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# What Determinants Influence Students to Start Their Own Business? Empirical Evidence from United Arab Emirates Universities

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Abstract: What factors influence students to start their own business? What are the implications at the university level? This paper aims to answer to these questions and investigates, at a micro level (university), the motivation for entrepreneurial intentions among students in 10 universities from the United Arab Emirates (UAE). An online inquiry has been conducted among 500 students between April and June 2018, and 157 fully completed questionnaires were retained. Factor Analysis with Varimax (with Kaizer Normalization) rotation and logistic regression were used to identify what factors motivate students to start their own business and, from those factors, which one is determinant in this decision. Also, age and parental self-employment status were used to determine the influence of these factors. Four factors have been identified as determinants for students to start their own business: entrepreneurial confidence, entrepreneurial orientation, university support for entrepreneurship, and cultural support for entrepreneurship. Surprisingly, the only factor significantly correlated with the intention in starting a business is entrepreneurial confidence. This factor becomes even stronger when it is associated with age (20-25 years old) and parents' self-employment status. These conclusions involve specific challenges on the university level, related to the role of entrepreneurial education and on country level, in link with the effectiveness of governmental programs to enhance entrepreneurial endeavours. Further research can explore and test these findings on a representative sample for the UAE, and for other countries.

**Keywords:** entrepreneurship; entrepreneurial intentions; determinants of entrepreneurship; entrepreneurship education; entrepreneurial confidence; United Arab Emirates

# 1. Introduction

Entrepreneurship is considered determinant for the innovation and for the general progress, a source of new job opportunities and of economic growth [1] (p. 12). Entrepreneurship is also a process that can be measured by an individual's intentions, activities and interactions [2] (p. 9). A huge literature is dealing with intentions towards entrepreneurship. As Krueger and Carsrud mentioned in their influential work [3] (p. 315), "intentions are the single best predictor of such behaviour, both conceptually and empirically".

This paper starts from the assumption that it is important to identify what drives the intention to start a business. This investigation is pursued on a specific case, that of business students from United Arab Emirates (UAE). Intentions are assumed to capture the motivational factors that influence

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behaviour (Ajzen, 1991, cited in [4] (p. 477). The entrepreneurial intention (EI) construct is central to the bulk of work that starts from investigating specific personality traits or demographic characteristics that are specific to an entrepreneur, to the attitude approach, that investigate how an individual values a specific behaviour [5] (p. 198). Two major theoretical approaches shape the recent research regarding EI: the theory of the "entrepreneurial event", developed by Shapero and Sokol in '80s, and the psycho-sociological approach (Theory of planned behaviour (TPB) launched by Ajzen at the beginning of the 1990s [5] (p. 198).

This paper embraced the vision according to the fact that intentions are regarded as resulting from attitudes, perceived behavioural control, and subjective norms [6] (p. 538). The attitude toward the results associated with behaviour and the subjective norms reflect the desirability and the desired occurrence of such behaviour. The perceived behavioural control reflects the personal perception of the ability to control the behaviour, regarded as self-efficacy [7] (p. 84).

The paper is structured in several parts. A literature review on the importance of factors that influence intentions to start new businesses is presented. Entrepreneurial intentions are discussed in the context of the TPB and are related to the other literature's visions developed around the role of the educational process in shaping an entrepreneurial behaviour of graduates. More and more studies concentrate on the importance of the educational process in cultivating a positive attitude towards entrepreneurship. Although there is a large literature devoted to the answer to the question "is entrepreneurship nurture or nature?" studies agree that an education that supports that an entrepreneurial attitude definitely helps in consolidating a healthy business environment in any economy [8] (p. 452). Therefore, almost all universities concentrate their curricula on cultivating and educating entrepreneurial skills of their students and more and more study programmes devoted to enhance entrepreneurial confidence are established.

Not only universities concentrate their education for cultivating entrepreneurial spirit. At the level of governments, more and more programs are launched to support entrepreneurial endeavours. From rich countries to poor countries, entrepreneurs are seen as a secret engine that promotes innovation and creativity, creates employment, and brings well-being in the society. Therefore, entrepreneurship is not only a matter for micro level concern, but also for macro-level and global level.

The paper continues with the methodological aspects regarding the empirical research conducted among UAE students. The study proposes to identify factors determining the intention to start their own business and how these factors are correlated. A batch of 23 statements relating to entrepreneurial features and cultural support gathered from the literature and inspired from the study developed by Van Gelderen et al. (2008), and three descriptive variables, namely gender, age and parents' self-employment status were analysed. The statements were measured using 7-level Likert scales (Table 5). These affirmations were firstly reduced by employing Principal Component Analysis. Once the factors were delineated, two logistic regressions were used in order to comply with the sample size assumption and to facilitate the analysis of the findings. Firstly, the factors were regressed against the dependent variable (intention to start a business after graduation). By retaining the significant factors, the descriptive variables were included in the model to run the second logistic regression against the same dependent variable.

The findings demonstrated that the only significant factor in influencing the decision to start a business is entrepreneurial confidence. The effect of this factor is even better explained together with age and parental self-employment. A rather surprising outcome, the paper interprets it from two points of view: the role the universities have in framing successful entrepreneurs through education and the implication on the country's vision to become more entrepreneurial and to change the preference of Emiratis from public jobs to private endeavours. It seems that this confidence is not reflected in the statistical data about the labour market, which demonstrated that UAE citizens are more interested in a governmental job.

The paper ends with conclusions and implications for further research.

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# 2. Theoretical Background

During the last three decades entrepreneurship has been perceived as a major driving force for local economies. It has a positive impact on evolving innovating business ideas and initiatives that support the creation of new job markets, boosting economies, developing new solutions to problems, creating technology that improves efficiency [9,10]. Moreover, entrepreneurship is seen as a strategy for countries' economic growth and maintaining sustainable competitive advantage during the globalization era [11,12]. Many scholars emphasize the role of entrepreneurship as a unique solution to the problems that constantly arise in our dynamic and fast changing world [13–16]. This is perhaps because of the nature of entrepreneurship as 'it is not related only to a single discipline, but to many disciplines such as psychology, sociology, culture, and environmental studies' [16].

One of the core concepts in studying entrepreneurship is the entrepreneurial intention (EI). According to various studies [5–7,17] these are two major strands that dominate the literature on EI: Shapero model (The entrepreneurial event theory) and TPB (Theory of Planned Behaviour).

EI is a powerful theoretical framework that has rapidly grown since the publishing of the influential works by Shapero in the 1980s [17] (p. 2). The Shapero model explains EI on the basis of perceived desirability, perceived feasibility and the propensity to act [6] (p. 543). In Shapero model (The entrepreneurial event theory), firm creation is a consequence of the interaction between individual's perception and the contextual factors (cultural and social factors) that influence this perception [5] (p. 198). According to Linan si Rodrighez [5] (p. 198), the Shapero model lies on two basic kinds of perceptions: perceived desirability (given by the attraction for a specific behaviour, desirability being a result of social and cultural influences), and perceived feasibility (the degree to which people consider themselves personally able to carry out certain behaviour). Contextual factors shape these perceptions, favouring or not their transformation into concrete actions. Negative impact of administrative barriers, for example, expressed as start-up costs or amount of procedures required to establish an enterprise may inhibit entrepreneurial endeavours [1] (p. 15).

