entrepreneurial Intention Questionnaire (EIQ) Version 3.1

I would like to invite you to participate in a research project by completing the following questionnaire/ survey. I am a student at the Lebanese American University and I am completing this research project as part of my MA in Educational Leadership and Management titled “Entrepreneurial Intentions of Undergraduate Students”. The aim of this research project is to investigate and examine factors affecting undergraduate students’ entrepreneurial intention, the level of their entrepreneurial intention and discovering students’ awareness towards entrepreneurial career.

In addition, I would also like to follow up with respondents to evaluate their personal and professional status, and to send invitation to a focused group interview for this research. For this reason, you are asked to provide your contact data at the end of the questionnaire. If you prefer not to participate in the follow-up, simply leave that section blank. In the questionnaire value-scales below, some statements are positive while others are negative. For each statement, you are asked to indicate your level of agreement with it, (1) representing total disagreement, and (7) representing total agreement. Please respond to the items by marking what you consider to be the appropriate answer, or filling in the blanks. Choose **only one answer** to each question.

All data and measurements obtained from this research study will be stored confidentially. Only researcher will have access to view any data collected during this research.

The research intends to cause no physical or psychological harm or offense and to abide by all commonly acknowledged ethical codes.

You voluntarily agree to participate in this research project by filling the following questionnaire.

You have the right to ask Is any question regarding this project.

You also have the right to reject participation.

You may withdraw from this research any time you wish.

This may take 20 minutes of your time.

Please make sure that you have responded to every statement.

If you have any questions, you may contact:

Name	Phone Number	Email Address
Lara Al Arab	03348916	Lara.arab@lau.edu
Dr. Mona Nabhani, Advisor	01786456 ext:1266	mnabhani@lau.edu.lb

If you have any questions about your rights as a participant in this study, or you want to talk to someone outside the research, please contact the:

IRB Office,

Lebanese American University

3rd Floor, Dorm A, Byblos Campus

Tel: 00 961 1 786456 ext. (2546)

8.1.2. Questionnaire

A. Indicate your level of agreement with the following statements about the **Entrepreneurial Activity** from 1 (total disagreement) to 7 (total agreement).

	1	2	3	4	5	6	7
A01.- Starting a firm and keeping it viable would be easy for me	<input type="checkbox"/>						
A02.- A career as an entrepreneur is totally unattractive to me	<input type="checkbox"/>						
A03.- My friends would approve of my decision to start a business	<input type="checkbox"/>						
A04.- I am ready to do anything to be an entrepreneur	<input type="checkbox"/>						
A05.- I believe I would be completely unable to start a business	<input type="checkbox"/>						
A06.- I will make every effort to start and run my own business	<input type="checkbox"/>						
A07.- I am able to control the creation process of a new business	<input type="checkbox"/>						
A08.- My immediate family would approve of my decision to start a business	<input type="checkbox"/>						
A09.- I have serious doubts about ever starting my own business	<input type="checkbox"/>						
A10.- If I had the opportunity and resources, I would love to start a business	<input type="checkbox"/>						
A11.- My colleagues would approve of my decision to start a business	<input type="checkbox"/>						
A12.- Amongst various options, I would rather be anything but an entrepreneur	<input type="checkbox"/>						
A13.- I am determined to create a business venture in the future	<input type="checkbox"/>						
A14.- If I tried to start a business, I would have a high chance of being successful	<input type="checkbox"/>						
A15.- Being an entrepreneur would give me great satisfaction	<input type="checkbox"/>						
A16.- It would be very difficult for me to develop a business idea	<input type="checkbox"/>						
A17.- My professional goal is to be an entrepreneur	<input type="checkbox"/>						
A18.- Being an entrepreneur implies more advantages than disadvantages to me	<input type="checkbox"/>						
A19.- I have a very low intention of ever starting a business	<input type="checkbox"/>						
A20.- I know all about the practical details needed to start a business	<input type="checkbox"/>						

B. Considering all advantages and disadvantages (economic, personal, social recognition, job stability, etc.), indicate your level of **attraction towards** each of **the following work options** from 1 (minimum attraction) to 7 (maximum attraction).

