

# FACTORS INFLUENCING ENTREPRENEURIAL INTENTIONS AMONG ARAB STUDENTS

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## ABSTRACT

*Entrepreneurship defined as the process and mindset to initiate and develop economic activity. Studies have shown entrepreneurship to be a crucial driver of economic growth. This study sought to examine the factors that influence entrepreneurial attitudes among students in Arab countries. More specifically, it sought to examine the role of universities, role models, the entrepreneurial curriculum, and students' demographic characteristics in promoting Arab students' entrepreneurial attitudes. The study employed a quantitative research design, where data was gathered from a sample of 1500 undergraduate Arab students in government universities, and subjected to one-way ANOVA tests. Descriptive statistics (means and standard deviations) was used to draw additional conclusions from the gathered data. The results showed that Arab students acknowledge the role played by universities, the entrepreneurship curriculum, role models, and demographic variables in influencing their attitudes towards entrepreneurship. Universities and the entrepreneurial curriculum were found to be the greatest influencers of students' entrepreneurial attitudes, ahead of role models and demographic variables. However, the low overall mean showed that most students do not believe that these institutions have played their role satisfactorily. Regarding the moderating effect of demographic variables, ANOVA results showed that age, academic major, and work experience were not important determinants of students' entrepreneurial attitudes. However, one's country, their gender, and academic level found to be significant influencers of entrepreneurial attitudes. Male students were more entrepreneurially inclined than their female counterparts were, and so were those in third and fourth years of study, compared to those in their freshman and sophomore years. The overall finding of the study that universities need to play a more profound role in influencing students' entrepreneurial attitudes.*

**Keywords:** Entrepreneurship, Entrepreneurial Intentions, Arab Students, Entrepreneurship Curriculum, Role Models.

## INTRODUCTION

The European Commission defines entrepreneurship as the process and mind-set to initiate and develop economic activity (European Commission, 2003). The continued uncertainty about the economy, signified by a declining number of corporate recruiters fosters the appeal of new business launching and self-employment (Schaper & Volery, 2004). Studies have shown entrepreneurship to be an effective driver of economic growth and a sustainable source of competitiveness amidst emerging trends of globalization (Schaper & Volery, 2004). According to the authors, entrepreneurship drives growth through technological change, innovation, job creation and wealth generation (Schaper & Volery, 2004). Over the last 15 years alone, large

corporations and Fortune 500 companies have eliminated millions of jobs through retrenchment plans; yet entrepreneurial discoveries have yielded a yearly average of 600,000 new incorporations and generated millions of job opportunities (Morris & Kuratko, 2002). These findings explain researchers' continued interest in studying the impact of entrepreneurship on growth and the factors influencing the development of entrepreneurial attitudes among different segments of the population. Most of these studies have, however, focused on western economies, leaving knowledge gaps in relation to the effects of the same in other regions such as Africa and the Middle East. This paper seeks to identify the core variables influencing university students' attitudes towards entrepreneurship in selected Arab countries in Africa and the Middle East. It is based on an empirical study conducted among a sample of 1500 undergraduate students pursuing business-related degrees in Egypt, Jordan, Qatar, Saudi Arabia (KSA), Oman and the United Arab Emirates (UAE). Considering the importance of entrepreneurship on the modern-day economy, the current study will provide meaningful insights on how universities and other institutions of higher learning could provide entrepreneurial support to their students to enable them start their own business ventures.

### **Problem Statement**

A 2009 report by Silatech and Gallup on the entrepreneurial attitudes of Arab youth identified three factors that youth consider to be the greatest obstacles to success in life: the necessity of personal connections (wasta), lack of awareness on new employment initiatives AND inadequate educational systems that do not offer effective job training (Gallup Inc., 2009). The report carefully states that Arab youths hold complex attitudes towards entrepreneurship - most of them believe that entrepreneurship leads to wealth and job creation, yet solid majorities do not harbour entrepreneurial intentions; neither do they believe they can make good entrepreneurs (Gallup Inc., 2009). This mismatch between entrepreneurial attitudes and entrepreneurial intentions among Arab youth is reflected in a study by Almobaireek and Manolova (2011) involving 59 MENA countries. The study showed that although Arab youth consider entrepreneurship a good career choice, most of them do not harbour serious entrepreneurial intentions (Almobaireek & Manolova, 2011). In Egypt, for instance, 77.7 percent of respondents indicated their agreement with entrepreneurship as a good career choice, yet only 24 percent mentioned harbouring serious entrepreneurial intentions (Almobaireek & Manolova, 2011). The situation is even more worrying in Saudi Arabia, where 86 percent of youth consider entrepreneurship a good career choice and only 1 percent is inclined to take up entrepreneurial opportunities (Almobaireek & Manolova, 2011). Moreover, only 7.7 percent of respondents believed that they were adequately trained and qualified to start and sustain their own businesses. The Almobaireek and Manolova (2011) study presents an interesting finding about the impact of successful role models on Arab youth's entrepreneurial intentions. The study findings depict a mismatch between youth's perceptions about successful entrepreneurs in their countries AND their own inclination to take up entrepreneurial opportunities (Almobaireek & Manolova, 2011). In Egypt, for instance, 89.5 percent of respondents indicated respecting and according successful entrepreneurs high statuses in society, yet only 24 percent indicated being influenced by these high statuses to take up entrepreneurial opportunities (Almobaireek & Manolova, 2011). The case was no different in Saudi Arabia, where the statistics compare 92.3% to 1% (Almobaireek & Manolova, 2011). The findings from these studies beg the question, 'how effective is the