The Theory of Planned Behaviour (TPB) brought more details in explaining EI. It captures the three motivational factors that influence behaviour and explains intentions by means of attitudes, perceived behavioural control (PBC), and subjective norms [5–7]. Attitude refers to the degree to which the individual holds a positive or negative personal valuation about being an entrepreneur. Perceived behavioural control refers to the capacity to fulfil the entrepreneurial endeavour requirements. Subjective norms measure the perceived social pressure to carry out—or not to carry out—that entrepreneurial behaviour [5] (p. 199).

Around these two major models, a large literature has developed. In an attempt to review the most influential works dealing with EI, between 2004 and 2013, the study developed by Linan and Fayolle [17] (p. 27) identified five categories of studies that have as a central topic EI: Core Entrepreneurial Intention Model, Personal-level variables, Entrepreneurship education, Context and institutions, Entrepreneurial process.

However, the research on the entrepreneurial intention is looking for more measurability and for including more factors that can explain the entrepreneurial motivation. Age, gender, role models, and institutional factors are only a few of those factors considered to have considerable influence on motivation to become entrepreneurs.

Also, education is considered important in orienting people towards entrepreneurship (to shape desirability), but also to transform this desirability towards actions (new companies on the market).

Due to very high-perceived value of entrepreneurship, many universities and colleges have included entrepreneurship as a study discipline and sometimes as a whole study program. Entrepreneurial education is a major instrument for invigorating entrepreneurial intentions, mind-sets and behaviours; however, it is arguable whether such education has been effective [18].

To have successful entrepreneurial education it is important to understand factors that affect entrepreneurial behaviour of students. Furthermore, quality of entrepreneurship education seats on understanding of such factors leading to entrepreneurial intention [19]. Scholars in different

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countries examine entrepreneurial education and students' entrepreneurial intentions from different angles. Having a decent knowledge about entrepreneurship may lead to entrepreneurial behaviour; however, education is not only a single construct to follow such path. There are research studies on the fundament of entrepreneurship to determine the nature or nurture essence of it [8]. Not only nurture skills and abilities determine the entrepreneurial spirit. Scholars emphasize other factors such as cultural values and support [20], personality traits and attitudes including self-efficacy that refers to a person's confidence to perform a certain task [21], entrepreneurial orientation of a student and some other demographic and socio-cultural factors.

Entrepreneurial knowledge is seen as an asset successfully contributing towards entrepreneurial intentions and contributing to sustainability of economies [22]. Many scholars highlight the key role of education in choosing entrepreneurial career. Successful educational programs have been seen by many scholars around the globe as a major construct for creation of entrepreneurial intention among students. If a university provides adequate knowledge and inspiration for entrepreneurship, the possibility of choosing an entrepreneurial career might increase among young people [23]. Empirical research suggests that students who have attended entrepreneurship courses at their universities have greater intentions for entrepreneurial activities compared to those who did not [24]. According to empirical research carried out in Spain, such courses develop self-efficacy, pro-activeness and risk-taking competences for attending students [25]. Universities and the entrepreneurial curriculum were found to be the greatest influencers of students' entrepreneurial attitudes in a study conducted among 1500 undergraduate Arab students in government universities [26]. One of the empirical studies conducted among Pakistani university students revealed perceived educational support as the most important factor in developing students' entrepreneurial self-efficacy [27]. A study conducted among the students in the Philippines has also supported the hypothesis that entrepreneurial knowledge positively affects students' perceptions of desirability of entrepreneurship and perceived self-efficacy [28]. Further evidence shows the same result among the Saudi students. The likelihood of expressing entrepreneurial intentions is significantly and positively affected by prior qualifications and training [29]. Some authors even prove that having studied entrepreneurial courses can incline students towards entrepreneurship [30]. However, some studies do not support the positive link between entrepreneurial education and intention. For instance, empirical research conducted in Uganda did not provide strong evidence to claim direct relationship between these two variables [31].

However, it is obvious that as universities engage more and more, all over the world, in providing innovative and complex support for entrepreneurship (curricula, collaborative programs with business, practical knowledge, etc.), sustaining the vision that entrepreneurship can be, also, educated, not only nurtured [8]. Therefore, our hypothesis is that university support for entrepreneurship has a direct influence on the student's intention to start a business. More than that, this research presumes that students from the final years (those over 20) are more oriented towards entrepreneurship compared to other age groups.

Entrepreneurial orientation emerged as a firm-level construct that determines a firm's performance [32]. However, in recent years, researchers have suggested that entrepreneurial orientation can be investigated, also, at the level of the individual [32]. Similar to the firm level construct, individual entrepreneurial orientation is a multi-dimension concept that brings forth the motivation that determines individuals to pursue for their own business, in what drives entrepreneurial action. Studies revealed that individual entrepreneurial orientation can be enhanced through proper entrepreneurship education. This is important information for universities in determining new approaches in business education in order to develop human resources for future business opportunities. In a research on Norwegian and American students, researchers found that students who completed the entrepreneurial course agreed that they were more creative and innovative and demonstrated higher entrepreneurial intent than before [32]. Ref. [33] found that self-efficacy and education were having significant positive influence on entrepreneurial intention among female undergraduate students in Nigerian

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universities. [34] discovered that business school students score higher than the average norm in all elements of the motivation structure except failure-avoidance.

Based on these findings, we assumed that entrepreneurial orientation has a direct influence on the student's intention to start a business.

Entrepreneurial confidence is another factor investigated as potential construct for entrepreneurial intention. 'Starting and owning a business typically is riskier and more demanding than paid employment, and we should expect that an entrepreneurial livelihood would attract, and indeed depend on, individuals with a well-developed sense of confidence, energy, and adaptability' [35]. Those who are determined to start their own business are considered the real potential entrepreneurs [36]. Consequently, entrepreneurial confidence will create entrepreneurial intention. There are at least two avenues for interpreting entrepreneurial confidence. One is related to education and the confidence graduates gain as a result of education. This is proved in many empirical researches where the authors highlight that such intention is greatly influenced by students' confidence [18,25,37,38]. An empirical study conducted among business students found that students were confident about their competences that would help them in their entrepreneurial endeavours [15]. As the author concludes, the higher the level of student's competences is, the stronger their entrepreneurial intention is, and vice versa. There is no doubt that the competences create self confidence that encourages the students to undertake entrepreneurial paths. The other avenue explores the emotional, psychological motivation of entrepreneurial confidence. Despite much evidence that entrepreneurial endeavour is risky and often not paid enough [39] (p. 2), more and more people continue to start new businesses. The entrepreneurial confidence seems to lay more on psychological motivation rather than in rational thinking. In a survey conducted in 2001 in 18 countries on a large sample of individuals who, at the time of the survey, were owning and managing a business or were in the process of starting one, provided significant evidence that perceptual variables have a crucial impact on new business creation [39] (p. 3).

