

What will the Entrepreneurial Students of Tourism and Hotels Intent to do After Graduation? Self-Employment or Green Entrepreneurship

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Abstract *This research aims to study the impact of entrepreneurship education on the tourism and hotel students' entrepreneurial attitude in Egypt after graduation and study the mediating role of the entrepreneurial attitude between entrepreneurship education and self-employment intention. In addition to, study the mediating role of entrepreneurial attitude between entrepreneurship education and green entrepreneurship intention. A questionnaire was designed and distributed to a random sample of students in faculties and institutes of tourism and hotels in Egypt to achieve the study objectives. 434 valid responses for statistical analysis were analyzed using AMOS V.24 program to extract the study results. The results of the study concluded that there is a positive effect of entrepreneurship education on self-employment intention as well as on green entrepreneurship intention. The results also demonstrated that entrepreneurial attitude plays a mediating role in the relationship between entrepreneurship education and self-employment intention, as well as in the relationship between entrepreneurship education and green entrepreneurship intention. The study revealed that tourism and hotel graduates in Egypt without an entrepreneurial attitude tend to self-employment. In contrast, tourism and hotel graduates who have an entrepreneurial attitude tend more to green entrepreneurship. This study presents a theoretical and practical contribution to tourism and hotel education.*

Keywords: *Entrepreneurship Education, Entrepreneurial Attitude, Self-Employment Intention, Green Entrepreneurship Intention, Tourism and Hotels Students*

INTRODUCTION

The importance of tourism education has emerged significantly during the past decades in order to meet the tourism and hospitality sectors with qualified and trained labor and overcome the great challenges facing tourism and hospitality. Therefore, students who will work in this sector need different skills that will enable them to face these challenges, such as entrepreneurial skills (Daniel et al., 2017). The topic of entrepreneurship has become very important at all educational levels, whether pre-university education, undergraduate, or postgraduate (Ahmad et al., 2018), as result higher education institutions around the

world and in Egypt are witnessing great and rapid changes in entrepreneurship (Welsh et al., 2016). Accordingly, countries have invested in entrepreneurship education and allocate the necessary financial resources to make education based on entrepreneurship in pre-university education and university education (Walter & Block, 2016), because education is one of the cornerstones of entrepreneurship development (Jahani et al., 2018). Consequently, universities play a pivotal role in entrepreneurship education by developing students' skills and providing them with knowledge that will enable them to change their thinking pattern and move towards entrepreneurial work (Volkmann & Audretsch, 2017; Kusumojanto et al., 2021).

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Recently, interest in entrepreneurship has increased as one of the recent trends in the tourism and hospitality industry. This led many countries to encourage the establishment of small and medium enterprises in the field of tourism and hospitality (Cem et al., 2019). Unemployment problems in many countries have forced these countries to try to find unconventional ways to create job opportunities by encouraging citizens to establish their own start-up projects (Bakar et al., 2015; Deveci & Seikkula-Leino, 2018). Despite this importance of entrepreneurship education in the field of tourism and hotels, this subject is still early in tourism and hotels researches and needs further study and development (Ndou et al., 2019).

Based on the above, this research deals with entrepreneurship education in the faculties of tourism and hotels in Egypt and its importance in tourism and hospitality industry, in addition to addressing the relationship between entrepreneurship education and a group of important variables such as entrepreneurial attitude, self-employment intention and green entrepreneurship intention.

LITERATURE REVIEW

Entrepreneurship Education

Entrepreneurship education has gained great importance over the past decades (Nabi et al., 2017; Thomassen et al., 2020) and it is one of the trends in education which more related to higher education (Ruskovaara & Pihkala, 2015). Entrepreneurship is a very important area right now after the spread of COVID-19. Many countries are counting on it to become a means of employing students and graduates of tourism and hotel faculties in the future, after this crisis recedes (Del Río et al., 2016). This contributed to creating an interest in developing educational programs that support and enhance entrepreneurship (Boldureanu et al., 2020). There are many definitions of entrepreneurship and differ according to industries and fields (Ahmad et al., 2018). This made defining entrepreneurship education difficult. However, the definitions depended on one idea, which is to learn and study the skills necessary to establish and start a business (Mentoor & Friedrich, 2007).