educational system and curriculum in Arab countries in equipping students with entrepreneurial skills?' Moreover, what is the impact of role models in shaping Arab youths' attitudes towards entrepreneurship? These two questions drive the current study.

### **Study Objectives**

Based on the background provided in the preceding section, this study seeks to realize the following objectives:

- i) To examine the role of universities in promoting entrepreneurship on Arab university students' preference towards entrepreneurship.
- ii) To determine the impact of role models in influencing Arab students' preference towards entrepreneurship.
- iii) To examine the effect of the entrepreneurial curriculum and content on Arab students' preference towards entrepreneurship.
- iv) To examine the moderating effect of demographic characteristics on Arab students' preference towards entrepreneurship.

### **Significance of Study**

The study provides crucial insight to policymakers in the selected Arab countries. Its findings will go a long way towards assisting them in the formulation of effective policies for enhancing entrepreneurial skills among university students. University administrators will better understand the roles that their institutions could play in fostering entrepreneurial development among students. They will understand the influence of role models and demographic variables such as gender on students' preference towards entrepreneurship. This way, policymakers and course designers will be able to come up with effective frameworks for instilling entrepreneurial skills among students. Consequently, more students will be inclined to learn entrepreneurship skills and the country as a whole will benefit from increased growth and low unemployment levels.

## **LITERATURE REVIEW**

### **The University's Role in Promoting Entrepreneurship and Students' Preferences towards Entrepreneurship**

Researchers concur that universities can play a crucial role in building entrepreneurial skills among students; however, their performance in this regard is far from perfect (Salem, 2014; Iqbal et al, 2012). In his study seeking to analyse the role played by Saudi Arabian universities in shaping entrepreneurial intentions among students, Salem concluded that "most universities have not fully integrated entrepreneurship programs in their curricula" (Salem, 2014, p. 630). Most institutions, the author posits, only offer entrepreneurship programs in economics and business studies, leaving students in other academic fields such as technology, mathematics AND computer science with no such exposure (Salem, 2014). These findings mirror those of Iqbal and his colleagues (2012), who found that most students in Saudi Arabia and other MENA countries do not consider universities and colleges to have played a sufficient role in influencing their entrepreneurial intentions. The authors, therefore, concluded that universities need to revisit

their curricula so they are more focused on equipping students with relevant entrepreneurial skills (Iqbal et al., 2012). Other researchers have moved away from the question of whether or not higher learning institutions have played their role as they should, choosing instead to focus on how such institutions need to adjust themselves to be more effective influencers of entrepreneurial intentions among students. Gallant et al. (2001) point out that the university's role as an influencer of entrepreneurial intentions can be categorized into two: its role as an educator and its role as a promoter of entrepreneurship.

As an educator, the university could foster students' interests towards entrepreneurship by:

- i) Providing students with ideas to start new businesses
- ii) Offering bachelors or masters studies on entrepreneurship
- iii) Arranging workshops and conferences on entrepreneurship
- iv) Offering project work focused on entrepreneurship
- v) Creating awareness of entrepreneurship as a possible career choice

As a promoter of entrepreneurship, the university could play its role by:

- i) Allowing business ventures run by students to use university services
- ii) Bringing students in contact with the network needed to start new business ventures
- iii) Bringing entrepreneurial students in contact with each other
- iv) Providing students with the financial means to start new business ventures

These findings reinforce the argument that universities can play an immense role in providing the requisite entrepreneurship education and skills to students; however, further research is needed to ensure that they play their role sufficiently and effectively.