As a consequence, another hypothesis retrieved is that entrepreneurial confidence has a direct influence on the student's intention to start a business.

In various research findings cultural support has been seen as one of the major contributors to entrepreneurial intention. Generally, culture is seen as common values, norms, rules and ethical standards among the groups of people. These cultural constructs could impact the entrepreneurship intentions and involvement extent of a society by endorsing individuals for such intentions or vice versa [40]. Thus, we consider cultural factor as one of the major factors influencing entrepreneurial intentions. The links between entrepreneurial intention and behaviour and cultural incentives are numerous and needs to be researched further [41]. The scholars believe that cognitive features such as principles and perceptions are influential on behaviour. Many other research studies have examined the relationship between cultural aspects and entrepreneurial behaviour [41]. While generally culture has a positive impact of entrepreneurial intentions, the degree of impact varies country to country and even region by region. This is important to consider while conducting research in a particular cultural environment. In the UAE, for example, studies concluded that despite many barriers foreigners encounter, cultural support for entrepreneurish seems to be attractive enough to determine expatriates to relocate in this country for entrepreneurial, not for immigration reasons [2,42] (p. 6).

Accordingly, we assumed that cultural support for entrepreneurship has a direct influence on the student's intention to start a business.

Literature identifies, also, the importance of having models of entrepreneurs among family members and of being exposed to entrepreneurship experience in the family. These constitute important determinants on entrepreneurial intention [43] (p. 6). Numerous studies underline the positive consequences on entrepreneurship intention of having parents with a self-employment history: create management expertise for the future own business [44], determine the desire to start a business [45] or leading to a greater tendency to choose a self-employed career [46].

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Therefore, similar to other studies [43] (p. 6), another hypothesis is that Students having parents with a self-employment history are more inclined to initiate a business than those having parents with no such history.

## 3. UAE Context

UAE is the second largest economy in the Arab World and one of the most important regional destinations for trade, investment and economic activities [47] (p. 11). Situated in Western Asia, at the southeast end of the Arabian Peninsula, UAE is a federation of seven emirates consisting of Abu Dhabi (that serves as the capital), Ajman, Dubai, Fujairah, Ras al-Khaimah, Sharjah and Umm al-Quwain. The UAE's oil reserves are the seventh largest in the world, with the majority of reserves located in Abu Dhabi (approximately 94 percent) [48]. The activities related to the extraction of crude oil and natural gas contributed by about 16.7% to the creation of the UAE's GDP (in 2016) [47] (p. 26), being the first industry in the UAE economy. The next leading industries are "Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles" (12.8%), "Construction and Building" (10.3%), "Financial and Insurance Activities" (10.1%), "Transformative Industries" (9.5%) [47] (p. 29).

UAE is a mosaic, with immigrants that count for more than 80% of the population, with Asian, not Arabs as the majority of residents, with Arabic as the official language used by government, but with English as business language [2] (p. 7). UAE citizens are among the most privileged in the world. Assisted from birth to death by funds from national wealth, they also have the social advantages that come with living in one of the region's most open and tolerant communities [49]. For these and many other characteristics, UAE is an interesting and a rich area for investigation.

The economic growth, together with the recent business-friendly reforms and a new investment law which authorize complete foreign ownership of firms in select sectors, determine the boosting of investor confidence and support for higher FDI inflows [50]. The UAE ranked second after Turkey in the list of countries attracting the most part of the foreign direct investment in the West Asia region in 2016, and it ranked first in the countries of the Gulf Cooperation Council (GCC), acquiring about 50% of the region's inflows investment estimated at \$17.9 billion [47] (p. 39). The United Arab Emirates is also the largest Arab investor abroad, with annual investments increasing from \$2.2 billion in 2011 to \$15.7 billion in 2016, with an average annual growth rate of 48.2%, doubling its cumulative investment abroad from \$57.8 billion in 2011 to \$113.2 billion in 2016 [47] (p. 39). According to UNCTAD [51] (p. 49) United Arab Emirates remains the sub-region's largest source of FDI in 2017. Out of \$33, 281 million FDI outflows for West Asia, UAE is counting \$13, 956 million [51] (p. 186).

Thanks to various government strategies aimed at diversifying the economy, oil revenues today only account for around 5% of Dubai's GDP—with the service industry accounting for over 70%. In the UAE as a whole, the large and diverse non-oil sector accounts for almost 70% of the nation's GDP, and this helps to promote more sustainable growth in the private sector [52].

An important step in fostering the development of the country was made through the Emiratization Program, launched in the 1990s. The Program is designed to overcome the structural division in the labour market and to increase the number of Emiratis in the job market and their contribution to the economy [53].

The government of UAE engaged in supporting entrepreneurial initiative among its citizens, in order to build a competitive knowledge economy. The National Agenda, in line with Vision 2021, aims to unlock the potential of citizens and enable them to be a driving force of the UAE's economic development [43]. Small- and medium-sized businesses are growing in importance in the UAE economy. In Dubai, SMEs make up 47 percent of the emirate's GDP and more than half of its workforce. Younger start-ups make up nearly 50 percent of the companies registered in Dubai, confirming the UAE desiderate to become a global center for entrepreneurship, knowledge transfer and innovation [54]. These realities specific to the UAE context strengthen the hypothesis retrieved from the literature, that cultural support for entrepreneurship has a direct influence on the student's intention to start a business.

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Strongly related to the cultural support for entrepreneurship, gender aspects are particularly interesting in the UAE. The UAE ranked first in the Arab world in women's rights, according to the annual report of the Arab Women Studies Centre of the Arab Women Foundation 2017 [55]. Already in 2000, 76.8% of the university students in the UAE were women [56] (p. 330). 59% of the UAE local labour force consisted of women, according to the UAE Year book 2008 [56] (p. 330). 66% of all government employees are women, over 30% of managerial positions across various industries are taken up by women and 15% of expert positions in the private sector are held by women. Emirati women also represent 71% of all graduates and more than 1,500 Emirati women work in Dubai Police, 93 of whom hold leadership positions [57].

Based on this evidence, taking into account the governmental engagement to foster women economic empowerment, and grounded in the literature that no meaningful difference between men and women are in terms of intentions to start businesses [43] (p. 4), we launch as hypothesis that women students are more inclined to start a business than men.