Entrepreneurship education is to make education able to change the students' mindset to become graduates with life skills that enable them to set up their own businesses (Abiogu, 2011). From another view, entrepreneurship education is a means by which students can be helped knowledgeably and skillfully in their success in establishing their own small and medium enterprises (Bakar et al., 2015; Lindner, 2018). Entrepreneurship education also defined as the practices and initiatives undertaken by universities and colleges within the framework of developing students' skills to establish organize and manage a business (Jones, 2019).

Hence, Entrepreneurship education in tourism and hotels as providing students with the basic knowledge and skills needed to start a business or become competent managers in the tourism and hotel industry (Ahmad et al., 2018).

The importance of entrepreneurship is increasing in educational institutions and universities in general, and particularly in engineering, business and tourism fields (Fayolle, 2018; Cem et al., 2019). The importance of entrepreneurship education is its rapid ability to achieve global economic recovery (Ratten & Usmanij, 2021), so it may be a good solution to contain the employment crisis in the tourism and hotel industry that occurred as a result of COVID-19 (Ratten & Jones, 2021). The aim of teaching entrepreneurship in tourism and hotel programs is to give students the opportunity to learn various entrepreneurial skills and educate about different opportunities to create businesses (Daniel et al., 2017).

Entrepreneurial Attitude

Choosing a career path consider one of the most critical and important choices in the people lives. Having a likable job and doing enjoyable work will have a positive impact on their lives. Being an entrepreneur needs a positive thinking, commitment, personal abilities and a certain attitude (Gibson et al., 2011). Attitudes towards achievement, independence, challenge, wealth and social recognition motivates the students to join in entrepreneurship activities after graduation (Huang et al., 2020).

Entrepreneurial attitude is the extent to which a person has a positive or negative ability to be an entrepreneur (Karali, 2013; Bae et al., 2014). Entrepreneurial attitude refers to a person's attitude towards starting a new business venture, such as innovativeness, self-confidence, risk-taking, need for achievement and locus of control (Do & Dadvari, 2017). The student's entrepreneurial attitude is the most essential determinant of creating a successful entrepreneur. The institutions of higher education should have the responsibility for increasing the entrepreneurial attitudes among their students (Patrisia et al., 2019). Entrepreneurial attitude of students can be influenced by entrepreneurship education that motivates them to do something productive in accordance with enhancing their entrepreneurial capabilities. Therefore, the entrepreneurial attitude plays an important role in affecting the individual behavior and mindset to show their entrepreneurial intention (Mahendra et al., 2017).

Self-Employment Intention

Self-employment is the most important determinant and a major contributor for economic development. It considers a change factor in job creation and maximizing the wealth

of nations through economic development (Dabale & Masese, 2014; Okeke et al., 2016; Aboho et al., 2016). Self-employment intention defined as the individual's intention to: (a) own a business (Crant, 1996), (b) start a new business (Zhao et al., 2005), (c) be self-employed (Douglas & Shepherd, 2002).

Therefore, it can be said that self-employment intention deals with the individual desire to start a new business in the future (Davidson, 2009). Currently, the unemployment rates among university and high schools graduates comparatively higher than the rate of less educated employees. Therefore, providing an employment opportunity for each graduate is a critical issue (Ummah, 2009). One of the most effective ways to solve the unemployment problem is bringing further graduate entrepreneurship that is a process to motivate a graduate to launch a business as an individual career orientation (Olufunso, 2010). It is a global challenge to make graduates more employable, so that universities and higher institutions around the world are interested in overcoming this challenge by becoming more entrepreneurial (Moreno, Castillo & Triguero, 2012).

The students' choice of launching their own property would be formulated when they successfully recognize, feel, perceive, and evaluate their own interests (Zampetakis et al., 2009). If the surrounding environment motivates and empowers the students as well as learning outcomes is based on personal interest, this can create a strong internal motivation (Taatala, 2010). Such perspective can be developed through entrepreneurship education/training at institutions and participation in the training programs of entrepreneurship that have been related to changes in attitudes, behaviors, and the intention towards self-employment, due to the influences of education on people's aspiration towards entrepreneurship and self-employment (Kuratko, 2005).