	1	2	3	4	5	6	7
B1 – Employee	<input type="checkbox"/>						
B2.- Entrepreneur	<input type="checkbox"/>						

C. Indicate your level of agreement with the following sentences about the **values society put on entrepreneurship** from 1 (total disagreement) to 7 (total agreement).

	1	2	3	4	5	6	7
C1.- My immediate family values entrepreneurial activity above other activities and careers	<input type="checkbox"/>						
C2.- The culture in my country is highly favourable towards entrepreneurial activity	<input type="checkbox"/>						
C3.- The entrepreneur's role in the economy is generally undervalued in my country	<input type="checkbox"/>						
C4.- My friends value entrepreneurial activity above other activities and careers	<input type="checkbox"/>						

- C5.- Most people in my country consider it **unacceptable** to be an entrepreneur
- C6.- In my country, entrepreneurial activity is considered to be worthwhile, despite the risks
- C7.- My colleagues value entrepreneurial activity above other activities and careers
- C8.- It is commonly thought in my country that entrepreneurs **take advantage** of others

D. How do you rate yourself on the following **entrepreneurial abilities/skill sets**? Indicate from 1 (no aptitude at all) to 7 (very high aptitude).

	1	2	3	4	5	6	7
D1.- Recognition of opportunity	<input type="checkbox"/>						
D2.- Creativity	<input type="checkbox"/>						
D3.- Problem solving skills	<input type="checkbox"/>						
D4.- Leadership and communication skills	<input type="checkbox"/>						
D5.- Development of new products and services	<input type="checkbox"/>						
D6.- Networking skills, and making professional contacts	<input type="checkbox"/>						

E. Have you ever seriously considered becoming an entrepreneur? Yes No

Education and experience

1. What degree or other qualifications are you studying?

2. When do you expect to complete your studies?

- This year? Next year? Later

3. Do you have any employment experience? Yes No

If yes:

a. In what capacity? (If several, in which were you employed the longest) _____

b. Have you been in charge of other people? Yes No

c. How much work experience do you have? (Total number of years) _____

d. How long is it since you left your last job? (Number of years, if still working write 0) _____

e. How many employees did your current/last employer have? _____

4. Have you ever been self-employed or the owner of a Small or Medium-sized Enterprise (SME)?

Yes No

If yes:

a. How long? (number of years) _____

b. How long is it since you ceased to be self-employed? (Number of years, if still self-employed write 0) _____

Entrepreneurial knowledge

5. Do you **personally know** an entrepreneur or entrepreneurs? Yes No

If yes, indicate your relationship to them, and evaluate the following questions from 1 (not at all) to 7 (extremely well).

	1	2	3	4	5	6	7
<input type="checkbox"/> Family							
- To what extent do you know about his/her activity as entrepreneur?	<input type="checkbox"/>						
- To what extent may he/she be considered a 'good entrepreneur'?	<input type="checkbox"/>						
<input type="checkbox"/> Friend							
- To what extent do you know about his/her activity as entrepreneur?	<input type="checkbox"/>						
- To what extent may he/she be considered a 'good entrepreneur'?	<input type="checkbox"/>						
<input type="checkbox"/> Employer / Manager							
- To what extent do you know about his/her activity as entrepreneur?	<input type="checkbox"/>						
- To what extent may he/she be considered a 'good entrepreneur'?	<input type="checkbox"/>						
<input type="checkbox"/> Other							
- To what extent do you know about his/her activity as entrepreneur?	<input type="checkbox"/>						
- To what extent may he/she be considered a 'good entrepreneur'?	<input type="checkbox"/>						

6.- Indicate your level of knowledge about business associations, support bodies and other **sources of assistance for entrepreneurs** from 1 (no knowledge) to 7 (complete knowledge).

	1	2	3	4	5	6	7
- Private associations (e.g. Chamber of Trade, Institute of Directors, etc.)	<input type="checkbox"/>						
- Public support bodies (e.g. Beirut Digital District, UK Tech Hub AltCity etc.)	<input type="checkbox"/>						
- Specific training for young entrepreneurs	<input type="checkbox"/>						
- Loans in specially favourable terms	<input type="checkbox"/>						
- Technical aid for business start-ups	<input type="checkbox"/>						
- Business centres	<input type="checkbox"/>						

Entrepreneurial objectives

7. If you ever started a business, what size would you like it to ultimately achieve (number of employees)?

- Self-employed
 Micro-enterprise
 Small enterprise
 Medium enterprise
 Large enterprise
 (No employees) (Up to 10 employees) (10 to 50 employees) (50 to 250 employees) (250 employees +)

8. To what extent do you consider the following factors to contribute to **entrepreneurial success**? Indicate from 1 (not at all important) to 7 (extremely important).