Notwithstanding these efforts, there is still room for improvements. Despite its economic diversification, the economic growth is still dependent on oil and gas industry. The decision of OPEC countries to reduce the oil and gas production reflected on slowing the GDP growth rate in the UAE, estimated at 2.3% in 2016, compared to 5% during 2010-2014 [47] (p. 23]. Nationals predominantly prefer to seek employment in the public sector due to better conditions, better salaries, more comprehensive packages, shorter working hours and job security [58] (p. 76). According to studies, those aged under 30 who want to work in the public sector score 49%, and the percentage grows to 60% for those over 30 [59]. Some issues of concern were related to job performance of Emirati nationals [58] and the need to foster innovative and technical fields of study [9].

In 2017, UAE scored the 26th place on the Global Entrepreneurship Index (GEI). The Index measures, based on 14 pillars, the health of the entrepreneurship ecosystem in a given country, both the quality of entrepreneurship and the extent and depth of the supporting entrepreneurial ecosystem. The GEI is composed of three building blocks or sub-indices: entrepreneurial attitudes (what do you think about it), entrepreneurial abilities (can you do it?), and entrepreneurial aspirations (do you want to do it?) [9]. Hence education, especially postsecondary education, plays a vital role in teaching and developing entrepreneurial skills. It is widely held that entrepreneurs with higher education degrees are more capable and willing to start and manage high-growth businesses [9].

For the UAE, there is a gap between individual and institutional entrepreneurial qualities. The entrepreneurial quality of the institutions scores higher in GEI 2018 (75%) than for the entrepreneurial quality of people in the ecosystem (69%). This illustrates a deficit in using both institutional infrastructure for entrepreneurship, which in UAE is very supportive, and the education facilities existed in this country. UAE has one of the highest literacy rates in the region and scores high in the tertiary education among its citizens. The effectiveness of the programmes provided by the government is at a stake.

Therefore, we found it appropriate to conduct a research among the UAE higher education students towards their intention to start a business, and what motivates them. Although the United Arab Emirates is a rapidly emerging country and ranks very high in various entrepreneurial dimensions, such as entrepreneurial spirit, self-perceptions, activities, motivation, gender equality, entrepreneurship impact, and social value of entrepreneurship [60], there are still few empirical studies on entrepreneurial intentions among students. The country has fast developing local higher education institutions and hosts many branches of renowned international universities.

Summing up, four major groups of factors loom from the entrepreneurship literature as important antecedents of entrepreneurial intention. This paper focuses on the impact of these factors in the UAE context and launches these hypotheses:

H1. Entrepreneurial intention of the UAE's students is directly influenced by all four categories of factors.

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H1.1. University support for entrepreneurship has a direct influence on the student's intention to start a business

- H1.2. Entrepreneurial orientation has a direct influence on the student's intention to start a business
- H1.3. Entrepreneurial confidence has a direct influence on the student's intention to start a business
- H1.4. Cultural support for entrepreneurship has a direct influence on the student's intention to start a business
- H2. Women students are more inclined to start a business than men.
- H3. Students between 20 and 25 years old are more inclined to start a business compared to other age groups.
- H4. Students having parents with a self-employment history are more inclined to initiate a business than those having parents with no such history.

Our findings aim to underline the challenges for universities, as well as for the government of UAE. As studies mention, there is necessary to transform intention towards starting a business, to concrete action, meaning new businesses entering on the market. [61]. Thus, we anticipate that the current research outcomes in the UAE context will derive further research areas and provide practical recommendations for universities and colleges in the country for entrepreneurial education improvements, and for the evaluation of the effectiveness of governmental programmes.

# 4. Methodology

The study measured students' intention to start a business after graduation based on a batch of 23 statements relating to entrepreneurial features and cultural support gathered from the literature and three descriptive variables, namely gender, age [62] and parents' self-employment status (developing on the works of [63–66] (see Figure 1).

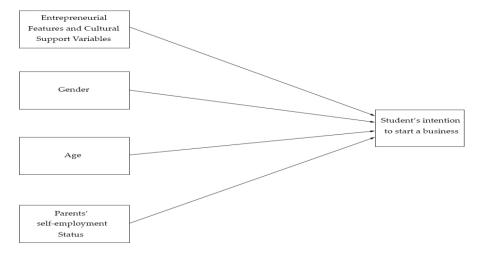


Figure 1. Conceptual model of the study. Source: own research compiled from literature [63–66].

Gender and parents' self-employment status were measured using categorical scales (Yes versus No) while age was measured using an ordinal scale with four levels (less than 20 years old, 20–25 years old, 26–30 years old, and over 30 years old). The entrepreneurial intention and cultural support variables were measured using 7-level Likert scales, drawing from the work of [36]. These variables were firstly reduced by employing Principal Component Analysis, aiming to comply with the assumptions discussed by [67,68]. Once the factors were delineated, two logistic regressions were used in order to comply with the sample size assumption [69,70] and to facilitate the analysis of the findings [71]. Firstly, the factors were regressed against the dependent variable (intention to start a business after graduation). By retaining the significant factors, the descriptive variables were included in the model to run the second logistic regression against the same dependent variable.

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The study employed a convenience sampling methodology centered on a close 2 to 1 woman-man ratio based on the minimum number of cases principle [72], as such perspective is appropriate for the largest Emirate of the seven comprising the UAE, namely Abu Dhabi [73]. Moreover, such a ratio reflects to a certain extent the overall current registered student situation, the number of Emirati women students exceeding that of men by a significant percentage [74]. The methodology entailed selecting randomly 10 universities from the 72 licensed institutions in the UAE [75], thus developing on the work of [76] to collect data from 50 students enrolled in their final year at each of the 10 universities (adapted from [77–79]. Thus, an email was sent to the administrative office of each of these universities with the purpose of disseminating the online link to the questionnaire (adapted from [59]. 168 respondents accessed the online link and completed the questionnaire. After scrutinising the data, 157 fully completed questionnaires were retained, all 10 universities being represented in the sample, seven of them with 16 students and three of them with 15. Ref. [78] contended based on literature that the sample size and, thus, the sample structure depended on the number of respondents open to take part in a survey, the aim being to obtain a convenient, cost-effective and approachable sample and not to generalise the findings. Thus, the 157 questionnaires were employed as the seven extra questionnaires exceeding the exact 1 to 2 man-woman ratio (see Table 1) could provide important insight for the research [80].

**Table 1.** Respondent's intention to start a business.

	Do you plan/intend to start your own business after graduation?									
	No	Frequency 40	Percent 25.5	Valid Percent 25.5	Cumulative Percent 25.5					
Valid	Yes	40 117	74.5	74.5	100.0					
	Total	157	100.0	100.0						

Source: own research.

Probing further, the sample size is in line with previous studies on entrepreneurship conducted among students enrolled in universities from Arab countries [79,81]. Data were collected from April to June 2018 using the online questionnaire linked to the email sent to administrative offices and the response rate (32.65%) could be considered typical for on online survey in a university environment [82,83].