Green Entrepreneurship Intention

The rapid development of entrepreneurship has led to negative cultural, social, and environmental impacts. Hence, the need to achieve a balance between the economic benefits of entrepreneurship and reduce its negative effects on society and the environment has emerged (Nuringsih et al., 2019). Therefore, the interest in green entrepreneurship increased at the academic level by conducting studies and research that contribute to the development of this field and at the industry level to provide the requirements for implementing and starting green entrepreneurship projects (Chee & Nordin, 2020). Alvarez-Risco et al. (2021, p. 3) define the intention as "the individual's state that creates decisions, attention, and interest to carry out a specific action". Bae et al. (2014) stated that entrepreneurship intention can be defined as individual's willingness to behave in an entrepreneurial manner in order to develop a start-up project. Yi (2021) indicated that the

term green entrepreneurship emerged in the early 1990s and came as a result of a combination of entrepreneurship term and environmental terms.

The concept of green entrepreneurship has become the focus of attention of many researchers and decision-makers in many fields (Hussain et al., 2021). Green entrepreneurship defined as a business that includes products, services, processes and activities that contribute to preserving the environment (Tan et al., 2013). In the same context, green entrepreneurship is one of the new forms of entrepreneurship that aims to start a new project, taking into account environmental practices that preserve natural resources (Ada Domańska & Zajkowski, 2018). From a sustainable view, green entrepreneurship also means the possibility of creating a business capable of achieving social and environmental benefits as well as achieving economic benefits for society (Qazi et al., 2020). Green entrepreneurship intention is defined as the desire to establish and manage a profitable private business based on respecting the community culture and preserving the environment (Nuringsih et al., 2019; Alamineh, 2019).

From another view, Arru (2020) and Yasir et al. (2021) stated that green entrepreneurship intention is the turning point from the individual's motives in establishing a startup company that takes into account the principles of sustainability to the entrepreneurial behaviors that can actually be implemented. In the research context, Alvarez-Risco et al. (2021) define green entrepreneurship intention as the student's intention to implement green start-up projects that involve solving environmental problems through recycling, waste management, and using environmentally friendly materials.

The importance of green entrepreneurship is that it is considered an important solution in preserving environmental resources, economic development, achieving sustainability and turning to green economy (Ahmad et al., 2015; Himel et al., 2016; Chu et al., 2021). As a result, there has been an increasing interest to establish green projects and their role in sustainable development (Tan et al., 2013). Recently, the green entrepreneurship term has gained great interest among university students and graduates (Hussain et al., 2021), in order to stimulate students' intentions towards entrepreneurship in general and green entrepreneurship in particular (Suwardi et al., 2021). Egypt is one of the countries where green tourism entrepreneurship has a great interest. This is represented in tourism entrepreneurship projects such as green hotels and eco-lodges (Himel et al., 2016; Elzek et al., 2020).

CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT

Prior studies indicate that entrepreneurship education has a positive impact on the future attitude of the university

graduates towards self-employment (Fayolle et al., 2006; Mamman, 2019). For instance, the study of Ayalew and Zeleke (2018) conclude that graduates who took entrepreneurship learning/training that developed their abilities on creativity, problem solving and decision making have a positive attitude towards self-employment. Moreover, Sánchez (2011) confirms that Entrepreneurial education increases graduates' competencies and self-employment tendency. In addition, the study of Kumara (2012) revealed that undergraduates who have received entrepreneurial learning during their education always have positive beliefs and attitude towards self-employment. Shariff and Saud (2008) show that there is a significant difference between students who have taken entrepreneurship courses during their studies and non-entrepreneur students in terms of personal control and self-esteem, where the entrepreneur students group being higher in entrepreneurial intention. Moreover, the study of Ismail et al. (2013) found that entrepreneurial attitudes have a significant relationship with self-employment intention. While the study of Ayalew and Zeleke (2018) revealed that entrepreneurship education/training and entrepreneurial attitude significantly predict undergraduates' intention of self-employment. Another survey conducted by Zain et al. (2010) among business undergraduates found out a significant relationship between attitude and the self-employment intention.