### **The Entrepreneurial Curriculum and Content's Role in Influencing Students' Preferences towards Entrepreneurship**

The bond of contention among researchers is that the entrepreneurial curriculum and content could play a positive role in influencing students' attitudes and preference towards entrepreneurship in Arab countries. However, this is only so if the curriculum is structured properly and if it sufficiently reflects the changes and trends in the globalized economy (Salem, 2014; Iqbal et al., 2012). Salem (2014) points out that the reason why the entrepreneurship curriculum in MENA countries has not been effective in influencing entrepreneurial intentions among students is because it focuses primarily on creating business plans and starting new ventures, at the expense of growth, creativity and innovation. The author posits that in order for the entrepreneurship curriculum to be more effective, it ought to focus on instilling relationship-building, critical thinking, problem solving and risk-taking skills as a way of thinking and a form of support for building a knowledge-based economy (Salem, 2014). The author's viewpoint is that the traditional focus on creating business plans may not work effectively amidst the on-going changes and trends brought about by globalization. The curriculum and content of entrepreneurship education ought to be structured around competitiveness, innovation, networking, self-realization, communication and economic growth as well (Salem, 2014). Only then will it be able to raise the skill and talent level of students and to adequately prepare them to contribute to the knowledge-based economy (Salem, 2014).

The authors concur with Gallant and her colleagues (2001) that the curriculum ought to stretch beyond the classroom walls. It needs to equip students with practical entrepreneurial knowledge to complement their theoretical skills (Salem, 2014; Gallant et al., 2001). It ought to

accord students an opportunity to interact with the outside world through mentorship programs, workshops and conferences organized through strategic alliances with established entrepreneurs (Salem, 2014). This will grant students greater exposure to trends and changes in the globalized economy and enhance their inclination to succeed as entrepreneurs in a dynamic environment. Consequently, it will foster their preference to take up entrepreneurial ventures in their respective economies.

### **Role Models' Influence on Students' Entrepreneurial Intentions**

Studies have shown that by identifying with a role model, individuals could be inspired to pursue similar ventures or achievements (Saeid et al., 2014; Salem, 2014). Saeid et al. (2014) posit that when a student identifies with a successful role model who owns or runs their own business, they may be inspired to also begin and run their business successfully. Fayolle et al. (2006) hold a similar view; however, these authors are of the opinion that the entrepreneurial intentions are stronger if the influences come from close relatives. Children of entrepreneurial parents, who perceive their role models as successful and positive, are, for instance, highly likely to imitate those role models (Fayolle et al., 2006). The authors base their argument on the social learning theory, which emphasizes the concept of observing and modelling the behaviours, emotional reactions and attitudes of others. Based on the precepts of the social learning theory, students who perceive an entrepreneurial parent or close relative as being successful are likely to demonstrate a greater preference for entrepreneurship than those without such kind of role model effect (Fayolle et al., 2006). Van Auken et al. (2006) conducted a study to assess the impact of role models on individuals' desire to own business ventures. They asked students whose role models were successful entrepreneurs to rank the influence of those role models on career intentions of 20 different activities. The findings showed role models activities related to involving the respondent in discussions about the business, employment in the business and professional activities within the business to be significantly related to respondents' interests in starting their own businesses (Van Auken et al., 2006). Another group of researchers, however, expresses different views from those explained above. Krueger and Carsrud (1993), for instance, conducted a quantitative study utilizing the theory of planned behaviour (TPB) AND concluded that exogenous influences on entrepreneurial behaviour and intentions only influence attitudes indirectly.

### **The Influence of Demographic Variables on Students' Preferences towards Entrepreneurship**

Numerous studies have been conducted to determine the effect of demographic variables on students' entrepreneurial attitudes. The main demographic variables that have been studied include age, gender, socioeconomic status, family business background, race, work experience and country (Singh, 2014; Rasli et al., 2013). The studies have given varied results, supporting the need for further research in this particular area of knowledge. Rasli et al. (2013), for instance, conducted a study to determine the effect of five variables: race, field of study, work experience, gender AND parents' occupation on Malaysian students' entrepreneurial intentions. They concluded that:

- i) There is insufficient evidence to show that students' entrepreneurial intentions differ with race
- ii) There is insufficient evidence to show that students' entrepreneurial intentions differ by field of study
- iii) Students with some work experience have higher entrepreneurial intentions than those without such experience
- iv) Male students have higher entrepreneurial intentions than their female counterparts
- v) There is insufficient evidence to show that students' entrepreneurial intentions differ with parents' occupation.