# 5. Findings

Data have been collected from students enrolled in 10 universities from the U.A.E pursuing mainly business and economics majors (95.5%), these fields being the top choices of Emirati students [74].

The research focus was on whether the students planned to start a business, on three descriptive variables, namely gender, age and parents' self-employment status (using a variable measuring whether such status has been ever attained), and on 23 entrepreneurial intention and cultural support variables. Tables 1–5 and Figure 2 display the descriptive statistics for these variables.

**Table 2.** Gender of the respondents.

	Gender									
Valid	Woman Man <b>Total</b>	Frequency 100 57 <b>157</b>	Percent 63.7 36.3 <b>100.0</b>	Valid Percent 63.7 36.3 <b>100.0</b>	Cumulative Percent 63.7 100.0					

Source: own research.

**Table 3.** Age of the respondents.

		·	Age		
		Frequency	Percent	Valid Percent	Cumulative Percent
	Less than 20 y.o	40	25.5	25.5	25.5
	20–25 y.o	108	68.8	68.8	94.3
Valid	26-30 y.o	3	1.9	1.9	96.2
	Over 30 y.o	6	3.8	3.8	100.0
	Total	157	100.0	100.0	

Source: own research.

 $\textbf{Table 4.} \ Respondent's \ parents' \ self-employment \ status.$ 

	Have your parents ever been self-employed?									
		Frequency	Percent	Valid Percent	Cumulative Percent					
	No	54	34.4	34.4	34.4					
Valid	Yes	103	65.6	65.6	100.0					
	Total	157	100.0	100.0						

Source: own research.

 $\textbf{Table 5.} \ \textbf{Statements related to Entrepreneurial features and cultural support.}$ 

	N	– Median	Mode
	Valid	- Meulali	Mou
In my university, people are actively encouraged to pursue their own ideas/entrepreneurial plans	157	4.00	4
In my university, you get to meet lots of people with good ideas for a new business.	157	4.00	4
Entrepreneurship courses at my university prepare people well for an entrepreneurial career	157	4.00	4
In my university, there is a well-functioning support infrastructure to support the start-up of new firms.	157	4.00	4
I know many people in my university who have successfully started up their own business.	157	4.00	4
An intensive entrepreneurship course would be extremely beneficial for anyone who would like to start a business.	157	5.00	7
A mentor/professor from my university would be of great help in assisting me preparing for being an entrepreneur	157	5.00	6
Starting a firm and keeping it working would be easy for me.	157	4.00	4
Starting my business will make me financially independent.	157	5.00	7
I would have a high chance of success if I would start my own business.	157	5.00	4
I have the skills and capabilities required to succeed as an entrepreneur.	157	5.00	5
I wish to be my own boss, make my own rules and work to fulfill my dreams.	157	6.00	7
It is preferable to be an entrepreneur, rather than a large firm employee.	157	5.00	4
Entrepreneurship is a good way to make lots of money.	157	5.00	7
Becoming an entrepreneur will contribute to the growth and development of my country.	157	6.00	7
Culture plays an important role in supporting businesses.	157	6.00	7
Culture in my country is supportive of younger people in starting their own business.	157	6.00	7
My cultural background helps me to better understand the ways of doing business in the region.	157	6.00	7
There is a culture of entrepreneurship in my country.	157	5.00	7
Local culture is supportive towards innovation, creativity and entrepreneurship.	157	6.00	7
Males and females have the same cultural support in starting own business.	157	5.00	7
I will get full support of my family if I decide to become an entrepreneur.	157	6.00	7
There are entrepreneurs among my relatives.	157	5.00	7

Source: own research.

An initial appraisal of the investigated the statements related to entrepreneurial features and cultural support based on the median values display a neutral perspective in the case of six variables and somewhat strong and strong attitudes about ten and seven variables, respectively. For the variables from the first category a perfect match between the median and mode values was uncovered, thus displaying that the most selected scale level was also the neutral one. For the other two categories, only in the case of three variables the most selected scale level was below or similar to the median value, thus the higher modal value for the remaining variables reinforcing the students' positive attitudes toward them.

Probing further in an attempt to explain the decision of starting a business based on entrepreneurial features and cultural support variables, gender, age and parents' self-employment status, Principal Component Analysis and sequential Logistic Regressions were employed. Pursuing Principal Component Analysis and a Varimax rotation and aiming for factor loading of minimum 0.5 suitable for the sample size [52] and a Cronbach Alpha higher than 0.7 [51], the 23 statements relating to entrepreneurial features and cultural support for entrepreneurship were reduced to four factors (see Table 6), namely cultural support for entrepreneurial orientation, university support for entrepreneurship and entrepreneurial confidence (see Table 7).

Table 6. Factor Analysis (Principal Component Analysis).

	Component	2	3	4
In my university, people are actively encouraged to pursue their own ideas/entrepreneurial plans	1		0.659	4
In my university, you get to meet lots of people with good ideas for a new business.			0.682	
Entrepreneurship courses at my university prepare people well for an entrepreneurial career			0.778	
In my university, there is a well-functioning support infrastructure to support the start-up of new firms.			0.818	
I know many people in my university who have successfully started up their own business.			0.647	
An intensive entrepreneurship course would be extremely beneficial for anyone who would like to start a business.		0.763		
A mentor/professor from my university would be of great help in assisting me preparing for being an entrepreneur		0.698		
Starting a firm and keeping it working would be easy for me.				0.79
Starting my business will make me financially independent.		0.504		
I would have a high chance of success if I would start my own business.				0.72
I have the skills and capabilities required to succeed as an entrepreneur.				0.66
I wish to be my own boss, make my own rules and work to fulfill my dreams.		0.638		
It is preferable to be an entrepreneur, rather than a large firm employee.		0.501		
Entrepreneurship is a good way to make lots of money.		0.635		
Becoming an entrepreneur will contribute to the growth and development of my country.	0.562	0.542		
Culture plays an important role in supporting businesses.	0.639			
Culture in my country is supportive of younger people in starting their own business.	0.730			
My cultural background helps me to better understand the ways of doing business in the region.	0.765			
There is a culture of entrepreneurship in my country.	0.699			
Local culture is supportive towards innovation, creativity and entrepreneurship.	0.763			
Males and females have the same cultural support in starting own business.	0.771			
I will get full support of my family if I decide to become an entrepreneur.	0.621			
There are entrepreneurs among my relatives.	0.519			
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser N	ormalization.			
a. Rotation converged in 7 iterations.				

Source: own research.

 Table 7. Delineated factors based on Principal Component Analysis.

Factor	Number of items	Cronbach alpha	Does Cronbach alpha increase if any item deleted?	Item-total correlations	Comment
Cultural support for entrepreneurship	9	0.914	no	all above 0.5	good factor
Entrepreneurial orientation	6	0.841	no	all above 0.5	good factor
University support for entrepreneurship	5	0.814	no	all above 0.5	good factor
Entrepreneurial confidence	3	0.775	no	all above 0.5	good factor

Source: own research.