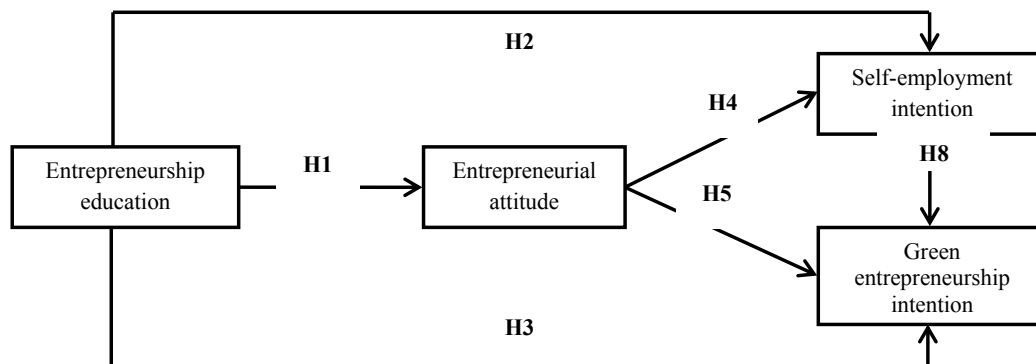
Scholars indicate that attitude is a significant predictor for self-employment and entrepreneurial intention. Students may react differently on the expected self-employment behavior according to their positive or negative perception towards self-employment based on their background and other traits. Perhaps if they form positive attitudes towards entrepreneurship, it is likely that they will start their own business after graduation. Conversely, if they have a negative attitude, likely they will not being entrepreneurs hence self-

employed (Douglas & Shepherd, 2002; Ayalew & Zeleke, 2018). Accordingly, it can be said that entrepreneurship education can play a crucial role in inculcating the necessary knowledge, skills and attitudes that could enable graduates to create jobs through launching their own properties (Mamman, 2019).

Entrepreneurship education mainly contributes to paving the way for students towards self-employment or towards the possibility of obtaining good jobs in the field of tourism and hotels (Ahmad et al., 2018). Supporting education is one of the main pillars in promoting the concepts and behaviors of entrepreneurship and innovation among university students (Amankwah & Sesen, 2021). Welsh et al. (2016) showed that there is a strong correlation between entrepreneurship education and entrepreneurial intentions. The results of Barba-Sánchez and Atienza-Sahuquillo (2018) study indicate that entrepreneurship education has a positive impact on students' intention to establish their own businesses.

Entrepreneurship education greatly contributes to encouraging students' intention towards entrepreneurship and green entrepreneurship (Ranasinghe & Ajward, 2019; Suwardi et al., 2021). The study by Hameed et al. (2021) also showed that entrepreneurship education influences students' commitment to the environment. The study also indicated that providing this type of education to university students and integrating it with environmental protection programs greatly affects green entrepreneurship. Therefore, Hussain et al. (2021) and Uvarova et al. (2021) supposed that universities should promoting green entrepreneurial intentions through education and the media by raising students' environmental awareness.

Based on the above, the conceptual model proposed as shown in Fig. (1) and the study hypotheses presented as the following:



H6: Entrepreneurial attitude mediating the relationship between entrepreneurship education and self-employment intention.

H7: Entrepreneurial attitude mediating the relationship between entrepreneurship education and Green entrepreneurship intention.

H9: Self-employment intention mediating the relationship between entrepreneurial attitude and Green entrepreneurship intention.

Fig. 1: Conceptual Framework and Study Hypotheses

H1: Entrepreneurship education has a positive impact on entrepreneurial attitude.

H2: Entrepreneurship education has a positive impact on self-employment intention.

H3: Entrepreneurship education has a positive impact on green entrepreneurship intention.

H4: Entrepreneurial attitude has a positive impact on self-employment intention.

H5: Entrepreneurial attitude has a positive impact on green entrepreneurship intention.

H6: Entrepreneurial attitude mediating the relationship between entrepreneurship education and self-employment intention.

H7: Entrepreneurial attitude mediating the relationship between entrepreneurship education and Green entrepreneurship intention.

H8: Self-employment intention has a positive impact on green entrepreneurship intention.

H9: Self-employment intention mediating the relationship between entrepreneurial attitude and Green entrepreneurship intention.

METHODS

The Measurement Instruments

The study relied on the quantitative method. A questionnaire was designed based on previous studies and consisted of five axes. The first axis included sample profile in four questions about gender, age, type of education (governmental-private) and the department (tourism studies-hotel management). The second axis concerned with entrepreneurship education and was measured using 8 phrases adopted from Denanyoh et al. (2015) and Hasan et al. (2017). The third axis was about entrepreneurial attitude. It was measured by using 6 phrases extracted from Lüthje and Franke (2003) and Linan et al. (2011). The fourth axis was self-employment intention. This variable was measured using 6 phrases relied on the studies of Chen et al. (1998), Krueger et al. (2000), Linan and Chen (2009) and Ismail et al. (2013). The fifth axis was about green entrepreneurship intention. It was measured using 6 phrases adapted from Linan and Chen (2009) and Wegner et al. (2019). All these phrases except sample profile were designed by using 5 Likert scale from 1 = strongly disagree to 5 = strongly agree.

