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# **Explaining the Intent to Start a Business among Saudi Arabian University Students**

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#### **ABSTRACT**

Studying entrepreneurial intention has long been an important topic in the field of entrepreneurship. In this paper, we investigate the entrepreneurial intentions of final-year management university students in the Kingdom of Saudi Arabia by applying the theory of planned behavior (TPB). The objectives of the study were to test whether the TPB can help explain the entrepreneurial intentions of university students; to determine whether students will have intentions to start a business and to test the validity of the entrepreneurial intention questionnaire in a Saudi Arabia context. The study was conducted by means of a survey. We found that attitude towards becoming an entrepreneur; perceived behavioural control and subjective norms are positively associated with entrepreneurial intention. Consistent with earlier research, the findings reveal that the TPB is a valuable tool in understanding entrepreneurial intention of Saudi university youth. Most of the students indicated that they intended to start businesses as soon as they had completed their studies and the entrepreneurial intention questionnaire was found to be a valid instrument to measure the entrepreneurial intention in this country. Furthermore, our findings reveal that the moderating effect of some additional contextual determinants does not seem to have a particular effect on predicting entrepreneurial intentions when moderating TPB dimensions. Recommendations for policy makers, entrepreneurship educators and researchers have been suggested.

**Keywords:** Entrepreneurial Intention, Saudi Arabia, Business Students, Theory of Planned Behavior **JEL Classification:** M130

#### 1. INTRODUCTION

The Saudi Arabian economy remains very dependent on oil revenues and has grown very strongly in recent years as it has benefited from high oil prices and output, strong private sector activity, increased government spending, and the implementation of a number of domestic reform initiatives. But the substantial drop in oil prices since the summer of 2014 is an important risk to the Saudi Arabia's economy. Solving this problem in oil-exporting countries is a difficult task and historical experience offers us few examples of countries that have been able to successfully diversify away from oil. While each country can follow its own path, diversification can be achieved according to IMF (2015) by means of:

- The provision of strong incentives for doing business
- The tapping and strengthening of nontraditional sectors, export promotion, and better trade integration
- Attraction of foreign direct investments and a reliance on technological transfers

- Education, training, and human capital development
- The development of small and medium enterprises (SMEs).

In this context, the Saudi authorities are continuing to take steps to improve the diversification of the country's economic base. It gives a great importance to the problem of youth unemployment by fostering entrepreneurship among university students. This strategic policy is justified by several researches which generally show two important realities:

Entrepreneurship has been recognized as an important element in the dynamics of modem economies (Davidsson, 1995). Many businesses, small and medium have become the major source of new job creation) Pendiuc and Lis, 2013; Fayolle, 2007). They have made great contributions in introducing valuable new products and keeping the economy competitive in the world markets. This impressive and rapid growth of entrepreneurship is attributed to the power of education in promoting social, economic, political, and spiritual well-being of an individual and social development.

 Young university graduates demonstrate the highest propensity towards starting a firm (Lüthje and Franke, 2003). University students combine the creativity and energy of the young generation with high levels of education and mastery of technological know-how. They are well prepared to establish innovative new businesses and create high-quality jobs, thus facilitating the transition to a knowledge-based economy (Autio et al., 1998).

In line with the previous evidence, there is a great focus upon higher education in Kingdom of Saudi Arabia to play an important role in developing entrepreneurial mind set of university students. This study follows the cognitive approach through the application of an entrepreneurial intention model, to verify if entrepreneurial measures taken by the Governments of Saudi Arabia arises a concern about the capacity of universities to produce students who may select entrepreneurship as their possible future occupation. In other words, the main objective of this study is to examine, based on the theory of planned behavior (TPB), whether Arabia Saudi university student have the intention to start their own businesses, and to explore in more depth the factors influencing their entrepreneurial behavior.