The four factors were regressed against the intention of starting a business using logistic regression. The method entails assessing the odds ratio (ExpB) in order to ascertaining the change in occurrence odds of a particular category of the dependent variable induced by a change with one unit of an independent variable (adapted from [68]).

After checking the logistic regression assumptions (Table 8), the results indicated only one significant factor, entrepreneurial confidence (Wald test, p < 0.01) (see Table 9). Thus, entrepreneurial confidence, with an odds ratio of 1.787, show that an increase with one unit on the measurement scale of the entrepreneurial confidence (moving from strongly disagree to strongly agree) increases the odds of starting a business by a multiplicative factor of 1.787.

Table 8. Logistic regression assumptions.

## Assumption

The errors should be independent [68]

Linear relationship between continuous predictors and their logs—Box Tidwell test [84]

Absence of multicollinearity—Variance Inflation Factors for continuous variables [85] and Phi coefficient for categorical variables [86]

Strongly Influential Outliers—Standardized/Studentized Residuals, Cook's distances, Average Leverage, DfBeta values for continuous variables [68] and Scatter Plots for categorical variables [87] Sample size—10–15 events per predictor [69,70]

Source: as mentioned in the table.

**Table 9.** Logistic Regression Results: The Impact of Entrepreneurial Features and Cultural Support factors on Intention to Start a Business after Graduation.

Variables in the Equation											
	Coefficient	Standard Error	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)				
	Coemeient	Startdard Error	· · · · · · · · · · · · · · · · · · ·	ai.		2/17(2)	Lower	Upper			
Cultural support for entrepreneurship	0.128	0.185	0.479	1	0.489	1.137	0.791	1.633			
Entrepreneurial orientation	0.019	0.179	0.012	1	0.914	1.019	0.717	1.449			
University support for entrepreneurship	0.048	0.193	0.061	1	0.805	1.049	0.719	1.531			
Entrepreneurial confidence	0.580	0.198	8.560	1	0.003	1.787	1.211	2.636			
Constant	1.155	0.196	34.682	1	0.000	3.173					

- a. Hosmer and Lemeshow test- p = 0.512
- b. Chi-square = 9.902 (p < 0.05)
- c. Nagelkerke R Square = 0.09

Source: own research.

Retaining the significant factor, entrepreneurial confidence, the model was enriched by including demographic variables (gender and age) and parents' self-employment ever status to ascertain whether these variables could explain the student's intention to start a business (adapted from [88,89].

The reference categories for these variables are presented in Table 10. Regarding age, the categories 20–25 years old, 26–30 years old and over 30 years old were compared against less than 20 years old. For gender, women were compared against men, while for parents' self-employment status; those with prior self-employment status were compared against those with no prior self-employment status.

**Table 10.** Logistic regression—reference categories for age, gender and parents' self-employment ever status.

Categorical Variables Coding							
		Frequency	Param	Parameter coding			
		rrequeries	(1)	(2)	(3)		
	Less than 20 y.o	40	0.000	0.000	0.000		
A	20–25 y.o	108	1.000	0.000	0.000		
Age	26–30 y.o	3	0.000	1.000	0.000		
	Over 30 y.o	6	0.000	0.000	1.000		
	Woman	100	1.000				
Gender	Man	57	0.000				
Have your parents ever been	No	54	1.000				
self-employed?	Yes	103	0.000				

Source: own research.

The model met the logistic regression assumptions, but gender was not found to have a statistically significant impact (Wald test, p > 0.1) on the dependent variable (see Table 11).

**Table 11.** Logistic Regression Results: The Impact of Entrepreneurial confidence, Age, Gender and Parents' self-employed status on Intention to Start a Business after Graduation.

Variables in the Equation											
	Coefficient	Standard Error	Wald	df	Sig.	Exp(B)	95% C.I. Lower	for EXP(B) Upper			
F. (	0.606	0.015	10.515	1	0.001	2.007		- 1 1			
Entrepreneurial confidence Age <sup>8</sup>	0.696	0.215	10.515 14.270	3	0.001 0.003	2.006	1.317	3.055			
Age (1)	1.133	0.300	14.252	1	0.000	3.104	1.724	5.590			
Age (2)	0.343	1.275	0.072	1	0.788	1.409	0.116	17.168			
Age (3)	0.555	0.969	0.328	1	0.567	1.741	0.261	11.634			
Parents_ever_se (1)**	0.797	0.444	3.229	1	0.072	2.219	0.930	5.292			
Gender (1)***	0.226	0.316	0.512	1	0.474	1.253	0.675	2.327			

a. Hosmer and Lemeshow test- = 0.9

Source: own research.

Thus, gender was dropped from the model and the remaining variables were further investigated. For age and parents' self-employed ever status the reference categories were preserved (see Table 12).

The new model rendered significant all 3 independent variables (see Table 13), and after checking the logistic regression assumptions (Table 8), they were all retained. (see Table 13 and Figure 2).

b. Chi-square = 57.672 (p < 0.001)

c. Nagelkerke R Square = 0.410

<sup>\*</sup>Age: Age (1): 20-25 y.o; Age (2): 26-30 y.o; Age (3): over 30 y.o- compared to Age (Less than 20 y.o)

<sup>\*\*</sup>Parents\_ever\_se (1): Parents have never been self-employed- compared to Parents have ever been self-employed

<sup>\*\*\*</sup>Gender (1): Women- compared to Men

TE-1.1. 40 To a to discount			1	1
Table 12. Logistic re	gression- reference	e categories for age an	a parents' seit-er	nployment ever status.

Categorical Variables Codings	1						
		Frequency	Param	Parameter coding			
		rrequericy	(1)	(2)	(3)		
	Less than 20 y.o	40	0.000	0.000	0.000		
Acc	20–25 y.o	108	1.000	0.000	0.000		
Age	26–30 y.o	3	0.000	1.000	0.000		
	Over 30 y.o	6	0.000	0.000	1.000		
Have your parents ever been	No	54	1.000				
self-employed?	Yes	103	0.000				

Source: own research.

**Table 13.** Logistic Regression Results: The Impact of Entrepreneurial confidence, Age and Parents' self-employed status on Intention to Start a Business after Graduation.

Variables in the Equation								
	Coefficient	Standard Error	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B) Lower Upper	
Entrepreneurial confidence	0.710	0.213	11.077	1	0.001	2.034	1.339	3.090
Age <sup>*</sup>			20.504	3	0.000			
Age(1)	1.227	0.272	20.416	1	0.000	3.411	2.003	5.808
Age(2)	0.448	1.258	0.127	1	0.722	1.564	0.133	18.421
Age(3)	0.606	0.961	0.397	1	0.529	1.833	0.278	12.063
Parents_ever_se(1)*	0.917	0.412	4.955	1	0.026	2.502	1.116	5.609

- a. Hosmer and Lemeshow test- p = 0.947
- b. Chi-square= 57.159 (p < 0.001)
- c. Nagelkerke R Square = 0.407
- \*Age: Age (1): 20-25 y.o; Age (2): 26-30 y.o; Age (3): over 30 y.o- compared to Age (Less than 20 y.o)
- \*\*Parents\_ever\_se (1): Parents have never been self-employed-compared to Parents have ever been self-employed

Source: own research.