These findings differ significantly from those of Singh (2014), who found students' entrepreneurial intentions to be influenced by age, income, parental occupation AND family business background, but not gender. In another study, Saleh and Salhieh (2014) assessed the impact of work experience, type of university and country on students' entrepreneurial intentions. They concluded that students' entrepreneurial intentions differ based on all three variables. In regard to the type of university, the authors assessed entrepreneurial intentions based on whether or not the university offers business incubation services – the study established that students in universities offering such services had higher intentions than those whose institutions lacked the same (Saleh & Salhieh, 2014). The authors also found entrepreneurial intentions to be higher for students with work experience compared to those without (Saleh & Salhieh, 2014). Moreover, students' entrepreneurial intentions differed across countries, with countries such as Egypt and Oman scoring lower than Lebanon and Jordan (Saleh & Salhieh, 2014). The authors concluded that the differences on the 'country' variable were due to differences in how students perceived their countries' market conditions, government regulations AND policies (Saleh & Salhieh, 2014). These studies demonstrate that there still are huge inconsistencies in regard to the effect of demographic variables on students' entrepreneurial attitudes. The preceding sections reveal knowledge gaps in relation to each of the four variables under study. Moreover, most studies have focused on studying MENA countries individually, with almost none studying the effect of entrepreneurship education on entrepreneurial intentions in the six selected countries collectively. This study complements existing literature by assessing the effect of the four entrepreneurship education variables above on students' entrepreneurial intentions in the six countries of interest: Egypt, Jordan, Qatar, Saudi Arabia, Oman and the United Arab Emirates. Its findings will be crucial in informing policy formulation and decision-making in the MENA (Arab) countries.

## METHODOLOGY

### Research Approach

The study falls within the quantitative research realm AND exclusively made use of primary data. The chief data collection instrument was a self-administered questionnaire, which was used to collect data in a cross-sectional field survey. This method was selected for its cost-effectiveness. Moreover, it proved easy and quick, saving time and money since respondents was available in a classroom situation. The data collected was used to construct a data set, which was

then factor-analysed and subjected to analyses of variances and correlation analyses. The study was conducted between 10/01/2015 and 15/06/2015.

### Measures and Instrument

All scales were measured on a seven-point Likert scale, ranging from 1 (strong disagreement) to 7 (strong agreement). Sekeran (2012) supports the use of a seven-point Likert scale on grounds of accuracy and high reliability. A review of literature revealed different models for predicting students' entrepreneurial intentions. The current study, however, selects a generalized framework, which assesses students' entrepreneurial intentions based on four variables: the university's role, the entrepreneurship curriculum and content, the availability of role models and demographic characteristics. Each of the four variables was measured using six questionnaire items.

### Data Collection

Data was collected from a sample of 1500 undergraduate students from 6 different government universities within six different Middle Eastern countries: Egypt, Jordan, Qatar, Saudi Arabia, Oman and United Arab Emirates. The self-administered questionnaire, accompanied by a cover letter, was delivered to respondents prior to the start of their classes. Faculty members distributed the questionnaires during their regular classes AND collected the same randomly at the end of the lesson. The simple random technique was used to select participants as a way of minimizing bias and increasing objectivity (Sekeran, 2010).

The questionnaire included questions about four factors: the university's role in promoting entrepreneurship, the entrepreneurship content and curriculum, the availability of role models AND the effect of demographic factors. The demographic factors were assessed using 6 different variables: age, gender, work experience, academic major, academic level of years and country.

A pilot study was conducted prior to the study to test the validity and reliability of the data collection instruments. The pilot study involved 50 students at the faculty of business of one of the participating universities. The study showed that there were no major changes or revisions needed. The instrument's reliability was further supported by the positive Cronbach alpha values for all factors, all of which ranged above 0.6 as shown in Table 1 below.

<b>Variable</b>	<b>Item</b>	<b>Cronbach's alpha value</b>
The role of University – promoting	6	0.633
The Entrepreneurial Curriculum and Content	6	0.669
Role Models	6	0.622

Demographic Characteristics	6	0.697
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**Hypotheses**

The study rides on the following hypotheses:

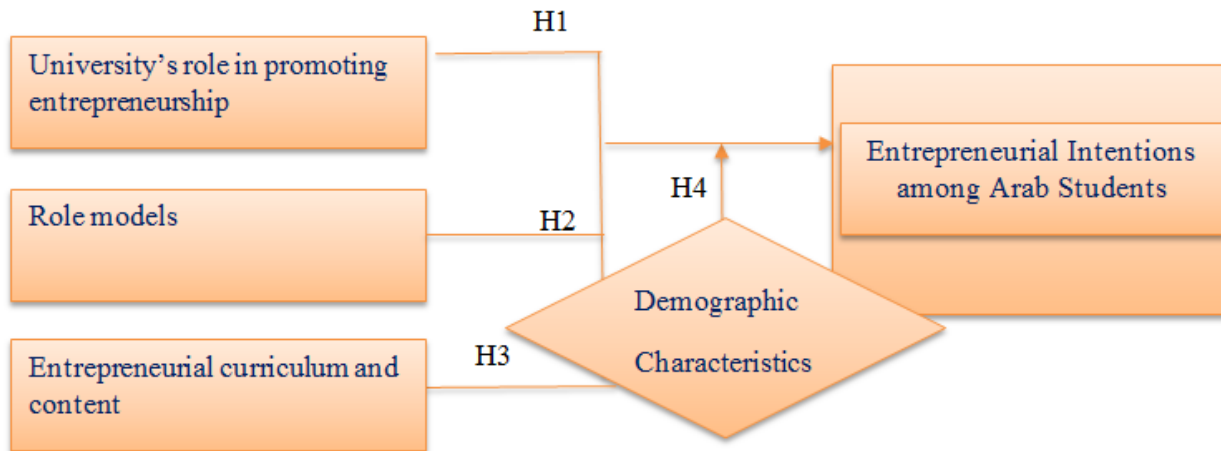
*H1: The University’s role as a promoter of entrepreneurship increases the likelihood of AMECs university students becoming entrepreneurially-inclined.*

*H2: The entrepreneurial curriculum and content increase the likelihood of AMECs university students being entrepreneurially-inclined.*

*H3: The availability of role models (educators or friends) increases the likelihood of AMECs university students being entrepreneurially-inclined.*

*H4: The relationship between entrepreneurship education and entrepreneurial inclination is stronger for (Demographic Characteristics):*

- i) Gender*
- ii) Age*
- iii) Academic level of years*
- iv) working experience*
- v) Academic major*
- vi) Academic level of years and*
- vii) Country*



**FIGURE 1  
RESEARCH MODEL**

**Population and Sample of the Study**

As mentioned earlier on, the study involved a total of 1500 undergraduate students, all pursuing business-related degrees in the faculty of business. Six government universities, one from each of the six countries, participated in the study. Describing the relationship between a



sample and the population from which it was drawn is crucial for the generalization of results AND the development of proper recommendations. Table 2 below presents the sample's demographic (Figure 1) characteristics to provide an overview of respondent characteristics.

Variable	Characteristics	# of Respondents	Percentages (%)
<b>You Think You're an Entrepreneur</b>	Yes	1140	76%
	No	360	24%
<b>Have you ever worked for yourself (Working experience)</b>	Yes	250	16.7
	No	1250	83.3
<b>Age</b>	18-22	1380	92%
	23-28	90	6%
	29 and older	30	2%
<b>Gender</b>	Male	890	59.30%
	Female	610	40.70%
<b>Academic Major</b>	Business	1460	97.30%
	Other	40	2.70%
<b>Academic level of years</b>	1 <sup>st</sup> Year	10	0.70%
	2 <sup>nd</sup> Year	40	2.70%
	3 <sup>rd</sup> Year	330	22%
	4 <sup>th</sup> Year	1120	74.7
<b>Country</b>	Jordan	440	29.30%
	Egypt	300	20%
	Qatar	360	24%
	Saudi Arabia (KSA)	240	16%
	Oman	20	1.30%
	United Arab Emirates (UAE)	140	9.40%

As illustrated in the table, a majority of respondents were between the ages of 18 and 22. 59.3 percent were male, whereas females accounted for only 40.7 percent. This is expected in this kind of society, given the low status accorded to women and girls. The results further show that 97 percent of respondents were pursuing business as their academic major AND only 3 percent were pursuing other majors. Moreover, over 96 percent of the sample was made up of third and final year students, while only 4 percent were distributed over the freshman and sophomore years. The skewness in proportion towards 3<sup>rd</sup> and 4<sup>th</sup> years of college can be explained by the fact that naturally, students start thinking and planning about their future careers in their final years in college. Finally, 29.3 percent of participants were from Jordan, 24 percent

from Qatar, 20 percent from Egypt and the rest were scattered across Saudi Arabia, Oman and the UAE.

## ANALYSIS AND FINDINGS

Descriptive analyses (frequencies, percentages AND means) and inferential analyses (one-way ANOVA) were employed to analyse the collected data using the latest version of SPSS.