Entrepreneurial intention is defined as "a state of mind directing a person's attention and action towards self-employment as opposed to organizational employment" (Souitaris et al., 2007. p. 570). A strong intention for self-employment is the first step in the process of setting up a business (Liñán and Chen, 2006) and the most frequently studied factor of enterprise creation (Ferreira et al., 2012). Then, entrepreneurship can be considered as an intentionally planned behavior (Krueger et al., 2000; Souitaris et al., 2007; Liñán et al., 2013) and entrepreneurial intentions typically precede entrepreneurial action (Shook et al., 2003; Ajzen, 2005; Kolvereid and Isaksen, 2006; Krueger et al., 2000; Schlaegel and Koenig, 2013; Shapero and Sokol, 1982; Douglas, 2013). Thus, observing intentions towards the entrepreneurial has been used in several studies to predict entrepreneurial behavior and the results obtained show in general a significant relationship between these two parameters (Bird, 1988, Lee et al., 2011; Liñán et al., 2011, Pendiuc and Lis, 2013; Davidsson, 1995; Boissin et al., 2007; Krueger and Carsrud, 1993; Fayolle and Gailly, 2004; Krueger et al., 2000; Kolvereid and Isaksen, 2006; Kolvereid and Isaksen, 2006; Liñán and Fayolle, 2015).

The research objectives of this study were:

- To test whether the TPB could help explain the entrepreneurial intention of final-year management university students in the Kingdom of Saudi.
- To assess whether these students will have the intention to start their own businesses in the future.
- To test the validity of the entrepreneurial intention questionnaire in a Saudi Arabian context.

The organization of the article is as follows. The second section reviews previous contributions and presents the theoretical entrepreneurial intention model adopted. The third sections present the methodology of research. The fourth section presents the results and discussion of this study. Finally, a brief conclusion is included in the fifth section.

#### 2. LITERATURE REVIEW

During recent years, an increasing number of studies have used the TPB as the theoretical framework when studying entrepreneurial intention (Shapero, 1982; Bird, 1988; Krueger and Carsrud, 1993; Davidsson, 1995, Kolvereid, 1997, Kautonen et al., 2012; Malebana, 2014; Kuttim et al., 2014, Fayolle and Liñán, 2014, Pingying et al., 2015). This theory is derived from the theory of reasoned action (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980) which was used to forecast behaviors that were not under complete voluntary control. The TPB indicates that people are expected to transform their intention into action, provided there is an adequate degree of actual control over the behavior. Thus, individuals engage in an activity (such as starting a business) as a deliberate action which is reflected on their intention to this behavior (Ajzen, 1991). According to this theory, person's attitude towards behavior, subjective norm, and perceived behavioral control are the significant factors that determine his intentions. These three components are claimed to capture "how hard people are willing to try and of how much an effort they are planning to exert, in order to perform the behavior" (Ajzen, 1991. p. 181). The TPB has been proposed as an antecedent of entrepreneurial behavior (Ferreira et al., 2012) and has been adopted in many studies since it may be applied to almost voluntary behaviors (Ajzen, 2001; Kolvereid 1996a). Figure 1 present the three conceptually independent antecedents of intention as formulated by Ajzen and Fishbein (1980); Ajzen (1991).

#### 2.1. The Attitude towards Behavior

It is conceptualized as the degree to which a person has a favorable appraisal of the behavior, and attitude towards entrepreneurship behavior refers to the difference between the concepts of a personal desire to become self-employed and the desire to work as an employee (Souitaris et al., 2007). Individuals perceptions on ability to perform specific tasks increase the likelihood of attitude converting into intention and subsequent behavior (Ajzen, 1991).

More recently, a number of studies have investigated how attitude toward entrepreneurship affect the intention of starting a business. Attitudes are based on the total set of the person's salient beliefs and the evaluations associated with those beliefs, and have direct

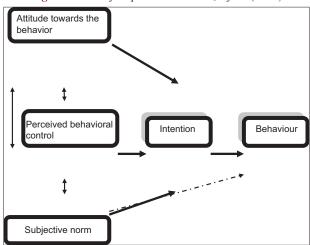


Figure 1: Theory of planned behavior, Ajzen (1991)

and positive effect on entrepreneurial intentions (Kolvereid and Tkachev, 1999; Shariff and Saud, 2009; Krueger et al., 2000; Paço et al., 2011). Hence, education and training should focus both on changing personal attitudes and technical knowledge about business because the effects could be more significant to the process of business creation and to overcome the perceived barriers to entrepreneurship (Paço et al., 2011; Kolvereid and Moen, 1997). Attitude can be also developed and strengthened through information related to environmental factors. External information cues (availability of resources) and internal (individuals perception on their capability and task-specific knowledge) can enhance entrepreneurial self-efficacy and in turns, strengthen their attitude toward entrepreneurship (Estay et al., 2013; Liñán et al., 2013). In general, the empirical tests of the TPB suggest that when individuals belief that they are personally capable of doing so when the act would result in the achievement of these entrepreneurial outcomes. So, entrepreneurial outcomes play a significant role in the intention to start and grow a business (Renko et al., 2012; Edelman et al., 2010).