Starting a firm and keeping it working be easy for me

I would have a high chance of success if I would start my own business

I have the skills and capabilities required to succeed as an entrepreneur

Age

2.034 (p < 0.01)

Student's intention to start a business

Age

Parents' self-employment Status

Figure 2. Significant variable. Source: own research.

Entrepreneurial confidence (Wald test, p < 0.01) with an odds ratio of 2.034 displays that an increase with one unit on the measurement scale of the entrepreneurial confidence (moving from strongly disagree to strongly agree) increases the odds of starting a business by a multiplicative factor of 2.034. Thus, the effect of this factor is even better explained together with age and parental self-employment.

Age (Wald test, p < 0.001) shows that students aged between 20 and 25 years old are 3.411 times more inclined to initiate a business than the ones ages less than 20 years old.

Parents' self-employment status (Wald test, p < 0.05) displays that students with parents that have not been self-employed are 2.502 times more inclined to start a business than those with parents that have had self-employment experiences.

### 6. Discussions

Although these findings are not valid for all the universities and for all UAE's business students, these are interesting results. Most of the students (74.5%) intend to start their own business. This result is in line with other studies [90] (p. 136) that empirically determined that young people in the UAE rank entrepreneurship as their first employment choice.

Perhaps the most intrigued finding is that, from the four factors identified as influencing students to start their own business, entrepreneurial confidence detached as the only significant factor. Therefore, H1 (Entrepreneurial intention of the UAE's students is directly influenced by all four categories of factors) was partially supported as Entrepreneurial confidence (H1.3) was found to have a direct influence on the entrepreneurial intention of students. Meanwhile H1.1 (Entrepreneurial knowledge has a direct influence on the student's intention to start a business), H1.2 (Entrepreneurial orientation has a direct influence on the student's intention to start a business) and H1.4 (Cultural support for entrepreneurship has a direct influence on the student's intention to start a business) were not supported.

The respondents were mostly students in business and economics (95.5% of the respondents) and is expected that specific knowledge and support provided by the university to be determinant in their intention to start a business. Therefore, the effectiveness of the entrepreneurial education has to be reconsidered, as other studies mention [18,31].

This confidence may be a sub-conscious effect of the business education, as well as a sub-conscious effect of the cultural support for entrepreneurship in the UAE. However, the entrepreneurial confidence has to be kept and has to be strengthened with a complex curricula and a more practical oriented education [56], capable to increase the capacity for better risk assessment, and to identify innovative market opportunities [91]. Business courses are not only important in strengthening confidence, but also discipline from other areas, as humanities or science, with positive effects on general and entrepreneurial behaviour are essential in the development of entrepreneurs for the twenty first century [92].

Also, university education has to prepare the future entrepreneurs for a better risk assessment, for a more effective mixture between confidence and wisdom. Although entrepreneurial confidence is very important, as those who manifest confidence in their enterprise are the potential entrepreneurs, this factor has its own limits. Many studies discuss about the implication of overconfidence on the high failure rate of business start-ups and excess market entry [89,93]. To diminish side effects of overconfidence, practical education is important in building healthier entrepreneurship behaviour. The more practically oriented courses are introduced into curricula, the more entrepreneurial oriented graduates will be, rendering more competitive businesses [91,94], and capable to identify innovative market opportunities.

However, a question rises regarding the manifestation of this confidence on the market. A study released by Oxford Strategic Consulting in 2016, mentioned that only 11% of Emirates citizens wanted to start their business and when given a choice between the public and private sector, many nationals tended to prefer the public sector [59].

It seems that this entrepreneurial confidence does not produce too many entrepreneurs and, thus, UAE goal to increase the importance of the private sector for employment may be compromised. This supports the theoretical foundations that underline the fact that desirability (in our case, entrepreneurial confidence, as this research assimilated it to attitudes from the TPB) does not necessary transform into action [6]. It appears that programmes developed by the UAE government did not manage to capacitate enough the entrepreneurial confidence the students have in materializing their intention to start a business. Why does this confidence not transform into entrepreneurial behaviour? The discrepancy between the comfort of the public job and the struggle of the private endeavour leads to keep entrepreneurial confidence only at the intentional level to start their own business. Therefore, institutional and legal environment seems to play an important role in increasing the appetite for entrepreneurship [5].

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The gender distribution of those who intend to start their own business is in favour to women students (from those 117 who intend to start their own business, 75 are women and 42 are men). Based on the findings, H2 was not supported as no relationship was uncovered between gender and the student's intention to start a business. This is explained by the gender structure of those who responded to the online survey (100 women and 57 men). Even if 64.10% of women students intend to start their own business, compared to 73.68% men students who would like to do the same thing, there was no significant relationship between gender and the intention to start a business. This result may be intriguing considering the significant impact of gender on entrepreneurship intent explored in various contexts in the case of the Middle East In this region, the number of female entrepreneurs lags behind other countries with similar levels of GDP per capita (such as Norway, or Finland) [95] (p. 330). Women entrepreneurs still face barriers at the start-up of their venture and on their path to success, (struggling to access financing options, coaching opportunities and networks [96] emanating mainly from the lack of support, society and traditions, and personal and family reasons [97] (p. 409). Gender inequality index for most of the countries in the region is between 0.200–0.250, placing those countries alongside Russian Federation, Malta or Hungary [98]. Moreover, the results of this research contrast the special status of the UAE and the progress UAE reached in the last two decades in order to promote women access to education and business. Already in 2000, 76.8% of the university students in the UAE were women [95] (p. 330). 59% of the UAE local labour force consisted of women, according to the UAE Year book 2008 [95] (p. 330). Many programmes have been developed by the UAE in order to promote entrepreneurship among all UAE citizens and to provide a gender empowerment in Emirates [95]. The effect of entrepreneurial confidence is even better explained together with age and parental self-employment. Based on the findings, H3 was partially supported as students between 20 and 25 years old were uncovered to be more inclined to initiate a business than those younger than 20 years old, but no relationship was uncovered between this age group and students between 26 and 30 years old and older. Students aged between 20 and 25 years old are 3.411 times more inclined to initiate a business than the ones ages less than 20 years old. This is an anticipated result for the group of students analysed. This age interval is that of knowledge, skills and abilities accumulation and it is expected that specifically these students to become confident and enthusiastic about their perspectives as entrepreneurs, mostly in a country that offer many business opportunities as UAE.

