

## Entrepreneurial education as a predicator of community college of Abqaiq students' entrepreneurial intention

Ali Saleh Alshebami<sup>a\*</sup>, Ibrahim Al-Jubari<sup>b</sup>, Ibrahim Youssef Alyoussef<sup>c</sup> and Muhammad Raza<sup>d</sup>

<sup>a</sup>Community College of Abqaiq, King Faisal University, Alahsa, 31982, Saudi Arabia

<sup>b</sup>Faculty of Business Management and Professional Studies, Management & Science University, Malaysia

<sup>c</sup>College of Education, Curriculum and Instruction Department, King Faisal University, Alahsa 31982, Saudi Arabia

<sup>d</sup>Emaan Institute of Management & Sciences, Pakistan

### CHRONICLE

### ABSTRACT

#### Article history:

Received: May 30, 2020

Received in revised format:

May 30 2020

Accepted: June 21, 2020

Available online:

July 10, 2020

#### Keywords:

Self-Efficacy

Attitude

Social Norms

Community College of Abqaiq

Behavior

Entrepreneurial Education

An entrepreneurial mindset requires a solid foundation of various components. These components may possibly affect the entrepreneurial mindset and intention of the entrepreneurs either negatively or positively. Hence, to analyze such effect, this study attempts to examine the association among entrepreneurial education and the components of the Theory of Planned Behavior (TPB), i.e., social norms, attitude and self-efficacy, and their effects on the Community College of Abqaiq students' entrepreneurial intention. The structural equation modeling based on partial least square (PLS) was employed for analyzing the data of the study. The findings confirmed that the entrepreneurship education construct had a significant effect on attitude towards entrepreneurship. Furthermore, there was a statistically significant positive effect of attitude and self-efficacy on entrepreneurial intention. Finally, social norms did not disclose any significant effect on entrepreneurial intention.

© 2020 by the authors; licensee Growing Science, Canada

## 1. Introduction

Becoming an effective individual requires a person to have a special competitive advantage that others do not have, which would distinguish the person from the others. This, theoretically speaking, might seem interesting; nevertheless, in reality, it would seem a bit challenging. For a single person to have an added value, he or she must acquire a uniqueness such as an entrepreneurial mindset that qualifies them to propose a change and be part of the entrepreneurial world. Entrepreneurship as a term has been defined by many theorists, a few of them defined it as those factors which positively influence and contribute to the growth and development of national economies and societies' wellbeing (Van Praag & Versloot, 2007). It is also defined as a multifaceted phenomenon due to its contribution to the creation of jobs, innovation introduction, competitiveness support, and economic efficiency enhancement (Iakovleva, Kolvereid, & Stephan, 2011). Economies in general and developing one in particular encounter various challenges and difficulties, out of which the major challenge is the issue of unemployment and therefore, the entrepreneurship is believed to act as a panacea for them (Thurik, 2003). However, it is always advisable to differentiate between the self-employed people and the entrepreneurs, as these terms could be used interchangeably (Martínez, Mora, & Vila, 2007). A key difference between an entrepreneur and an ordinary person is that an entrepreneur is the one with added values and merits whereas the other one just carries out an activity regardless of its uniqueness. Presently, small and medium enterprises (SMEs) play a key role in the transition states through economic development, activity innovation, and new job opportunity creation (Sahinidis, Vassiliou, & Hyz, 2014). Jobs might be created either by establishing new business economic units or by improving the already existing ones. These created job opportunities are established by small businesses started by entrepreneurial-minded individuals who ultimately transform them into big business activities (The Consortium for

\* Corresponding author.

E-mail address: [aalshebami@kfu.edu.sa](mailto:aalshebami@kfu.edu.sa) (A. S. Alshebami)

Entrepreneurship Education, 2005, as cited in Fatoki, 2010). It is the state of mind that reflects a person's stimulation and capacity to distinguish an opportunity and to seek after it to deliver modern esteem or financial sources (Van Gelderen et al., 2008). Having the intention toward entrepreneurship is not the single source for becoming an entrepreneur; the surrounding environment such as having a role model or an entrepreneurial family is assumed to have a part in the contribution process (Birley & Westhead, 1994; Crant, 1996). However, despite having a role model or entrepreneurial family, it is often believed that challenges such as lack of financial support are considered a critical hindrance in entrepreneurship as they limit the process of ideas implementation despite its existence. Small and micro-enterprises can be financed by different sources including the microfinance institutions (MFIs) that are considered good sources for financing particularly for those poor individuals with great ideas which will help them to start some profitable businesses (Alshebami, 2017; Imran et al., 2018; Khalid et al., 2019). Again, the capital issue cannot be identified as the only obstacle before the motivation of entrepreneurial intention.