Sample and Procedures

The questionnaire was distributed to a random sample of students from governmental and private faculties and

institutes of tourism and hotels in Egypt during June 2021. To reach the largest possible number of students, the study questionnaire was designed through a Google form and the link was sent to students through social media. The questionnaire was sent to 700 students. The number of participants in filling out the questionnaire was 460 students, with a response rate of 65.71%. 26 responses were found invalid, while 434 were found valid for statistical analysis. Table 1 shows sample profile.

Table 1: Sample Profile

Sr. No.	Items		Freq.	Percent
1	Gender	Male	273	62.9
		Female	161	37.1
2	Age	Less than 20 years	65	15
		20-22 years	286	65.9
		More than 20 year	83	19.1
3	Education category	Governmental (Faculty/institution)	253	58.3
		Private (Faculty/institution)	181	41.7
4	Department	Tourism studies	309	71.2
		Hotel studies/management	125	28.8

ANALYSIS AND RESULTS

Mean and Standard Deviation of Study Constructs

Table 2 displays that there is a positive response towards the study constructs: (Entrepreneurship education, Entrepreneurial attitude, Self-employment intention, and Green entrepreneurship intention).

Table 2: Mean and SD of Constructs

Constructs	Mean	SD
Entrepreneurship education	3.28	0.98
Entrepreneurial attitude	4.05	0.79
Self-employment intention	3.79	0.88
Green entrepreneurship intention	3.68	0.80

Measurement Model Results

The study tested all scales for their validity and reliability by using Cronbach's alpha for testing the reliability and AVE (Average Variance Extracted) for testing the convergent validity. Table 3 shows that all values of composite reliability

and Cronbach's alpha were higher than the minimum limit of 70%. This percentage is considered statistically acceptable according to Hair et al. (1992). Table 3 also indicates that the value of AVE was more than 0.70. It is higher than 0.5, so the study scales are valid (Hair et al., 2014).

Table 3: Composite Reliability, Cronbach's Alpha, AVE and VIF

Constructs	Composite Reliability	Cronbach's Alpha	AVE
Entrepreneurship education	0.911	0.886	0.755
Entrepreneurial attitude	0.834	0.727	0.713
Self-employment intention	0.871	0.754	0.699
Green entrepreneurship intention	0.803	0.767	0.751

The researchers used AVE's square roots to test the variables' validity. According to Hair et al., (2014) AVE's square roots should be greater than a couple of variables correlation bold type as shown in in Table 4. The same table showed that the correlation between entrepreneurship education (EE) and entrepreneurial attitude (EA) was 0.147, which is less than the respective AVE of entrepreneurship education (EE) (0.711) and entrepreneurial attitude (EA) (0.901). From the results of Table 4, the AVE's square roots of all variables are larger than the highest correlations with any other variables.

Table 4: Squared Roots of AVE

	Entrepreneurship Education (EE)	Entrepreneurial Attitude (EA)	Self-Employment Intention (SEI)	Green Entrepreneurship Intention (GEI)
Entrepreneurship education (EE)	0.711			
Entrepreneurial attitude (EA)	0.147	0.901		
Self-employment intention (SEI)	0.183	0.630	0.832	
Green entrepreneurship intention (GEI)	0.292	0.461	0.486	0.821

Model Fit

As indicated in Table 5 $\chi^2/df = 2.582$, GFI= 0.943, CFI= 0.979, NFI= 0.911, TLI = 0.937, and RMSEA= 0.060. These results fell with the ranges showed in Table 5.