#### 2.2. Subjective Norm

It refers to the perceived social pressure to perform the behavior. The opinion of significant others (i.e., opinions of individuals' parents, friends, partners or other important role, etc.) about whether a person will choose to follow a career as an entrepreneur seems to affect the formation of entrepreneurial intention (Ajzen, 2001; Solesvik, 2013; Liñán and Chen, 2006). Fishbein and Azjen (1975) describes subjective norm as "perceived social pressure to engage or not to engage in behavior." When social valuation of entrepreneurship is positive, it contribute to the formation of positive attitudes towards entrepreneurship. Individuals are more likely to hold positive attitudes towards entrepreneurship when their decision to engage in it is approved by significant others in their environments and when entrepreneurship is positively valued by those close to them (Liñán et al., 2013; Liñán et al., 2011; Uygun and Kasimoglu, 2013; Liñán, 2008).

The relationship between subjective norms and the intention to start a business has been studied by several investigators. Some of them found that subjective norm is significant in predicting entrepreneurial intention (Kolvereid 1996a; Kolvereid and Tkachev, 1999; Kolveried and Isaksen, 2006; Yordanova and Tarrazon, 2010; Uygun and Kasimoglu, 2013). Therefore, entrepreneurial activity can be facilitated or hindered by certain sociocultural practices, values and norms (Krueger et al., 2010). The social environment impacts on entrepreneurial activity by contributing to the formation of positive attitudes towards entrepreneurship and enhanced perceived behavioural control which in turn influence entrepreneurial intention (Krueger and Brazeal, 1994). On the contrary, further researchers found that social norms to exert the weakest influence on intention among the three antecedent of TPB (Ajzen, 1991; Krueger et al., 2000; Autio et al., 1997; Armitage and Conner, 2001; Liñán 2004; Liñán and Chen, 2009).

#### 2.3. Perceived Behavioral Control

It reflects to the perception of the easiness or difficulty in the fulfillment of the behavior of interest (Liñán and Chen, 2006).

It includes two components (Ajzen, 1991). The first one reflects the availability of resources needed to engage in the behaviour) i.e., access to money, time, and other resources). The second component reflects the focal person's self-confidence in the ability to conduct the behavior. Sometimes, research adopt a different approach in which perceived behavioral control includes beliefs about whether factors that will affect the difficulty of the behavior, perceived power of these factors and number of factors. These three elements determine individuals' perceptions of their capability to act entrepreneurially. According to Townsend et al. (2010), perceived ability exerts a greater effect on the motivation to start a business than perceived outcomes. Similarly, Ajzen (2012; 2011; 2005) and Ajzen & Cote (2008), noted that perceived behavioural control is determined by control beliefs concerning the availability of factors (market opportunities, resources, role models, social support from others and entrepreneurial support) that can facilitate or impede performance of the behavior. It has also been found that individuals who possess the necessary knowledge and skills to start a business and who know other people who are entrepreneurs are more likely to identify business opportunities (Geissler and Zanger, 2013; Ramos-Rodriguez et al., 2010).

The theory of planned behavior has received broad support in empirical studies and its basic assumption is that the more favorable the attitude and subjective norm, and the greater the perceived control, the stronger should be the person's intention to perform the behavior in question.

#### 3. METHODOLOGY

The population for this study was final-year business university students in the Majmaah Province, located 180 km North Riyadh city in Kingdom of Saudi Arabia. In line with other similar studies such as Krueger et al. (2000); Liñán and Chen (2009) and Liñán et al. (2011), this group of students was chosen because they were suitable for studying entrepreneurial intentions as they were facing important career decisions on completion of their studies, of which entrepreneurship could be one of them. The survey population consists of 283 students enrolled in the 4th year of the business management. Among the respondents 62% (175) were male and 38% (108) female.