The deficiency of willingness to take a risk and the fear of failure would also play an important role in demotivating the entrepreneurs in addition to preventing them from exploring ideas into the competitive stage. Looking at these limitations from the students' point of view, it could be noted that the limitedness in managerial skills is considered as a major impediment before them (Papulova & Mokros, 2007). This bounds their chances to start up potential income-generating activities and reduce the probability of minimizing the unemployment phenomenon rate (Zamberi Ahmad & Xavier, 2012). This is confirmed by the graduate tracer, which articulated that only 2% of the graduates participated in entrepreneurial projects after six months of their graduation (Ministry of Higher education, 2014, as cited in Shamsudin, Al Mamun, Nawi, Nasir, & Zakaria, 2017). The low institutional support provided to the students by academic institutions, the limited family support, the difficulty in getting the essential capital, and the inability to build a strong connection with the suppliers and potential clients could be deemed as the causes for this low contribution (Shinnar, Giacomini, & Janssen, 2012). Such obstacles could be dealt with by offering the required business incubators to aid in minimizing them. Entrepreneurship is an attractive idea for both male and female entrepreneurs; however, it offers more attraction to a female agent because they see it as an asset that would allow them to participate in the labor market without losing one's autonomy (Martínez et al., 2007). Entrepreneurship is many times affected by various aspects, and thus they all need to be assessed. Factors such as the impact of role models and the entrepreneurial family background or experience also need to be evaluated. Harris and Gibson (2008) investigated their effects and disclosed a strong connection with them and considered parents as a key role player in children's entrepreneurial careers. Environment and its surroundings may also act either as a motivator or an impediment before entrepreneurship. The study by Lüthje and Franke (2003) claimed that environmental variables can encourage or restrain entrepreneurial activities in a way that will influence the affirmed advantage rate of modern wander creation. Accordingly, the environment may have a significant role in the forming of entrepreneurial intentions among the students. While investigating the difference between entrepreneurial intention in the developing and developed countries, it was disclosed by Iakovleva et al., (2011) that the developing countries' respondents reported having a robust entrepreneurial intention than those in developed countries. To understand the effect of social factors on entrepreneurship, Tkachev and Kolvereid (1999) attempted to test the correlation among the components of the theory of planned behavior (TPB) on a sample of 128 undergraduate students from business faculty in Norway and found strong support for it. Identifying the factors affecting the students' entrepreneurial intention is an essential step in the process of providing and promoting an appropriate entrepreneurial environment for them in addition to supplying them with the essential tools that could elevate their skills and abilities to become entrepreneurs. For that reason, this study aims to examine the liaison between entrepreneurial intention and entrepreneurial education among the students of the Community College of Abqaiq at King Faisal University.

## 2. The Study's Context

Saudi Arabia is an oil-based economy with a high level of government control on key economic activities. It holds about 16% of the world's petroleum reserves and ranks as the largest oil exporter. The petroleum sector accounts for about 90% of the export earnings, 87 % of the budget revenues, and 42% of the GDP. Currently, the state encourages the development of the private sector to expand its economy by taking certain steps such as employing more Saudis. About 6 million foreign workers in the kingdom play a foremost role in the economy. Nonetheless, the country is struggling to reduce the unemployment rate among its people. The country has taken into consideration privatization as one of the remedial strategies for the diminishing oil prices and to reduce the unemployment rate that is estimated to be 6% as of 2017 (Central Intelligence Agency, 2020). Besides, the government focuses on supporting small and medium enterprises to enable individuals to start their small income-generating activities that shall ultimately result in a better standard of living. These small enterprises should not only be ordinary ones, but they also have to be of entrepreneurial features. As per the available data in the 2019 global entrepreneurship monitor report, there is about 73.8% of adult population in Saudi Arabia who perceive noble chances to start a venture, with the percentage ranking the sixth-highest out of 50 countries analyzed. The report further showed that the entrepreneurial intention amounted to 32.2% among Saudi adults, positioning Saudi Arabia at 14 out of 50 in the international ranking. Furthermore, the report revealed that Saudi entrepreneurs have become substantially more competitive in 2018, with over twice as many entrepreneurs (46%) and fewer competitors compared to 2016 (21%). Therefore, it is anticipated that the present study would be able to identify whether or not the existing entrepreneurial education has a connection with the entrepreneurial intention and also to decide how the components of TPB may contribute to motivating the students of the Community College of Abqaiq to start their projects.