H4 was not supported, as an inverse relationship was uncovered between parents' self-employment history and the student's intention to start a business. Students with parents that have not been self-employed are 2.502 times more inclined to start a business than those with parents that have had self-employment experiences. One explanation can be that those with parental self-employment experience expect to continue their family businesses, thus focusing on existing companies and not on new enterprises. Another justification can be offered by the social status the business owners have and the desire to achieve this status. Mostly these students, with parents that have not been self-employed, have to be targeted as new entrepreneurs. The lack of support coming from the parent self-employment experience should act as a catalyst in determining students to actively manifest this entrepreneurial confidence.

# 7. Conclusion

This study proposed an analysis of the students' intentions to start their own business on a sample of 157 subjects (95, 5% business students) from 10 universities from UAE. The analysis aimed: (i) to uncover what are the most important factors in influencing student to start their own business in the context of the UAE, and (ii) to discuss the implications for universities, in terms of the importance of the entrepreneurial education and programmes. Four hypotheses have been formulated: H1 Entrepreneurial intention of the UAE's students is directly influenced by all four categories of factors, H2. Women students are more inclined to start a business than men, H3. Students between 20 and 25 years old are more inclined to start a business compared to other age groups and H4. Students

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having parents with a self-employment history are more inclined to initiate a business than those having parents with no such history.

The theoretical frame of this study embraced the vision according to the fact that intentions are regarded as resulting from attitudes, perceived behavioural control, and subjective norms [6] (p. 1). The attitude towards the results associated with the behaviour and the subjective norms reflect the desirability and the desired occurrence of such behaviour. The perceived behavioural control reflects the personal perception of the ability to control the behaviour, regarded as self-efficacy [7] (p. 84).

Most of the students (74.5%) intend to start their own business. This result is in line with other studies that underline young people in the UAE rank entrepreneurship as their first employing choice. Twenty-three statements related to entrepreneurial features and cultural support have been analysed in order to determine the criteria underlying the decision to start a business. Based on Factor Analysis, the 23 statements were reduced to 4 factors impacting UAE students' decision to start a business: Entrepreneurial Orientation, Entrepreneurial Confidence, Cultural Support for Entrepreneurship, and University Support for Entrepreneurship. Among these factors, Entrepreneurial confidence is the only significant factor influencing the intention to start a business. This is, somehow, an unexpected result, taking into consideration that the surveyed students came mostly from the business and economics field. This result supports the studies that sustain that desirability (in our case, entrepreneurial confidence, as this research assimilated it to attitudes from the TPB) does not necessarily transform into action and that the fact that entrepreneurial education did not prove to be effective. However, this confidence may be a sub-conscious effect of the business education, as well as a sub-conscious effect of the cultural support for entrepreneurship in the UAE. Further investigations, involving interdisciplinary approaches that involve sociological, anthropological and psychological determinants can go deeper into the justification of this confidence.

The effect of this factor (entrepreneurial confidence) is even better explained together with age and parental self-employment. Students aged between 20 and 25 years old are 3.411 times more inclined to initiate a business than the ones ages less than 20 years old. This is an expected result. These students are aware about what business means, are equipped with knowledge and skills and they are exactly the group of students you will imagine to be the start-uppers.

Students with parents that have not been self-employed are 2.502 times more inclined to start a business than those with parents that have had self-employment experiences. The finding is not a predictable one, but can be sustained by the fact that owning a business gives a person a better social status, and those who do not have parents with a self-employment experience dream to be the one who will start one. Moreover, a parental self-employment status could mean in many cases an existing business that could be handed over to children and, thus, taking over a family business would make more sense than starting a new one. Mostly this group of students, with parents that have not been self-employed, may be targeted by governmental programs in order to transform their entrepreneurial confidence from intention to action towards starting a business.

In terms of implications for universities, one conclusion is that universities have to strengthten the confidence the students have in starting their own business. However, the benefits of this factor have its limitations, mostly in terms of the failure rate of start-ups and excess market entry. To overcome these limitations, universities have to accompany traditional entrepreneurship education with new insights from different others disciplines and with practical education, capable to increase the capacity for better risk assessment, and to identify innovative market opportunities. Also, a better assessment for entrepreneurial programmes and disciplines are required.

For UAE, students' determination to pursue their own business is a catalyst for the society growth. It represents not only a source for economic development, but also an indicator for human capital development. For UAE putting entrepreneurship in the center of the development strategy is a country goal for enhancing sustainability and a better social integration. It is demonstrated by the resources devoted to programmes as Emiratization, Vision 2012, or by investments in R&D. However, it raises a concern for the UAE government, in terms of materialization of this confidence. Governmental analysts

have to identify how to transform this Entrepreneurial Confidence into action in order to increase the number of Emirates entrepreneurs, how to help students to identify market opportunities and how to reduce the gap between the comfort of a public job and the challenges of a private endeavour. Otherwise, the effectiveness of the governmental programmes will remain low, the Emiratis will continue to seek public jobs and the human capital developed through a qualitative education will not produce the expected outcome. Finally, in the long run, the innovative spirit that characterises entrepreneurs will erode and will affect the wealth of the country.

## 8. Research Limitations and Future Directions

The present research is not without limitations. First of all, the non-random procedure employed in the study does not allow for generalising the findings to all UAE students. Thus, future studies should focus on using random sampling procedures, such as multiple-layer sampling [99], but still with a focus on gender, considering UAE's significantly higher number of women students compared to men students. Secondly, although a cross-sectional approach is not uncommon in entrepreneurial studies [100], a longitudinal framework could provide causal evidence [101], and, thus, more insights about entrepreneurial intention antecedents. Moreover, longitudinal studies could be very useful in uncovering the degree to which intention is actually turned into behaviour [102]. Hence, future studies should consider sequential investigations based on fixed panels [103], as well as qualitative research streams by completing the quantitative approach with in-depth interviews and focus groups [101] in order to generate more insights entrepreneurial intentions. Thirdly, the impact of parents' self-employment status on the intention to start a business was investigated. Although parents' self-employment and occupation have been found to significantly influence the children's entrepreneurial intentions in previous studies [63–66], the findings of the present paper render necessary further investigation as the student's intention to start a business was directly explained by the category in which parents never had self-employment status. Clarification on this situation can be provided by investigating the influence of other people. Role models do not appear just from within the family and future studies should aim to uncover these influencers and their impact on students, developing on [104] conclusions, that women were more influenced than men by role models regarding entrepreneurial intentions.

Future research streams should also consider including in the model education, by discriminating between academic programmes, especially entrepreneurship-related and non-entrepreneurship-related [105] and public versus private academic institutions [23]. Other demographic variables that should be considered in future research are marital status [64], as the dichotomy married/unmarried might affect differently on entrepreneurial intentions, and employment status [64], as there might be significant differences between employed students and unemployed ones when it comes to initiate a business. From a different perspective, the 23 entrepreneurial intention and cultural support variables should be completed with at least one variable measuring the impact of the necessary capital to initiate a business endeavour [106].

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