	1	2	3	4	5	6	7
- Competing effectively in world markets	<input type="checkbox"/>						
- Reaching a high level of income	<input type="checkbox"/>						
- Doing the kind of job I really enjoy	<input type="checkbox"/>						
- Achieving social recognition	<input type="checkbox"/>						
- Helping to solve the problems of my community	<input type="checkbox"/>						
- Keeping the business alive	<input type="checkbox"/>						
- Keeping a path of positive growth	<input type="checkbox"/>						

9. How important would it be for you to continuously develop and grow your business?

- Indicate from 1 (not at all important) to 7 (extremely important)

10. To what extent would you use the following **strategies to expand your business**? Indicate from 1 - Developin(not at all likely) to 7 (extremely likely).

- Exporting a significant share of production	<input type="checkbox"/>						
- Regularly introduce new products/services for my customers	<input type="checkbox"/>						
- Regularly introduce new processes or systems of production	<input type="checkbox"/>						
-Devaloping research and development projects	<input type="checkbox"/>						
- Planning the different areas of the firm in detail	<input type="checkbox"/>						
- Reaching cooperative agreements or partnerships with other firms	<input type="checkbox"/>						
- Offering specialized training for employees	<input type="checkbox"/>						
- Growing your business (personnel, premises, etc.)	<input type="checkbox"/>						

Personal Data

11. Age: _____

12. Gender: Male Female

13. Place of birth: _____ . Place of residence: _____

14. What level of education have your parents achieved?

Father: Primary Secondary Vocational training University Other

Mother: Primary Secondary Vocational training University Other

15. What are their present occupations?

	Private sector	Public sector	Self-employed	Retired	Unemployed	Other
	employee	employee	employee	or entrepreneur		
Father:	<input type="checkbox"/>					
Mother:	<input type="checkbox"/>					

16. How many people are living in your household? (Including yourself) _____
17. Roughly speaking, what is the **total monthly income** in your household? (Adding up all revenues from any person living in the household)
- Up to 500\$ From 500 to 1000\$ From 1000 to 2000\$ From 2000 to 4000\$
- From 4000 to 7000\$ From 7000 to 10000\$ Over 10000\$

Contact Data

Filling in the following details will allow us to follow up your evaluations. All information provided will be considered as strictly confidential, and will only be used for the aims of this research project.

Name: _____

Address: _____

City/town (State): _____ Post Code (ZIP): _____

e-mail: _____ Telephone: _____

8.2. Appendix B

8.2.1. Questionnaire: Guided Interviews with Entrepreneurship Educators

8.2.1.1. Introductory questions

1. How long have you been teaching entrepreneurship?
2. What kind of entrepreneurship classes do you teach?
3. In which semesters are the entrepreneurship classes offered?

8.2.1.2. Possible relevant factors influencing the intention to start up a company

1. In your opinion, what are the major reasons behind LAU students' entrepreneurship intention?
2. In your experience, what role does the family and social background of students play when it comes to self-employment?
3. What role does the perception of one's own chances and capability to successfully start one's own company play?

8.2.1.3. Possible changes in entrepreneurial intention through attending entrepreneurship classes

1. To what extent can entrepreneurship classes change students' intention to start their own business?
2. To what extent can entrepreneurship classes change the perception of one's chances and capability to successfully start one's own business?
3. Which type of course content is particularly suited to increasing the intention to found your own company?

8.3. Appendix C

8.3.1. Focus Group Interview with Students

- Describe any Entrepreneurial Activity or course that you have been engaged in?
- How did you get involved in the entrepreneurship activity? Why?
- How did the idea of taking part in the entrepreneurial activity start? How did you materialize this idea?
- What did you gain from this experience? In what way it has influenced you?