### Descriptive Statistics

The descriptive statistics for the four variables tested have been summarized in Table 3 below.

<b>Scale</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>
The university's role in promoting entrepreneurship	1500	7.22	1.21
The entrepreneurial curriculum and content	1500	7.32	1.28
Role models	1500	6.72	1.51
The demographic characteristics and family business background	1500	6.72	1.51

The analyses of these factors is based on a 7-measurement Likert scale, with responses ranging from 1 (strongly disagree) to 7 (strongly agree). The first item, '*the university plays a positive role as a promoter of entrepreneurship*' drew a mean of 7.22 and a standard deviation (SD) of 1.21. The mean for the second item, '*the entrepreneurial curriculum and content plays a positive role as a promoter of entrepreneurship*', was 7.32, with a SD of 1.28. The third item, '*the availability of role models plays a positive role in promoting entrepreneurship for me*' had a lower mean of 6.72 and a SD of 1.51. The final item, '*demographic characteristics and family business background have an influence over my entrepreneurial intentions*' rated 6.72, with a SD of 1.5.

A close look at the scale of students' personal attitudes towards entrepreneurship education reveals a positive overall average of 6.99, implying that AMEC students have a positive attitude towards the role played by their universities, entrepreneurship curricula, entrepreneurial role models and demographic variables in influencing entrepreneurial intentions. However, their attitudes are not very strong. When it comes to their preferences, however, the high scores for the '*the entrepreneurial curriculum and content plays a positive role as a promoter of entrepreneurship*' and '*the university plays a positive role as a promoter of entrepreneurship*' items (at 7.32 and 7.22, respectively) indicate that AMEC students consider

the entrepreneurship curriculum/content and the university as the greatest influencers of entrepreneurial intentions, way above the effect of role models and demographic variables.

It is clear, from the analysis that students regard the curriculum and higher learning institutions as bearing the greatest responsibility in shaping their entrepreneurial intentions; however, the low average of 6.99 implies that students believe that these elements have not played that role sufficiently. On the other hand, the relatively high standard deviations symbolize the low consensus and dispersions associated with the gathered responses.

### **ANOVA: Measuring the Effect of Demographic Variables**

Analyses of variances were conducted to determine the effect of demographic variables on AMEC students' entrepreneurial intentions. Tables 4-6 below present ANOVA results for the relationships between: i) working for yourself and preference towards entrepreneurship, ii) age and preference towards entrepreneurship and iii) academic major and preference towards entrepreneurship.

<b>Table 4</b>					
<b>ONE-WAY ANOVA FOR WORKED FOR YOURSELF (WORKING EXPERIENCE) AND PREFERENCE TOWARDS ENTREPRENEURSHIP</b>					
	<b>Sum of Sq.</b>	<b>Df</b>	<b>Mean Sq.</b>	<b>F</b>	<b>Significance</b>
Between Groups	1.673	17	0.353	0.917	0.428
Within Groups	21.22	1483	0.141		
Total	22.893	1500			

<b>Table 5</b>					
<b>ONE-WAY ANOVA FOR AGE AND PREFERENCE TOWARDS ENTREPRENEURSHIP</b>					
	<b>Sum of Sq.</b>	<b>Df</b>	<b>Mean Sq.</b>	<b>F</b>	<b>Significance</b>
Between Groups	18.274	12	9.626	1.669	0.097
Within Groups	202.818	1488	1.376		
Total	221.092	1500			

<b>Table 6</b>					
<b>ONE-WAY ANOVA FOR ACADEMIC MAJOR AND PREFERENCE TOWARDS ENTREPRENEURSHIP</b>					
	<b>Sum of Sq.</b>	<b>Df</b>	<b>Mean Sq.</b>	<b>F</b>	<b>Significance</b>
Between Groups	22.652	19	17.651	0.82	0.59
Within Groups	393.661	1481	22.878		
Total	416.313	1500			

The results show that the ANOVA is insignificant at  $p < 0.05$  for each of the three variables. In other words, the mean differences between students with work experience and those without, younger students and older ones and those taking business as an academic major and those taking other majors are not significant. We could, therefore, conclude that there is insufficient evidence to indicate that work experience, age and academic major have a role in influencing AMEC students' attitudes towards entrepreneurship. On the other hand, ANOVA was found to be significant at  $p < 0.05$  for the following variables:

Gender:  $F(17, 1483) = 2.201, p = 0.048$

Academic Level:  $F(17, 1483) = 0.448, p = 0.031$

Country:  $F(17, 1483) = 1.983, p = 0.042$

Tables 7-9 summarize these variables.