The instrument for data collection was designed based on structured and validated questionnaire that was designed and tested by Liñán and Chen (2006, 2009). This entrepreneurial intention questionnaire was solely designed for the TPB as it is applied to entrepreneurship (Liñán and Chen, 2006; 2009; Liñán, 2008; Linan et al., 2011). Spanish and Taiwanese contexts were initially the field of application of this type of questionnaire, and then it has also been validated in both developed and developing countries. The questionnaire as illustrated in Table 1, consisted of questions that were based on the five-point Likert scale (1 = Strongly disagree and 5 = Strongly agree) and nominal scales. Likert scale type questions were used for entrepreneurial intention (four items), the attitude towards becoming an entrepreneur (five items), perceived behavioural control (seven items) and subjective norms (three items) whereas nominal scales were used for gender

Table 1: Measures of entrepreneurial intention, attitude towards becoming an entrepreneur, perceived behavioral control and subjective norms

Variable	Items	Cronbach's
		alpha
Entrepreneurial intention	I am ready to do anything to be an entrepreneur	0.868
	My professional goal is to be an entrepreneur	
	I will make every effort to start and run my own business	
	I am determined to create a business venture in the future	
Attitude towards becoming an entrepreneur	Being an entrepreneur implies more advantages than disadvantages to me	0.816
	A career as an entrepreneur is totally attractive to me	
	If I had the opportunity and resources, I would like to start a business	
	Amongst various options, I would rather be an entrepreneur	
	Being an entrepreneur would give me great satisfaction	
Perceived behavioral control	To start a business and keep it working would be easy for me	0.863
	I am able to control the creation process of a new business	
	I would have complete control over the situation if I start and run a business	
	I am prepared to do anything to be an entrepreneur	
	I know all about the necessary practical details needed to start a business	
	If I wanted to, I could easily start and run a business	
	If I tried to start a business, I would have a high chance of being successful	
Subjective norms	My friends would approve of the decision to start a business	0.684
	My immediate family would approve of the decision to start a business	
	My colleagues would approve of the decision to start a business	

(1 = Male and 2 = Female) and prior entrepreneurial exposure (whether the respondents currently own a business or have tried to start a business before or were from an entrepreneurial family background (1 = Yes and 2 = No).

The methodological approach chosen for this study is the quantitative research, which involved a self-administered survey filled out both online and personally. Initially, efforts were made to collect data from all students of the Business Department of The University of Majmaah, Kingdom of Saudi Arabia. Secondly the online data collection method was used, and surveys were sent to all students via e-mails provided by the department. The data collection was conducted from 15.10.2015 to 15.12.2015.

#### 4. RESULTS AND DISCUSSION

Data was analyzed by means of the SPSS using descriptive statistics and hierarchical multiple regression analysis. Descriptive statistics were used for the frequencies of the sample. The association between the attitude towards becoming an entrepreneur, perceived behavioural control, subjective norms and entrepreneurial intention was tested using hierarchical multiple regression analysis (Table 2). Before testing the association between the independent variables and the dependent variable, control variables were entered first followed by the second regression that included control variables and independent variables. The last regression consisted of the antecedents of entrepreneurial intention and entrepreneurial intention.

This study was mainly concerned with the relationship between the antecedents of entrepreneurial intention as the independent variables (the attitude towards becoming an entrepreneur, perceived behavioural control and subjective norms) and entrepreneurial intention as the dependent variable. The reliability of the measuring instrument was tested by means of Cronbach's alpha. Garson (2009) states that the cut-off criteria for internal

Table 2: Respondents' prior exposure to entrepreneurship

Types	•	N (%)	
responses	Prior start-up experience	Currently runs a business	Family members run businesses
Yes	14 (5)	12 (4)	28 (10)
No	269 (95)	271 (94)	255 (90)
Total	283 (100)	283 (100)	283 (100)

consistency reliability is 0.60 for exploratory research and that alpha of at least 0.70 or higher is required to retain an item in an adequate scale. The Cronbach's alpha scores of the data collection instrument were higher than 0.68, meaning that it was a reliable tool for use in this research. To ensure reliability of the results, a pilot test was conducted in a group of 10 students from the targeted population, in order to test if questions and terms involved were clear and comprehensible to students.

### **4.1. Descriptive Statistics of the Sample Characteristics**

This study involved 283 final year university students who were registered for various business degrees. Of the 283 respondents 38.2% were female and 61.8% were male. In terms of age, 77.74% were in the age category between 18 and 25 years, 15.2% of the respondents were in the age category between 26 and 30 years and 7% were in the age category between 31 and 35 years. These statistics mean that all the respondents were falling in the youth category. In terms of prior exposure to entrepreneurship for the three questions that were based on a nominal scale, 4% of the respondents were currently running their own businesses, 5% of the respondents have tried to start a business before while 10% of the respondents were coming from the families with members who were running businesses, as shown in Tables 3 and 4.