### 3. Theoretical Foundation and Hypothesis Development

Entrepreneurship has become an important asset in every economy; this is because it plays a central role in the development of economies, more particularly in the developing ones. Becoming an entrepreneur means having the ability to think out of the box and start a venture with added values which will yield a reasonable return. This would, without a doubt, contribute to the reduction of the unemployment level in poor economies, and shall eventually lead to a better standard of living for jobless individuals. Yet, the question that may arise is how to create entrepreneurs and how to provide an entrepreneurial environment for them. Moreover, there is a need to understand whether these individuals are motivated enough to start their ventures or not, and what could be the factors that demotivate them. Preparing ordinary people to have an entrepreneurial mindset requires a joint effort and support in different aspects. Consequently, to understand the various effects that might impact the entrepreneurs and their intentions, few theories have discussed these factors by looking at them from different angles; on top of them is the Theory of planned behaviors, (TPB) (Ajzen, 1991) that classifies factors affecting the intention of entrepreneurs in terms of attitude, social norms, and self-efficacy or perceived behavioral control as explained below:

#### 3.1 Intention

The intention is the motivation that individuals possess toward certain behavior; it is the perception which guides people to behave either positively or negatively or to carry out any activity. It is considered as important, but not as the only determinant that motivates individuals toward entrepreneurial behavior or for becoming an entrepreneur. The intention, in addition to its existence in the individual, requires support from other bodies such as social support, which is the belief from others in the success of the intended activity and the belief in the level of easiness and difficulty about performing a specific task. It is the people's observation of how difficult or easy the behavior is (Ajzen, 1991). Despite reporting a connection between the entrepreneurial intention and components of the theory of planned behavior (TPB), few studies still revealed a negative association between some of the theory components such as the connection between the social norms and the entrepreneurial intention as reported by Shook and Bratianu (2010), who carried out a study on the Romanian students. Additionally, Armitage and Conner (2001) and N. F. Krueger, Reilly, and Carsrud (2000) disclosed a weak connection between EI and social norms. The social norms or the so-called the subjective norms in most of the studies revealed a strong link with entrepreneurial intention, which is confirmed by Autio, H. Keeley, Klofsten, G. C. Parker, and Hay (2001), Engle et al., (2010), and Tkachev and Kolvereid (1999). The study of Shamsudin et al., (2017) also reported a negative significant correlation between the entrepreneurship barriers and the intention of the students to become entrepreneurs. The study further showed that innovativeness, risk-taking, propensity, and family background have significant connections with a supportive environment. Entrepreneurs and entrepreneurial intentions can be motivated by various factors. A few of these factors have been classified by the study of Fatoki (2010), who investigated them among the graduates of South Africa and reported them as employment, autonomy, creativity, economy, and capital. The study further identified capital skills, support, risk, economy, and crimes as challenges to entrepreneurship. De Jongh and Meyer (2017) also mentioned the lack of entrepreneurial skills, necessary capital, and low support as deterring barriers to entrepreneurship.

#### 3.2 Attitude toward Behavior

Attitude has been defined by many authors. According to Al-Jubari (2019), it replicates the individual convictions that individuals might have toward a certain action or behavior such as entrepreneurship. It is the negative or positive suspicion around a specific thought or concept. It is also the overall evaluation of people's behavior (Ajzen, 1991). Before forming an intention, individuals appear to assess their attitude in favor of or against that particular behavior. In short, it is the belief built in mind because of the previous action accumulated. It is assumed that a better entrepreneurial intention will be achieved if a positive attitude toward entrepreneurship exists. Attitude has indeed shown a strong prediction toward entrepreneurship intention (Liñán & Chen, 2009). The study of Roca and Gagné (2008) confirms that attitude acts as a mediator between the intention and the Self Determination Theory (SDT) constructs. Hence, the first hypothesis of the study can be stated as the subsequent:

*H1: Attitude toward entrepreneurship has a significant positive effect on entrepreneurship intention.*

#### 3.3 Social Norms

This is the elementary element of the TPB theory. It concentrates on analyzing the influence of the social surroundings of the individuals on their intention toward becoming an entrepreneur (Krueger, Reilly, & Carsrud, 2000). This element specifically focuses on the effect of parents, friends, and other important figures such as guides on who may endorse or disapprove of the idea of the person taking entrepreneurial action. It is also the individual's perception of others particularly influential ones in their life thinking about whether or not to involve in a specific behavior such as starting a business. Subjective norms are seen as a predictor of entrepreneurial intention as they affect people and the way they think about something whether negatively or positively. Thus, our second hypothesis can be stated as follows:

*H2: Social norms toward entrepreneurship has a significant positive effect on entrepreneurship intention.*

#### 3.4 Self-Efficacy

This can be characterized as the conviction in one's competencies to mobilize the inspiration, cognitive assets, and course of activity required to be met given situational requests. It is also assumed to play a vital role in the personal selection of behavior

settings where people tend to choose behavioral situations over which they anticipate higher control and avoid low personal control situations (Wood & Bandura, 1989, as cited in Boyd and Vozikis, 1994). People generally engage in behaviors that make them feel professional and more competent, and avoid the ones with less competency (Chen, Greene, & Ann Crick, 1984; Fernández-Ballesteros, Díez-Nicolás, Caprara, Barbaranelli, & Bandura, 2002). It is believed that the level of self-efficacy has an impact on an individual's choice of activities; a level of goals, persistence, and performance in a range of contexts (Zhao, Hills, & Seibert, 2005). The strength of the belief in the individuals enforces their capability of performing the role and tasks of entrepreneurs successfully. The effect of self-efficacy lies in the intention of an individual's multiple self-efficacy such as self-efficacy, learning self-efficacy, and entrepreneurial self-efficacy (Fuller et al, 2018). Chen et al., (1988) reported that entrepreneurial self-efficacy (ESE) had a positive influence on the intention of an individual to become an entrepreneur. They suggested that those students with entrepreneurial education showed higher ESE intention. In another study by BarNir, Watson, and Hutchins (2011) focusing on the mediating effect of the entrepreneurial self-efficacy and the connection between the exposure to role models and entrepreneurship intentions of undergraduate students in the US, it was found that there was a positive liaison between the role models exposure and self-efficacy, and in turn on entrepreneurial intention. The study of Sahinidis et al., (2014) also approved the existence of a strong link between personal attraction, self-efficacy, and entrepreneurial intention. This result was also confirmed by Armitage and Conner (2001) and Van Gelderen et al., (2008) on the part of social attraction. Besides, Krueger et al., (2000) confirmed that self-efficacy is a strong predictor for intention among entrepreneurs. Therefore, and as a result, the third hypothesis can be assumed as follows:

*H3: Self-efficacy toward entrepreneurship has a significant positive effect on entrepreneurship intention.*

### 3.5 Entrepreneurial Education

Having an intention toward entrepreneurship or any behavior is usually not enough to take a step forward. This intention needs to be backed with a solid education, specifically with an entrepreneur's features. Individuals in general and students in particular need to be fully supported with entrepreneurial education that allows and supports them to carry their activities professionally and with fewer chances of risks. The entrepreneurial education may include the provision of a suitable environment that provides an updated syllabus to meet the students' requirements to become an entrepreneur. This is so because once the students are exposed to entrepreneurial programs and courses, this would without question impact their inclination toward entrepreneurship (Keat, Selvarajah, & Meyer, 2011; Shahverdi et al., 2018). Entrepreneurial education is proved to have an impact on the feasibility and attractiveness of the establishment of the new venture (Souitaris, Zerbinati, & Al-Laham, 2007; Tkachev & Kolvereid, 1999). Creating more entrepreneurs shall lead to economic improvement and innovation; hence, universities and other research institutions worldwide tend to provide more entrepreneurial education to meet this goal (Nabi, Walmsley, Liñán, Akhtar, & Neame, 2018). Education in general is essential, let alone the entrepreneurial education that is considered a backbone for entrepreneurs. It benefits in changing the mentality and mindset of an individual about a certain behavior. It is believed that many people have been greatly influenced by their education and as a result started successful establishments (Sexton & Robinson, 1994). At present, many universities are amending their educational curriculum to meet the demand and needs of the students. Individuals with more knowledge, skills, and higher perception of competencies achieve better results and performance than those with low knowledge (Martin, McNally, & Kay, 2013). The entrepreneurial intention among individuals is enhanced by entrepreneurial education (Bae, Qian, Miao, & Fiet, 2014). This enhancement benefits females more than males, and it results in increasing the level of perception when starting ventures (Wilson, Kickul & Marlino's, 2007, as cited in Mutlutürk & Mardikyan, 2018). Training and education are two important components of successful ventures. In China and Malaysia, education influences shape engineering and entrepreneurship and non-entrepreneurship students' attitude and intention to be entrepreneurs (Wu & Wu, 2008). Entrepreneurial education plays a role in enhancing Malaysian students' level of inclination toward starting their small businesses (Keat et al., 2011). It is thus concluded that entrepreneurship education and training are essential in shaping the attitude, skills, and intention of individuals regardless of a few studies reporting otherwise. As a result, the fourth hypothesis of the study is:

*H4: Entrepreneurial education toward entrepreneurship has a significantly positive effect on entrepreneurship intention through the mediating roles of attitude, self-efficacy, and social norms.*

## 4. Methods

### 4.1 Participants

Since the Community College of Abqaiq is of small capacity that offers only a diploma certification, the sample of the study targeted all students studying there whether in the human resource program or the medial secretary program. Both males and females were targeted, regardless of their study level. The collection of data was done with the help of an electronic questionnaire and a simple random sampling method was employed. For a more convincing argument, an attempt was carried out with 10 students to investigate if there were any challenges in understanding the questionnaire measures and as a result, nothing was reported. Then, the questionnaire was sent and remained online for a month. The responses received were 190, out of which 6 responses were reported as invalid. The valid samples accounted for 184 responses (75 males and 109 Females).

4.2 Measures

Measures were drawn from studies conducted earlier to measure all stated constructs in the study model, and for a better understanding of the students' attitudes and intentions to become entrepreneurs in the future. The TPB constructs were evaluated by a scale developed by Liñán and Chen (2009). The 5-item-scale was used to measure the variables of the study. This scale ranged from 1 = total disagreement to 5 = total agreement. Sample items included were 'I'm ready to make anything to be an entrepreneur', 'A career as an entrepreneur is attractive for me', 'I can originate new business ideas and products', 'If I were to start my own business, my classmates would be supportive', 'In my university, there is a well-functioning support infrastructure to support the start-up of new firms'. All measures were distributed and administrated in Arabic because the original measures were prepared and developed in the English language. For more assurance, the contents of the translated measurements were done by bilingual experts.

5. Analysis

The partial least square (PLS) was used for analyzing the data of the study. PLS was deemed suitable as it employs a nonparametric approach in assessing the psychometrics of the scales and the path coefficients and it has fewer restrictions of the linearity, normality, and sample size (Hair, Sarstedt, Pieper, & Ringle, 2012).

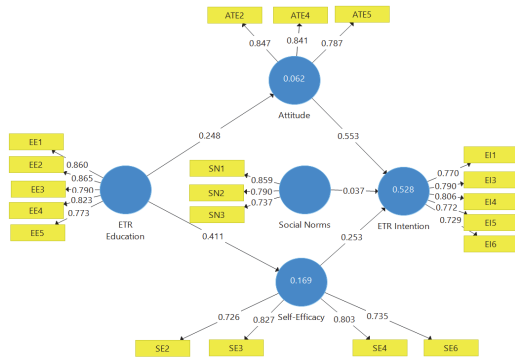


Fig. 1. The results of the coefficients

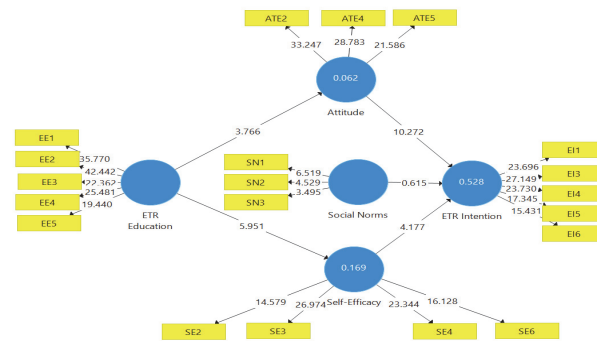


Fig. 2. The results of the t-values

Table 1  
Constructs of Convergent Validity & Reliability

Construct	Factor Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Attitude		<b>0.766</b>	<b>0.865</b>	<b>0.681</b>
ATE2	0.847			
ATE4	0.841			
ATE5	0.787			
Entrepreneurship Education		<b>0.881</b>	<b>0.913</b>	<b>0.678</b>
EE1	0.860			
EE2	0.865			
EE3	0.790			
EE4	0.823			
EE5	0.773			
Entrepreneurial Intention		<b>0.834</b>	<b>0.882</b>	<b>0.599</b>
EI1	0.770			
EI3	0.790			
EI4	0.806			
EI5	0.772			
EI6	0.729			
Self-Efficacy		<b>0.776</b>	<b>0.856</b>	<b>0.599</b>
SE2	0.726			
SE3	0.827			
SE4	0.803			
SE6	0.735			
Subjective Norms		<b>0.746</b>	<b>0.839</b>	<b>0.635</b>
SN1	0.859			
SN2	0.790			
SN3	0.737			