8.4. Appendix D

8.4.1. The Permission to Use EIQ

APPROVAL REQUEST| To use an EIQ instrument for
MA Research Purpose

Lara Hassan Arab

Reply all|

Thu 16-Nov-17 06:27 PM

To:

fLinãñ @us.es;

g1359508@nccu.edu.tw

Cc:

Mona Nabhani

Sent Items

Dear Francisco Linãñ and Yi-In Chen,

Trust this email finds you Ill.

I am a Master's in Education student from [Lebanese American University](#) writing my dissertation on *Entrepreneurial Intentions of University Students in a Lebanese Higher Education Institution*, under the direction of my dissertation committee chaired by Dr. Mona Nabhani (cc'd).

The main purpose of my thesis is to explore the entrepreneurial intention among students of a higher education institution in Lebanon. Using

the Entrepreneurship Intention Questionnaire, you developed in 2009 will indeed help me investigate my purpose, and scientifically collect data to enrich the research.

Accordingly, I would like to kindly request your permission to use the Entrepreneurial Intention Questionnaire (EIQ) instrument in my research study. I would like to use and print your survey under the following conditions:

- I will use the surveys only for my research study and will not sell or use it with any compensated or curriculum development activities.
- I will include the copyright statement on all copies of the instrument.
- I will send a summary of my completed research study to your attention upon completion of the study.

If these are acceptable terms and conditions, kindly confirm and send the EIQ instrument by replying to my e-mail lara.arab@lau.edu. The Lebanese American University IRB Committee can also be contacted via email at christine.chalhoub@lau.edu.lb or karmen.baroudy@lau.edu.lb

Thank you in advance for considering this request and for supporting my research.

Sincerely,

Lara Al Arab

Dear Lara,

Thank you for your interest in our work.

Please find attached 3 versions of the EIQ and the papers in which they are used.

The first versions (EIQ2 and EIQ3) are designed as aggregated scales. The

papers in which they were used are Liñán & Chen (2009) and Liñán, Urbano & Guerrero (2011), respectively.

More recently, within the VIE Project (<http://institucional.us.es/vie>), I have developed a newer and more refined questionnaire. In it, Personal Attitude and Subjective Norm has been measured by pondering personal beliefs with the relevance attached to each belief.

I attached this newer version of the questionnaire (Original in Spanish, the translation made by ourselves), and one of the papers in which it was used (Liñán, Moriano & Jaén, 2016).

You can use them as you feel is best, but do please acknowledge your source.

Entrepreneurial Intention Questionnaire

Francisco Liñán <fLinán @us.es>

Tue 21-Nov-17 06:58 PM

Dear Lara,

Thank you for your message.

The proposed changes make all the sense to me. Please go on.

Best regards,

Francisco Liñán

Professor in Entrepreneurship and Innovation

Anglia Ruskin University. Lord Ashcroft International Business

School. Cambridge. francisco.Linán@anglia.ac.uk

Universidad de Sevilla. Depto. Economía Aplicada I. Sevilla. fLinán@us.es

https://www.researchgate.net/profile/Francisco_Linán

<https://es.linkedin.com/in/franciscoLinán>

Best regards,

Prof. Francisco Liñán

Universidad de Sevilla // University of Seville

Av. Ramon y Cajal, 1. E41018 - Sevilla (Spain)

T:+34.954554487. F:+34.954551636. M:+34.654982383. Skype: franciscoLinán
alcalde

lb: <http://personal.us.es/flinán> ; <http://www.masteremprededoresus.com/>

Fayolle, Kyrö & Liñán (Eds.) (2015): *Developing, Shaping And Growing
Entrepreneurship*. Edward Elgar.

http://www.e-elgar.com/bookentry_main.lasso?currency=US&id=16255

8.5. Appendix E

8.5.1. Permission Request for an Interview

Permission Request| Interview| LAU MA Research in
EDU

Lara Hassan Arab

Thu 18-Jan-18 01:45 PM

Dear Sir,

I wholeheartedly appreciate that you have swiftly approved my request.

Looking forward to meeting you and to this valuable interview.

Best Regards,

Lara Al Arab

Elie Samia

Today, 01:37 PM

Thank you Lara. My colleague Dana will be able to coordinate with you the most suitable time for the interview. Best, Elie Samia Assistant Vice President Outreach & Civic Engagement

Lara Hassan Arab

Reply all

Thu 18-Jan-18 12:43 PM

To:

Elie Samia

Cc:

Mona Nabhani

Dear Dr. Elie Samia,

Trust this email finds you well.