Table 5: Model Fit Summary for the Research Model

Fit Index	Ranges	Model
χ^2/df	1-3	2.582
Goodness-of-fit index (GFI)	More than 0.90	0.943
Comparative fit index (CFI)	More than 0.95	0.979
Normed Fit Index (NFI)	More than 0.90	0.911
Tucker-Lewis index (TLI)	More than 0.95	0.937
RMSEA	0.05-0.08	0.060

Structural Relationship Model

Bootstrap path analysis was conducted using AMOS program. The results of path coefficients (β), t -statistics, and the significance of the model were showed in Table 6. The results indicated that entrepreneurship education has a positive impact on entrepreneurial attitude ($\beta=0.412, p<0.01$) with t -statistic 7.794. Also, entrepreneurship education has a positive impact on self-employment intention ($\beta=0.124, p<0.01$) with t -statistic 3.417. Additionally entrepreneurship education has a positive impact on green entrepreneurship intention ($\beta=0.284, p<0.01$) with t -statistic 6.948. Consequently, H1, H2 and H3 are accepted. The results showed that entrepreneurial attitude has a positive impact on self-employment intention ($\beta=0.812, p<0.01$) with t -statistic value 13.717. It showed also that entrepreneurial attitude has a positive impact on green entrepreneurship intention ($\beta=0.328, p<0.01$) with t -statistic value 3.816. Therefore, H4 and H5 are supported.

Table 6 indicates that there is a direct effect of entrepreneurship education on entrepreneurial attitude ($\beta=0.412, p<0.01$) with t -statistic value 7.794. There is a direct impact of entrepreneurial attitude on self-employment intention ($\beta=0.812, p<0.01$) with t -statistic value 13.717. In addition, there is a direct impact of the entrepreneurship education on self-employment intention ($\beta=0.124, p<0.01$) with t -statistic value 3.417. There is also an indirect effect of the entrepreneurship education on self-employment intention in the presence of entrepreneurial attitude as a mediating variable ($\beta=0.334, p<0.01$) with t -statistic value 5.641, which confirms the role that the entrepreneurial attitude plays as a mediating role (partial) in enhancing the effect of entrepreneurship education on self-employment intention. So, H6 is accepted.

According to Table 6, there is a direct effect of entrepreneurship education on entrepreneurial attitude ($\beta=0.412, p<0.01$) with t -statistic value 7.794 and a direct effect of entrepreneurial attitude on green entrepreneurship intention ($\beta=0.328, p<0.01$) with t -statistic value 3.816. The direct effect of entrepreneurship education on green entrepreneurship intention was also significant ($\beta=0.284, p<0.01$) with t -statistic value 6.948. The indirect effect

of entrepreneurship education on green entrepreneurship intention through entrepreneurial attitude as a mediator was ($\beta=0.306, p<0.01$) with t -statistic value 8.713. Consequently, entrepreneurial attitude plays a partially mediating role in the relationship among entrepreneurship education and green entrepreneurship intention. Hence, H7 is supported.

Table 6 showed the path coefficients (β), t -statistic, and significance for the effect of self-employment intention on green entrepreneurship intention to test H8. It can be showed from the table that ($\beta=4.167, p<0.01$) with t -statistic value 4.167. These results indicated that self-employment intention has a significant and positive effect on green entrepreneurship intention. Accordingly, H8 is accepted.

From the results in Table 6, there is a direct effect of entrepreneurial attitude on self-employment intention ($\beta=0.812, p<0.01$) with t -statistic value 13.717 and a direct effect of self-employment intention on green entrepreneurship intention ($\beta=0.372, p<0.01$) with t -statistic value 4.167. The direct effect of entrepreneurial attitude on green entrepreneurship intention was also significant ($\beta=0.328, p<0.01$) with t -statistic value 3.816. The indirect effect of entrepreneurial attitude on green entrepreneurship intention through self-employment intention as a mediator was ($\beta=0.302, p<0.01$) with t -statistic value 3.992. Consequently, self-employment intention plays a partially mediating role in the relationship among entrepreneurial attitude and green entrepreneurship intention. Hence, H9 is supported.

Table 6: Path Coefficient, T-Statistics, and Significance

Path	Path Coefficient	T-Statistics	Sig.	Result
EE → EA	0.412	7.794	0.000	Supported
EE → SEI	0.124	3.417	0.000	Supported
EE → GEI	0.284	6.948	0.000	Supported
EA → SEI	0.812	13.717	0.000	Supported
EA → GEI	0.328	3.816	0.000	Supported
EE → EA → SEI	0.334	5.641	0.000	Supported
EE → EA → GEI	0.306	8.713	0.000	Supported
SEI → GEI	0.372	4.167	0.000	Supported
EA → SEI → GEI	0.302	3.992	0.000	Supported

Note: EE = Entrepreneurship education, EA = Entrepreneurial attitude, SEI = Self-employment intention, GEI = Green entrepreneurship intention.