	<b>Sum of Sq.</b>	<b>Df</b>	<b>Mean Sq.</b>	<b>F</b>	<b>Significance</b>
Between Groups	17.873	17	2.557	2.201	0.048
Within Groups	175.421	1483	1.333		
Total	193.294	1500			

	<b>Sum of Sq.</b>	<b>Df</b>	<b>Mean Sq.</b>	<b>F</b>	<b>Significance</b>
Between Groups	8.342	7	0.668	0.448	0.031
Within Groups	218.656	1493	1.535		
Total	226.998	1500			

	<b>Sum of Sq.</b>	<b>Df</b>	<b>Mean Sq.</b>	<b>F</b>	<b>Significance</b>
Between Groups	6.018	15	0.577	1.983	0.042
Within Groups	42.077	1485	0.389		

Total	48.095	1500			
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It is clear from Table 7 that the mean difference between male students and female ones in relation to their attitudes towards entrepreneurship is significant at  $p < 0.05$ . Male students are seen to have greater preference for entrepreneurship than their female counterparts. Moreover, as Table 8 demonstrates, students in higher levels of education (third and final years) are seen to be more inclined towards entrepreneurship than those in freshman and sophomore years. Additionally, Table 9 demonstrates that students' preferences towards entrepreneurship differ across countries, with some countries reporting significantly higher preferences than others. In this regard, we could conclude that one's country, their gender and academic level are significant determinants of their attitudes towards entrepreneurship.

## DISCUSSION

The aim of this paper was to determine the impact of selected variables of entrepreneurship education on AMEC students' attitudes towards entrepreneurship. From the literature review, the following hypotheses were formulated:

- H1: The University's role as a promoter of entrepreneurship increases the likelihood of AMECs university students becoming entrepreneurially-inclined.*
- H2: The entrepreneurial curriculum and content increase the likelihood of AMECs university students being entrepreneurially-inclined.*
- H3: The availability of role models (educators or friends) increases the likelihood of AMECs university students being entrepreneurially-inclined.*
- H4: The relationship between entrepreneurship education and entrepreneurial inclination is stronger for (Demographic Characteristics):*
- i) Gender*
  - ii) Age*
  - iii) Academic level of years*
  - iv) working experience*
  - v) Academic major*
  - vi) Country*

### **Hypothesis H1: The University's Role as a Promoter of Entrepreneurship Increases the Likelihood of AMECS University Students Becoming Entrepreneurially Inclined**

The positive mean of 7.22 indicates that students believe that the university contributes to their inclination towards entrepreneurship. The university plays a positive, fundamental role in shaping their entrepreneurial attitudes. In this regard, hypothesis H1 is supported.

### **Hypothesis H2: The Entrepreneurial Curriculum and Content Increase the Likelihood of AMECS University Students Being Entrepreneurially Inclined**

The positive mean of 7.32 indicates that students believe that the entrepreneurship curriculum and content positively influences their entrepreneurial attitudes. Both elements play a strong, positive role in shaping their preference towards entrepreneurship. The content and

curriculum actually plays the greatest in shaping students' entrepreneurial attitudes, among the four factors. This finding supports hypothesis H2.

### **Hypothesis H3: The Availability of Role Models (Educators or Friends) Increases the Likelihood of AMECS University Students Being Entrepreneurially Inclined**

The mean of 6.72 indicates that AMEC students think highly of their entrepreneurial role models. They believe that these role models positively influence their attitudes towards entrepreneurship. The positive mean suggests a positive relationship between the availability of role models and students' preferences towards entrepreneurship. The impact of role models on students' entrepreneurial attitudes is; however, lower than that of universities and entrepreneurship curricula. All the same, hypothesis H3 is supported. Universities and other learning institutions could develop students' entrepreneurial capabilities by organizing mentorship programs, workshops and conferences that enable students to interact with entrepreneurial role models.

### **Hypothesis H4: The Relationship between Entrepreneurship Education and Entrepreneurial Inclination is Stronger for (Demographic Characteristics)**

- i) Gender*
- ii) Age*
- iii) Academic level of years*
- iv) working experience*
- v) Academic major*
- i) Country*

The mean results show demographic variables to be a significant influencer of students' entrepreneurial attitudes. ANOVA tests were conducted to determine the individual effect of the different variables: age, gender, academic level, country, work experience and academic major. The ANOVA results showed the relationship between entrepreneurship education and entrepreneurial inclination to be stronger for three variables: gender, academic level and country. Therefore, H4 for these variables is supported. However, there was no sufficient evidence to support the argument that works experience, age and academic major had any considerable effect on entrepreneurial attitudes. Thus, hypothesis H4 for these three variables is rejected.