#### 4.2. Entrepreneurial Intentions of the Respondents

The majority of the respondents as shown in Table 5 had the intention to start their own businesses. This is evident when

Table 3: Descriptive statistics and correlations among variables

<b>Descriptive statistics</b>	Mean	SD	1	2	3	4	5	6	7	8
Gender	1.38	0.488	1.000							
Currently run a business	1.95	0.201	169**	1.000						
Entrepreneurial family background	1.90	0.299	0.205**	0.236**	1.000					
Prior start-up experience	1.95	0.217	0.183**	-0.049	0.209**	1.000				
Attitude towards becoming an entrepreneur	0.79	0.824	-0.076	-0.008	0.073	-0.094	1.000			
Entrepreneurial intention	0.68	0.935	-0.042	-0.034	0.023	-0.078	0.505**	1.000		
Perceived behavioral control	0.81	0.815	-0.030	0.016	0.076	0.067	0.427**	0.489**	1.000	
Subjective norms	0.37	1.018	-0.060	-0.025	0.010	-0.044	0.252**	0.276**	0.273**	1.000

<sup>\*\*</sup>Correlation is significant at the 0.01 level. SD: Strongly disagree

**Table 4: Entrepreneurial intentions of the respondents** 

<b>Entrepreneurial intention</b>	N		Percentage						
		SD	D	N	A	SA	Total agreed		
I am ready to do anything to be an entrepreneur	283	4.2	8.0	12.6	51.0	24.2	75.2		
My professional goal is to be an entrepreneur	283	2.4	7.2	15.6	45.1	29.4	74.5		
I will make every effort to start and run my own business	283	2.5	5	10	51.0	31.5	82.5		
I am determined to create a business venture in the future	283	2.1	6	13	51.4	27.3	78.7		

SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly agree

Table 5: Attitude towards becoming an entrepreneur of the respondents

Attitude towards becoming an entrepreneur	N	Percentage					
		SD	D	N	A	SA	Total agreed
Being an entrepreneur implies more advantages than disadvantages to me	283	4.2	12	25.5	42.3	16	58.3
A career as an entrepreneur is totally attractive to me	283	3	7.0	17.1	45.4	27.5	72.9
If I had the opportunity and resources, I would like to start a business	283	2	4.7	13.3	44	36	80
Amongst various options, I would rather be an entrepreneur	283	1	10	18	47.2	23.6	70.8
Being an entrepreneur would give me great satisfaction	283	3.3	8.6	12	44.1	32	76.1

SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly agree

comparing the percentages of the respondents who "agreed" and "strongly agreed" against the percentages of those who "disagreed" and "strongly disagreed" with the four entrepreneurial intention factors. As it is shown, over 31.5% of the respondents strongly agreed that they will make every effort to start and run their own businesses. This is followed by the statement "my professional goal is to be an entrepreneur" which has the second highest mean, 29.4. Close to 27% of the respondents strongly agreed that they were "determined to create a business venture in the future" and 24.2% of the respondents strongly agreed that they were "ready to do anything to be an entrepreneur." At this level, the most encouraging finding of the study is that over 77% of our respondents indicated their intention to start their own businesses at some point in the future. This signals that a vibrant entrepreneurial class is in the making, bringing vigor and strength to the Saudi economy for years to come, and consequently they are a potential pool of entrepreneurs who need various kinds of support to translate their intentions into action by starting new businesses that would create jobs.

The majority of the respondents as shown in Table 6 had a positive attitude towards becoming an entrepreneur. This is evident when comparing the percentages of the respondents who "agreed" and "strongly agreed" against the percentages of those who "disagreed" and "strongly disagreed" with the five behavioral beliefs factors. The statement "If I had the opportunity and resources, I would like to start a business" has the highest mean of agreement, which is 80%, followed by statement "Being an entrepreneur

would give me great satisfaction" which has the second highest mean, 76.1%. However, it seems that the statement "Being an entrepreneur implies more advantages than disadvantages to me" has the lowest mean, 58.3%. This implies that students know that entrepreneurship can have negative effects, and not only positive effects. Consequently, it is insufficient for Saudi university to just introduce courses on theory emphasizing entrepreneurship, but it needs to develop suitable educational programs to prepare students for future entrepreneurship. Empirically, Saudi students need to be convinced of the existence of government support structures created by the Saudi government, whose role is to develop business and management capacity through entrepreneurship education and training, mentoring and coaching. This can maximize the success of new projects especially for young graduates.