I am a Master's in Education student from [Lebanese American University](#) writing my dissertation on *Entrepreneurial Intentions of University Students in a Lebanese Higher Education Institution*, under the direction of my dissertation committee chaired by Dr. Mona Nabhani (cc'd).

The main purpose of my thesis is to explore the entrepreneurial intention among students of LAU students. Knowing that the Outreach and Civic Engagement Department has introduced a boot camp in collaboration with INJAZ Lebanon and other entrepreneurship activities to LAU students, I would like to respectfully request your permission to be interviewed in order to gain more in depth insights. The interview will indeed help me investigate my purpose, and scientifically collect data to enrich the research.

Kindly note that I would like to use and print your interview under the following conditions:

- I will use the interview only for my research study and will not sell or use it with any compensated or curriculum development activities.
- I will send a summary of my completed research study to your attention upon completion of the study.

If these are acceptable terms and conditions, kindly confirm by replying to my e-mail lara.arab@lau.edu . The Lebanese American University IRB Committee can also be contacted via email at christine.chalhoub@lau.edu.lb or karmen.baroudy@lau.edu.lb

Thank you in advance for considering this request and for supporting my research.

Sincerely,

Lara Al Arab

Amine Abi Aad

Reply all|

Thu 18-Jan-18 01:32 PM

To:

Lara Hassan Arab

Cc:

Mona Nabhani

Dear Lara,

I hope this email finds you ill.

I will be happy to help.

You can pass by my office (BB1615) on MWF at 10:30 a.m.