Male students reported higher preferences towards entrepreneurship than their female counterparts, except the case of UAE that results shows no difference between male and female for their entrepreneurial inclination. This can be attributed to the fact that the society in question is largely male-dominated and female students may feel that they would not be accorded sufficient opportunities to develop their entrepreneurial skills. Entrepreneurial preferences were also found to be higher among third and fourth year students as compared to their freshman and sophomore counterparts. This can be attributed to the fact that naturally, students start thinking and planning about their future careers in their final years in college. It is advisable, therefore, to begin developing students' entrepreneurial skills from their beginner years in college so that they grow more inclined towards entrepreneurship as they move forward.

Finally, entrepreneurial preferences were found to differ across countries. Since post-hoc tests were not conducted, it was not possible to tell which countries had higher preferences and

which ones had lower ones. However, we could conclude that students' entrepreneurial preferences are shaped by their perceptions of their countries' business policies and market regulations. If students perceive these to be positive, they are deemed to be more inclined towards entrepreneurship. Towards this end, it is prudent that countries concentrate on making their business policies and regulations as favourable as possible for potential entrepreneurs.

## CONCLUSION AND RECOMMENDATIONS

This paper was geared at identifying the variables that influence Arab students' attitudes and preferences towards entrepreneurship. It was guided by four core objectives:

- i) To examine the role of universities in promoting entrepreneurial attitudes among students in AMEC countries
- ii) To determine the impact of role models in influencing Arab students' attitudes towards entrepreneurship
- iii) To determine the influence of the entrepreneurial curriculum and content on students' entrepreneurial attitudes.
- iv) To examine the moderating effect of students' demographic characteristics on their entrepreneurial attitudes

To realize these objectives, the study made use of a quantitative approach. A standardized questionnaire was distributed among 1500 undergraduate students taking business-related courses in government universities in Egypt, Jordan, Oman, Qatar, Saudi Arabia and the United Arab Emirates. The sample comprised of 890 male students and 690 female ones. Descriptive statistics (mean, frequencies and percentages) and inferential statistics (one-way ANOVA tests) were used to analyse the gathered data.

The results showed that Arab students acknowledge the role played by universities, the entrepreneurship curriculum, role models and demographic variables in influencing their attitudes towards entrepreneurship. Mean deviations showed that students consider the university and the entrepreneurship curriculum the greatest influencers of entrepreneurial attitudes, above the effect of role models and demographic variables. The overall mean was, however, quite low, implying that although students recognize the positive influence played by the aforementioned variables in influencing students' entrepreneurial attitudes, most of them believe that none of the variables have played their role satisfactorily. Regarding the role of demographic variables, regression results showed that age, academic major and work experience were not important determinants of students' entrepreneurial attitudes. However, one's country, their gender and academic level were found to be significant influencers of entrepreneurial attitudes. Male students were more entrepreneurially-inclined than their female counterparts and so were those in third and fourth years of study, compared to those in their freshman and sophomore years. Moreover, students' attitudes were dependent on their perceptions of their countries' business environments and policies.

The overall finding of the study was that universities need to play a greater and more profound role in influencing students' entrepreneurial attitudes. The study makes the following policy recommendations.

- i) That AMEC country enacts governmental policies to create a climate that motivates entrepreneurship among individuals. These policies should particularly be targeted at supporting the creation of the microfinance sector

- ii) That countries ease the procedures, laws and regulations governing the start and conduction of business
- iii) That university administrators design their curricula to emphasize the importance of entrepreneurship and at the same time provide the necessary skills to support such a desire in a knowledge-based economy
- iv) That universities promote entrepreneurship throughout their campuses via workshops and conferences
- v) Those universities establish on-campus entrepreneurial centres and incubators to support business start-ups by students and the community.

The identified policy objectives will go a long way towards improving AMEC students' preferences towards entrepreneurship. A number of limitations, however, impede on the objectivity of findings. To begin with, the study is focused on entrepreneurial intentions and there is no guarantee that intentions will turn into actual behaviour over time. Moreover, this was an exploratory study conducted on selected government universities in the six countries. Caution needs to be when generalizing the results to private universities and colleges in the studied countries. A third limitation is that the research findings seem to support further research on a very wide, cross-sectional scale. All the same, the findings have important implications for policy makers and university administrators.

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