Source: Primary Data

Smart PLS was employed to perform the analysis. To proceed with the analysis, the overall scale of reliability, convergent, and discriminant analysis were performed. The construct reliability is achieved when Cronbach Alpha and composite reliability

bility are greater than 0.70. Convergent validity is achieved when the factor loadings of the study items are statistically significant, ideally greater than 0.70. Moreover, the average variance extracted (AVE) should be greater than 0.50. Last but not least, the acceptable threshold for discriminant validity is found when the square root of AVE of the study constructs is more than the correlation with the other constructs in the study. The results of the analysis performed have shown that six items did not meet the criteria of being greater than 0.70, and thus they were deleted as shown in Table 1 (EI2 from Intention; ATE1 and ATE3 from attitude; SE1 and SE5 from efficacy; and EE6 from education). As shown in Table 1, the reliability of all constructs met the criteria; Cronbach Alpha and composite reliability were greater than 0.70. Convergent validity was achieved since all items factor loadings were greater than 0.70, after the deletion of items with low factor loadings. Furthermore, convergent validity was also achieved since the AVE was more than 0.50. The discriminant validity was also achieved, where the square root of AVE was more than the construct correlations, as shown in Table 2.

**Table 2**  
Discriminant Validity

Construct	Attitude	ETR Education	ETR Intention	Self-Efficacy
Attitude	0.826			
ETR Education	0.248	0.823		
ETR Intention	0.691	0.181	0.774	
Self-Efficacy	0.518	0.411	0.548	0.774
Social Norms	0.182	0.169	0.196	0.234

Source: Primary Data

### 5.1 Hypothesis Testing

Following the validation of the study constructs, a bootstrapping procedure was performed with 5000 resamples for hypothesis testing. As illustrated in Figure 1, our hypothesized relationships were all supported, except for the social norms and entrepreneurial intention relationship. The entrepreneurship education construct has a significantly positive effect on attitude towards entrepreneurship ( $\beta = .24, p = .000$ ) and self-efficacy ( $\beta = .41, p = .000$ ). Furthermore, the positive effects of attitude and self-efficacy on entrepreneurial intention were statistically significant ( $\beta = .55, p = .000$ ;  $\beta = .25, p = .000$ ), with attitude being the strongest predictor of entrepreneurial intention. Lastly, the social norms did not show a significant effect on entrepreneurial intention ( $\beta = .03, p = 0.53$ ), thus this hypothesis was not supported. The indirect effect results of the entrepreneurship: Education  $\rightarrow$  Attitude  $\rightarrow$  entrepreneurial intention link showed that the attitude plays a significant mediation role ( $\beta = .137, t = 3.469, p = .001$ ) and entrepreneurship education  $\rightarrow$  self-efficacy  $\rightarrow$  entrepreneurial intention ( $\beta = .104, t = 3.637, p = .000$ ). Therefore, mediation hypotheses were supported.

## 6. Conclusion

Entrepreneurship is considered as an effective tool for economic development and unemployment reduction (Iakovleva et al., 2011). Henceforth, there is a need for more focus on the provision of a suitable entrepreneurial environment for individuals in general, and students in particular. This is so because preparing student entrepreneurs for the work environment means ensuring job opportunities and a better standard of living. For that reason, and in light of that, the study adds up an addition value to the entrepreneurship literature as it provides new analysis and insight into the entrepreneurship status in the community college of Abqaiq. It investigated the relationship between entrepreneurial education and components of the theory of planned behavior, i.e., attitude, social norms, and self-efficacy on one side, and the entrepreneurial intention on the other side. The analysis confirmed a positive relationship among all the study variables except for the social norms with entrepreneurial intention. Thus, since a positively significant relationship exists among the study variables, it is recommended that more attention should be devoted to the provision of entrepreneurial education so that it would assist in changing the attitude of the students and will improve their self-efficacy level. This would ultimately result in a positive entrepreneurial intention among the students of the college.