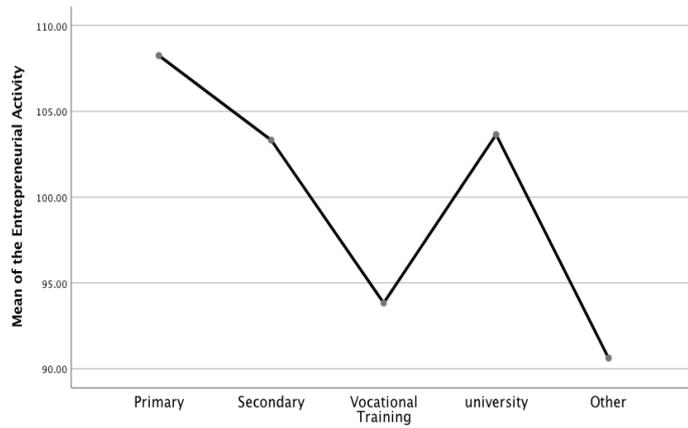
Best,

Dr. Abi Aad

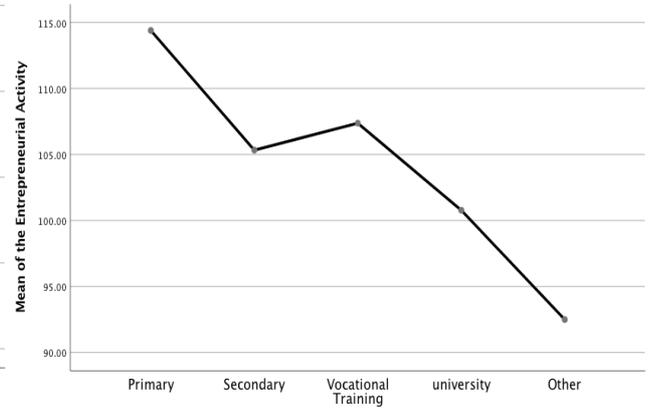
8.6. Appendix F

8.6.1. Graphs

8.6.1.1. TPB and EI with Parent's Educational Background

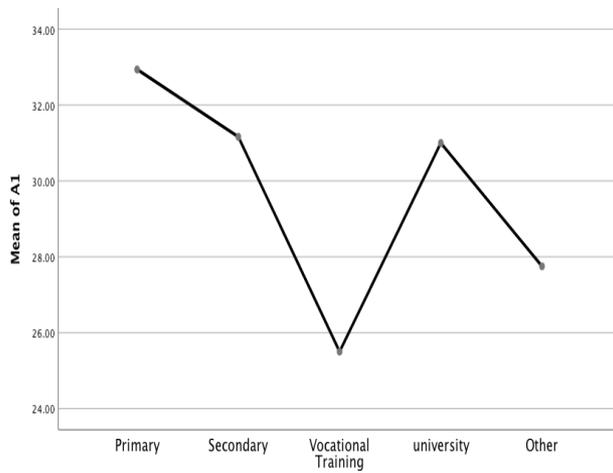


Q32_15. What level of education have your parents achieved?_Father_First Scale

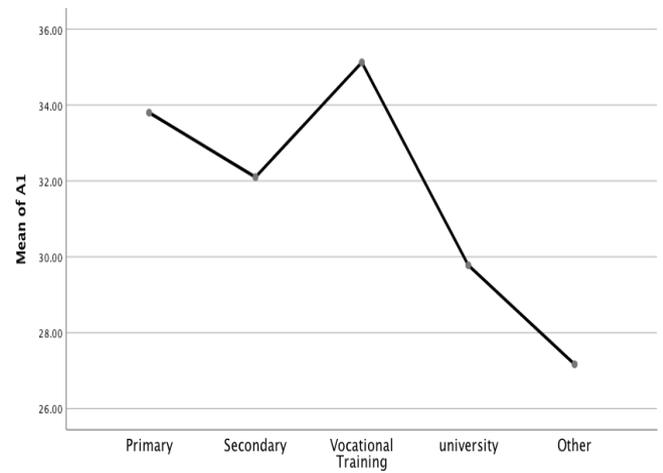


Q32_15. What level of education have your parents achieved?_Mother_First Scale

8.6.1.2. TPB and Family Occupation

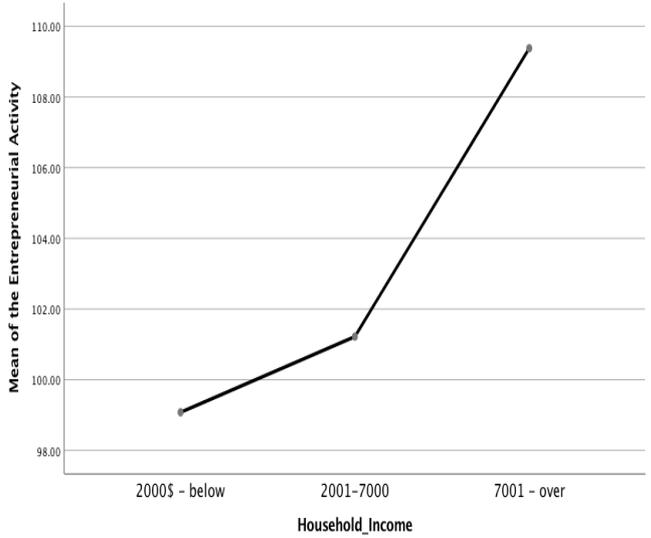
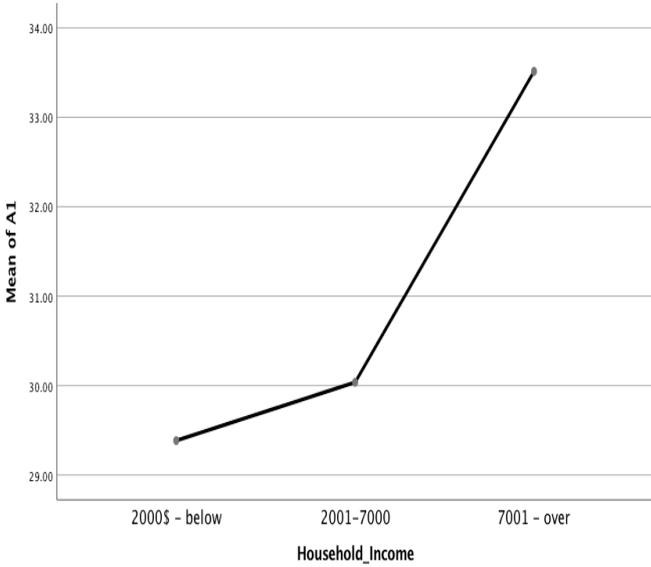