Based on the above, Fig. 2 show the path coefficient of the study model as following:

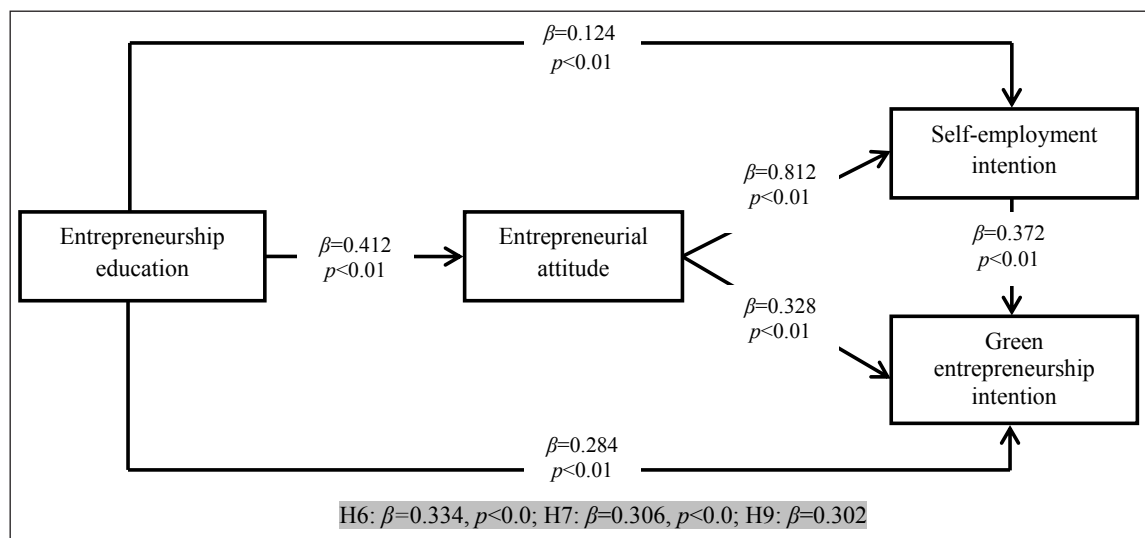


Fig. 2: The Path Coefficient of the Study Model

DISCUSSION AND CONCLUSION

This study aims to examine the entrepreneurial students' intentions in faculties and institutes of tourism and hotel in Egypt to determine the attitudes of these students after graduation. The study relied on a model consisting of four variables: entrepreneurship education, entrepreneurial attitude, self-employment intention, and green entrepreneurship intention. This model aims to explore the relationship between entrepreneurship education and entrepreneurial attitude, self-employment intention, and green entrepreneurship intention. It also aims to identify the mediating role of the entrepreneurial attitude between entrepreneurship education and self-employment intention, as well as between entrepreneurship education and green entrepreneurship intention. This model contributes to determining whether entrepreneurial students' in faculties and institutes of tourism and hotel in Egypt prefer self-employment or green entrepreneurship.

The results showed that entrepreneurship education positively affects entrepreneurial attitude. This finding is consistent with what Mamman (2019) emphasized, that entrepreneurship education is an important factor in determining graduate entrepreneurs' attitude towards owning a business. The results of the study concluded that there is a positive effect of entrepreneurship education on self-employment intention. This result confirmed by Kumara (2012) and Ayalew and Zeleke (2018). The study results also concluded that there is a positive effect of entrepreneurship education on green entrepreneurship intention. This result agreed with many studies such as Ranasinghe and Ajward (2019), Ranasinghe and Ajward (2019), Suwardi et al. (2021) and Suwardi et al. (2021). The results demonstrated that entrepreneurial attitude has a positive impact on self-employment intention and green entrepreneurship intention. This result is consistent with Zain et al. (2010) and Ismail et al. (2013). The results also demonstrated that the entrepreneurial attitude plays a mediating role in the relationship between entrepreneurship education and self-employment intention. The results showed that the entrepreneurial attitude plays a mediating role in the relationship between entrepreneurship education and green entrepreneurship intention. The study revealed that tourism and hotel graduates in Egypt without an entrepreneurial attitude tend to self-employment. In contrast, tourism and hotel graduates who have an entrepreneurial attitude tend more to green entrepreneurship. This result is consistent with Shariff and Saud (2008) as there is a significant difference between students who have taken entrepreneurship courses during their studies and non-entrepreneurs students in terms of personal control and self-esteem, where the entrepreneur students group is higher in entrepreneurial intention.