Our findings highlight the significance of entrepreneurship education as well as the importance of the role of universities in shaping students' attitudes and behaviors. As shown earlier, the role of education has a stronger effect on students' perceptions of their entrepreneurial capacities followed by positive attitudes towards entrepreneurship. Nonetheless, attitude exerted stronger effects on entrepreneurial intention than self-efficacy. It means that the perception of the value and advantages that entrepreneurship entails is what influences the decision to start a business the most, while social norms were found to not be a determinant factor of entrepreneurial intention. Such findings are in line with previous research. For instance, it has been found that perceived desirability (i.e., attitude) has a stronger effect on King Saud university students' entrepreneurial intention than the perceived feasibility (i.e., self-efficacy); yet, social norms were not significant (Almobaireek & Manolova, 2012). Similar findings were shown in Al-Jubari's (2019) recent study among university students in Yemen, where attitude was the strongest predictor of intention. Further similar results were found in other studies in other contexts as well, which give additional support and more evidence on the applicability of the theory of planned behavior in the context of community colleges in the Kingdom of Saudi Arabia. The overall variance explained by the study constructs was more than fifty percent. Future research may focus on incorporating other theories of motivation and/or better methodological design. Still, one of the

limitations that our study should acknowledge is that the results were based on a relatively small sample size from one single community college in the Kingdom, which may hamper its generalizability to the wider community colleges. Future research may want to address this issue by having more community colleges included in their study.

## Acknowledgment

The author acknowledges the Deanship of Scientific Research at King Faisal University of the Financial Support under Nasher Track (Grant No.186397).

## References

- Agency, C. I. (2020). *The World Factbook - Central Intelligence Agency*. 2011(2865), 1–9.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Al-Jubari, I. (2019). College students' entrepreneurial intention: Testing an integrated model of SDT and TPB. *SAGE Open*, 9(2), 1–15.
- Almobaireek, W. N., & Manolova, T. S. (2012). Who wants to be an entrepreneur? Entrepreneurial intentions among Saudi university students. *African Journal of Business Management*, 6(11), 4029–4040.
- Alshebami, A. S. (2017). *The Role of Microfinance in Mitigating Poverty and Unemployment in Yemen*. SRTM University, India-Nanded.
- Armitage, C. J., & Conner, M. (2001). *Efficacy of the Theory of Planned Behaviour: A Meta-Analytic Review*. *Efficacy of the Theory of Planned Behaviour: A meta-analytic review*. (July 2017), 471–499.
- Autio, E., H. Keeley, R., Klofsten, M., G. C. Parker, G., & Hay, M. (2001). Entrepreneurial Intent among Students in Scandinavia and in the USA. *Enterprise and Innovation Management Studies*, 2(2), 145–160.
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A Meta-Analytic Review. *Entrepreneurship: Theory and Practice*, 38(2), 217–254.
- BarNir, A., Watson, W. E., & Hutchins, H. M. (2011). Mediation and moderated mediation in the relationship among role models, self-efficacy, entrepreneurial career intention, and gender. *Journal of Applied Social Psychology*, 41(2), 270–297.
- Birley, S., & Westhead, P. (1994). A taxonomy of business start-up reasons and their impact on firm growth and size. *Journal of Business Venturing*, 9(1), 7–31.
- Boyd, N. G., & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18(4), 63–77.
- Chen, C. C., Greene, P. G., & Ann Crick. (1988). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13, 295–316.
- Crant, J. M. (1996). The proactive personality scale as a predictor of entrepreneurial intentions. *Journal of Small Business Management*, 34(3), 42–49.
- Engle, R. L., Dimitriadi, N., Gavidia, J. V., Schlaegel, C., Delanoe, S., Alvarado, I., ... Wolff, B. (2010). Entrepreneurial intent: A twelve-country evaluation of Ajzen's model of planned behavior. *Team Performance Management*, 16(1–2), 35–57.
- Fatoki, O. O. (2010). Graduate entrepreneurial intention in South Africa: motivations and obstacles. *International Journal of Business and Management*, 5(9), 87–98.
- Fernández-Ballesteros, R., Díez-Nicolás, J., Caprara, G. V., Barbaranelli, C., & Bandura, A. (2002). Unilateral pterygium inversum unguis. *International Association for Applied Psychology*, 51(1), 107–125.
- Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: A review of past practices and recommendations for future applications. *Long Range Planning*, 45(5–6), 320–340. <https://doi.org/10.1016/j.lrp.2012.09.008>
- Harris, M. L., & Gibson, S. G. (2008). Examining the entrepreneurial attitudes of US business students. *Education and Training*, 50(7), 568–581.
- Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education and Training*, 53(5), 353–370.
- Imran, M., Aziz, A., Hamid, S., Shabbir, M., Salman, R., & Jian, Z. (2018). The mediating role of total quality management between entrepreneurial orientation and SMEs export performance. *Management Science Letters*, 8(6), 519–532.
- Jongh, Jacques De, N. M. (2017). No TAn investigation into the factors affecting young People's entrepreneurial inclination: the case of Selected areas in south africa itle. *International Journal of Business and Management Studies*, 9(2), 1309–8047.
- Keat, O. Y., Selvarajah, C., & Meyer, D. (2011). Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students. *International Journal of Business and Social Science*, 2(July 2015), 206–220.
- Khalid, N., Ahmed, U., Tundikbayeva, B., & Ahmed, M. (2019). Entrepreneurship and organizational performance: Empirical insight into the role of entrepreneurial training, culture and government funding across higher education institutions in Pakistan. *Management Science Letters*, 9(5), 755–770.
- Krueger, N. F. J., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(9), 411–432.