Q32_15. What level of education have your parents achieved?_Father_First Scale



Q32_15. What level of education have your parents achieved?_Mother_First Scale

8.6.1.3. TPB and Household income



NOTICE OF IRB APPROVAL – EXEMPT STATUS

To: Ms. Lara Al Arab
 Advisor: Dr. Mona Nabhani
 Associate Professor
 School of Arts & Sciences

APPROVAL ISSUED: 12 February 2018
EXPIRATION DATE: NA
REVIEW TYPE: EXEMPT

Date: February 12, 2018
RE: **IRB #:** LAU.SAS.MN1.12/Feb/2018
Protocol Title: Entrepreneurial Intentions of Undergraduate University Students: The Case of a Lebanese American Style University

Your application for the above referenced research project has been approved by the Lebanese American University, Institutional Review Board (LAU IRB). This research project qualifies as exempt under the following category:

B. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:

- (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and
- (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

This approval is limited to the activities described in the Protocol Exempt Application and all submitted documents listed on page 2 of this letter. **Enclosed with this letter are the stamped approved documents that must be used.**

APPROVAL CONDITIONS FOR ALL LAU APPROVED HUMAN RESEARCH PROTOCOLS - EXEMPT

LAU RESEARCH POLICIES: All individuals engaged in the research project must adhere to the approved protocol and all applicable LAU IRB Research Policies. **PARTICIPANTS must NOT be involved in any research related activity prior to IRB approval date or after the expiration date.**

EXEMPT CATEGORIES: Activities that are exempt from IRB review are not exempt from IRB ethical review and the necessity for ethical conduct.

MODIFICATIONS AND AMENDMENTS: Certain changes may change the review criteria and disqualify the research from exemption status; therefore, any proposed changes to the previously approved exempt study must be reviewed and approved by the IRB before implementation.

NOTIFICATION OF PROJECT COMPLETION: A notification of research project closure and a summary of findings must be sent to the IRB office upon completion. Study files must be retained for a period of 3 years from the date of notification of project completion.

IN THE EVENT OF NON-COMPLIANCE WITH ABOVE CONDITIONS, THE PRINCIPAL INVESTIGATOR SHOULD MEET WITH THE IRB ADMINISTRATORS IN ORDER TO RESOLVE SUCH CONDITIONS. IRB APPROVAL CANNOT BE GRANTED UNTIL NON-COMPLIANT ISSUES HAVE BEEN RESOLVED.

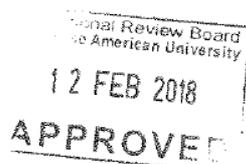
BEIRUT CAMPUS	BYBLOS CAMPUS	NEW YORK OFFICE
P.O. Box: 13-5053 Chouran Beirut 1102 2801 Lebanon	P.O. Box: 36 Byblos Lebanon	475 Riverside Drive Suite 1846 New York, NY 10115
Tel: +961 1 78 64 56 +961 3 60 37 03 Fax: +961 1 86 70 98	Tel: +961 9 54 72 62 +961 3 79 13 14 Fax: +961 9 54 62 62	Tel: +1 212 870 2592 +1 212 870 2761 Fax: +1 212 870 2762
		www.lau.edu.lb



If you have any questions concerning this information, please contact the IRB office by email at irb@lau.edu.lb

The IRB operates in compliance with the national regulations pertaining to research under the Lebanese Minister of Public Health's Decision No.141 dated 27/1/2016 under LAU IRB Authorization reference 2016/3708, the international guidelines for Good Clinical Practice, the US Office of Human Research Protection (45CFR46) and the Food and Drug Administration (21CFR56). LAU IRB U.S. Identifier as an international institution: FWA00014723 and IRB Registration # IRB00006954 LAUIRB#1

Dr. Costantine Daher
Chair, Institutional Review Board



DOCUMENTS SUBMITTED:

LAU IRB Exempt Protocol Application	Received 5 February 2018
Proposal	Received 5 February 2018, Amended 10 February 2018
Introduction to Survey & survey	Received 5 February 2018, Amended 10 February 2018
Interviews Consent and questions	Received 10 February 2018
Focus group Consent and questions	Received 10 February 2018
NIH Training – Mona Nabhani	Cert.# 207839 Dated (1 April 2009)
NIH Training – Lara Al Arab	Cert.# 2629637 Dated (2 February 2018)