Through the Table 7, statement 4 has the highest rank mean of agreement, which is 72.8%. This is followed by statement 3 which has the second highest mean of agreement, 70.9%, then respectively statement 7 (69.3%), statement 2 (66.6%), statement 5 (63%) and statement 1 and statement 6 (with the same percentage of agreement 59.5%). Therefore, the majority of the respondents believe that they are able to execute the target behavior (creating new ventures). This would have been the result of the new education policies introducing entrepreneurial development program by the Saudi University in management and administration disciplines. This program was aimed at catalyzing and filling the gap in developing entrepreneurial competence among students.

**Table 6: Perceived behavioral control of the respondents** 

Perceived behavioral control	N	Percentage					
		SD	D	N	A	SA	Total agreed
To start a business and keep it working would be easy for me	283	7.5	20.6	12.4	44.3	15.2	59.5
I am able to control the creation process of a new business	283	3.4	15	15	50	16.6	66.6
I would have complete control over the situation if I start and run a business	283	3	10	16.1	54.5	16.4	70.9
I am prepared to do anything to be an entrepreneur	283	1	6.8	19.4	45	27.8	72.8
I know all about the necessary practical details needed to start a business	283	3.7	16.3	17	45.3	17.7	63
If I wanted to, I could easily start and run a business	283	4.5	21.9	14.2	42.2	17.3	59.5
If I tried to start a business, I would have a high chance of being successful	283	3.7	11.4	15.6	43.9	25.4	69.3

SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly agree

**Table 7: Subjective norms of the respondents** 

Subjective norms	N	Percentage					
		SD	D	N	A	SA	Total agreed
My friends would approve of the decision to start a business	283	2.3	4.5	19.9	49.9	23.6	73.5
My immediate family would approve of the decision to start a business	283	3.1	5.9	12.9	43.7	34.3	78
My colleagues would approve of the decision to start a business	283	3.3	7.5	22.9	45	21.2	66.2

SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly agree

As shown in Table 8, there is a pressure from family, friends and society which affect positively the entrepreneurial behavior of students. It seems that immediate family has the biggest impact from factors constituting the social norm (total agreed=78%).

# 4.3. The Relationship between the Antecedents of Entrepreneurial Intention and Entrepreneurial Intention

The results of statistical testing for the base model (Model 1) in Table 8 show that control variables only accounted for the least variance (1%) in entrepreneurial intention compared to the theoretical antecedents of entrepreneurial intention in Model 3. The four control variables (having tried to start a business before, being from an entrepreneurial family background, gender and currently runs a business) were statistically non- significant (F (4, 283) = 0.540; P > 0.10) but negatively related to entrepreneurial intention. Model 2 present the regression that combined the three antecedents of entrepreneurial intention with control variables. This regression accounted for 36.2% of variance in entrepreneurial intention (F (7, 283) = 22.026; P < 0.01), indicating that control variables explained the least variance in entrepreneurial intention. Moreover, the results of correlation analysis for this second model show that three antecedents of TPB have significant relationship with entrepreneurial intention at 0.05 level of significance.

For the Model M3, and in line with the TPB, the attitude towards becoming an entrepreneur, perceived behavioural control and subjective norms were statistically significantly associated with entrepreneurial intention (F (3, 283) = 49.01; P < 0.01). All the three antecedents of entrepreneurial intention were statistically significant and accounted for 40% of variance in entrepreneurial intention. The attitude towards becoming an entrepreneur explained the most variance in entrepreneurial intention (33.8%), followed by perceived behavioural control (32%) and subjective norms explained the least variance in entrepreneurial intention (8.5%). The results corroborate those of Wafa et al. (2011) with regards to the high explanatory power of the attitudes on the intention to start a business, suggesting that attitudes have

Table 8: Hierarchical regression model for the relationship between the antecedents of entrepreneurial intention and entrepreneurial intention

Types of used variables	Model 1	Model 2	Model 3
Control variables			
Gender	-0.035	0.02	
Currently runs a business	-0.046	-0.039	
Has tried to start a business before	-0.085	-0.008	
Family members run a business	0.06	-0.068	
Independent variable			
Attitude towards becoming an		0.337**	0.338**
entrepreneur			
Perceived behavioral control		0.324**	0.320**
Subjective norms		0.1**	0.085*
Multiple R	0.106	0.601	0.6
$\mathbb{R}^2$	0.011	0.362	0.4
$\Delta$ F-ratio	0.778	22.026	49.01
Significance of F	0.540	0.0000**	0.0000**

\*P<0.10, \*\*P<0.05

more influence in Arabi Saudian on the decision to embark on an entrepreneurial career compared to the other antecedents of entrepreneurial intention. Similarly, Wafa and Manolova (2012) found that attitudes have a higher explanatory power on entrepreneurial intention and subjective norms had the lowest impact on entrepreneurial intention.