- Liñán, F., & Yi-Wen Chen. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions, entrepreneurship theory and practice. *Baylor University*, 33(3), 593–617.
- Lüthje, C., & Franke, N. (2003). The “making” of an entrepreneur: Testing a model of entrepreneurial intent among engineering students at MIT. *R and D Management*, 33(2), 135–147. <https://doi.org/10.1111/1467-9310.00288>
- Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28(2), 211–224.
- Martínez, D., Mora, J. G., & Vila, L. E. (2007). Entrepreneurs, the self-employed and employees amongst young European higher education graduates. *European Journal of Education*, 42(1), 99–117.
- Mutlutürk, M., & Mardikyan, S. (2018). Analysing factors affecting the individual entrepreneurial orientation of university students. *Journal of Entrepreneurship Education*, 21(Special Issue), 1–9.
- Nabi, G., Walmsley, A., Liñán, F., Akhtar, I., & Neame, C. (2018). Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? The role of learning and inspiration. *Studies in Higher Education*, 43(3), 452–467. <https://doi.org/10.1080/03075079.2016.1177716>
- Papulova, Z., & Mokros, M. (2007). Importance of Managerial Skills and Knowledge in Management for Small Entrepreneurs. *E-Leader, Prague*, 1–8. [https://doi.org/10.1016/S2212-5671\(14\)00039-2](https://doi.org/10.1016/S2212-5671(14)00039-2)
- Roca, J. C., & Gagné, M. (2008). Understanding e-learning continuance intention in the workplace: A self-determination theory perspective. *Computers in Human Behavior*, 24(4), 1585–1604. <https://doi.org/10.1016/j.chb.2007.06.001>
- Shahverdi, M., Ismail, K., & Qureshi, M. (2018). The effect of perceived barriers on social entrepreneurship intention in Malaysian universities: The moderating role of education. *Management Science Letters*, 8(5), 341–352.
- Sahinidis, A., Vassiliou, E., & Hyz, A. (2014). Factors affecting entrepreneurs’ intention to start a new venture: An empirical study. *International Journal of Strategic Innovative Marketing*, 01, 1–16.
- Sexton, E. A., & Robinson, P. B. (1994). The effect of education and experience on self-employment success. *Journal of Business Venturing*, 9(2), 141–156.
- Shamsudin, S. F. F. B., Al Mamun, A., Nawi, N. B. C., Nasir, N. A. B. M., & Zakaria, M. N. Bin. (2017). Factors affecting entrepreneurial intention among the Malaysian university students. *The Journal of Developing Areas*, 51(4), 423–431.
- Shinnar, R. S., Giacomini, O., & Janssen, F. (2012). Entrepreneurial perceptions and intentions: The role of gender and culture. *Entrepreneurship: Theory and Practice*, 36(3), 465–493.
- Shook, C. L., & Bratianu, C. (2010). Entrepreneurial intent in a transitional economy: An application of the theory of planned behavior to Romanian students. *International Entrepreneurship and Management Journal*, 6(3), 231–247.
- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4), 566–591. <https://doi.org/10.1016/j.jbusvent.2006.05.002>
- Thurik, R. (2003). Entrepreneurship and unemployment in the UK. *Scottish Journal of Political Economy*, 50(3), 264–290.
- Tkachev, A., & Kolvereid, L. (1999). Self-employment intentions among russian students. *Entrepreneurship and Regional Development*, 11(3), 269–280.
- Van Gelderen, M., Brand, M., Van Praag, M., Bodewes, W., Poutsma, E., & Van Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13(6), 538–559.
- Van Praag, C. M., & Versloot, P. H. (2007). What is the value of entrepreneurship? A review of recent research. *Small Business Economics*, 29(4), 351–382. <https://doi.org/10.1007/s11187-007-9074-x>
- Zamberi Ahmad, S., & Xavier, S. R. (2012). Entrepreneurial environments and growth: evidence from Malaysia GEM data. *Journal of Chinese Entrepreneurship*, 4(1), 50–69. <https://doi.org/10.1108/17561391211200939>
- Zhao, H., Hills, G. E., & Seibert, S. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265–1272.