#### 5. CONCLUSION

The purpose of this study was to investigate the entrepreneurial intentions of Saudi university youth based on the TPB. The results confirms many previous findings presented in the literature review and support for the usability of this theory to analyzing and predicting entrepreneurial intentions (Ajzen, 2005; Souitaris et al., 2007; Basu and Virick, 2008; Gird and Bagraim, 2008; Engle et al., 2010; Müller, 2011; Angriawan et al., 2012; Otuya et al., 2013, Malebana, 2014). The results show that there are significant and positive relationship between the three antecedents) attitude towards becoming an entrepreneur, perceived behavioral control and subjective norms (and the entrepreneurial intention.

It had been found that attitudes have a higher explanatory power than other antecedents on the intention of starting a business. This means that efforts to improve entrepreneurial activity rates in Saudi Arabia should begin with making entrepreneurship a desirable career option followed by various interventions that can increase the personal capability of starting a business. In this study, Entrepreneurship seems to be valued as a viable career option among students, which demonstrated that they are ready to swift their current learning approach to a more practical way which is required in the entrepreneurial learning process. Thus, Saudi University must develop entrepreneurial competence among students to improve perceived behavioral control of its students. The findings also support previous research in validating Liñán and Chen's (2006; 2009) entrepreneurial intention questionnaire as a reliable tool in measuring the antecedents of entrepreneurial intention.

Understanding the antecedents of entrepreneurial intention of university students and the factors impacting on their antecedents is vital in improving the efforts to promote entrepreneurship in Saudi Arabia where the substantial drop in oil prices recently become an important risk to this emergent economy. During the last years, the Saudi Arabia government has adopted various entrepreneurial support programmers to stimulate entrepreneurial activity whether in universities or in Entrepreneurial Support Structures. Among these measures, we find broad private-public partnerships in university research, the creation of business incubators and new public initiatives seeking to facilitate technology transfer and knowledge spillovers from the universities for commercialization and entrepreneurial innovative activity. The TPB can be a valuable tool in evaluating the impact of such programmes on the intention to start a business and actual start-up of a new venture (Fayolle and Liñán, 2014). As Ajzen (2011) pointed out, behavioural interventions can be evaluated in terms of how they change the antecedents of intention and behavior. This is specifically more relevant in Saudi Arabia universities where the utilization of support programmes are in the first phase of development.

Firstly, support programmes can be designed to change the mindsets, attitudes and intentions of those who have not thought about entrepreneurship as a viable career. In fact, it's an idea that has been widely tested by match studies which had find that participation in programmes motivating business creation substantially increases the perception of the viability of a business start-up (Fayolle and Gailly, 2004). Secondly, support programmes should be directed to the needs of those who have made up their minds to start their own ventures, which are according to this study equal to 78%. In this case support programmes should make it possible for one to start a business (Martin et al., 2013). Lastly, entrepreneurial support programmes should be targeted to promoting effective management and growth of existing SMEs.

For universities in Saudi Arabia, the TPB could be valuable in designing and evaluating the impact of education programmes on the entrepreneurial intentions of students. For example, in entrepreneurship education programmes the TPB can be used to assess the impact of these programmes on changing the antecedents of entrepreneurial intention and ultimately

entrepreneurial behaviour. Therefore, this study can be important for the government and university policy makers to understand how to develop and nurture potential entrepreneurs even while they are still students.

According to this study, the Saudi Arabian authorities must accelerate efforts to integrate entrepreneurship as a formal part of the curriculum at all levels of the educational system, and not only in university programs. For youth universities students, the goal should be to focus on developing business and management capacity through entrepreneurship education and training, mentoring and coaching. This is critically important given that a high proportion of Saudi Arabia students are likely to eventually engage in entrepreneurial activity at some point in the future.

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