Based on the above, these results contribute to bridging the theoretical gap related to entrepreneurship education among

tourism and hotel students in Egypt. The study also practically contributes to providing a set of recommendations to support entrepreneurship education among tourism and hotel students in Egypt. Although the programs in the faculties of tourism and hotels in Egypt do not contain subjects under the name of entrepreneurship, entrepreneurship education as stated by Barba-Sánchez and Atienza-Sahuquillo (2018) can be enhanced through making practices represented in organizing exhibitions for successful entrepreneurs in the field of tourism and hotels to identify their success stories, holding workshops based on brainstorming and working groups to create and generate different ideas for the creation of start-up projects, in addition to organizing competitions to present project ideas between students of colleges and institutes of tourism and hotels in Egypt and allocating prizes to the winners of these competitions in the form of funding from the organizations supporting these projects.

LIMITATIONS AND FURTHER RESEARCH

This study included some limitations, the most prominent of these limitations is that the field study was conducted during the end-of-year vacation (June, 2021). To overcome this limitation, the study questionnaire was designed through a Google form and the link was sent to students through social media in order to reach the largest possible number of students. Moreover, the hospitality and tourism education programs in Egypt differ from one institution to another depending on their regulations. This was overcome by choosing governmental and private educational institutions in the study. For further research, researchers can investigate other factors may influencing the students' intention towards entrepreneurship and self-employment such as personality traits, lack of finance and regulations and legislation.

REFERENCES

- Abiogu, G. C. (2011, October). *Entrepreneurship education: A veritable means of reconstructing tertiary institutions in Nigeria*. The 29th annual Conference of Philosophy of Education Association of Nigeria (PEAN), Lagos State University, Ojo - Lagos State.
- Aboho, R., Aleru, G. E., & Danladi, S. A. (2016). Impact of entrepreneurship education on entrepreneurial inclination amongst undergraduate students of two Nigerian universities. *Knowledge Review*, 35(1), 1-6.
- Ada Domańska, B. Ż., & Zajkowski, R. (2018). Green entrepreneurship as a connector among social, environmental and economic pillars of sustainable development. Why some countries are more agile? *Problems of Sustainable Development*, 13(2), 67-76.

- Ahmad, N. H., Halim, H. A., Ramayah, T., & Rahman, S. A. (2015). Green entrepreneurship inclination among Generation Y: The road towards a green economy. *Problems and Perspectives in Management*, 13(2-1), 211-218.
- Ahmad, S. Z., Bakar, A. R. A., & Ahmad, N. (2018). An evaluation of teaching methods of entrepreneurship in hospitality and tourism programs. *The International Journal of Management Education*, 16(1), 14-25.
- Alamineh, H. (2019). Factors for potential entrepreneurs intention towards sustainable entrepreneurship: The case of Wolkite University graduate students' in Ethiopia. *Global Scientific Journal*, 7(12), 1386-1410.
- Alvarez-Risco, A., Mlodzianowska, S., García-Ibarra, V., Rosen, M. A., & Del-Aguila-Arcentales, S. (2021). Factors affecting green entrepreneurship intentions in business university students in COVID-19 pandemic times: Case of Ecuador. *Sustainability*, 13(11), 6447.
- Amankwah, J., & Sesen, H. (2021). On the relation between green entrepreneurship intention and behavior. *Sustainability*, 13(13), 7474.
- Arru, B. (2020). An integrative model for understanding the sustainable entrepreneurs' behavioural intentions: An empirical study of the Italian context. *Environment, Development and Sustainability*, 22(4), 3519-3576.
- Ayalew, M. M., & Zeleke, S. A. (2018). Modeling the impact of entrepreneurial attitude on self-employment intention among engineering students in Ethiopia. *Journal of Innovation and Entrepreneurship*, 7(1), 1-27.
- Bae, T., Qian, S., Miao, C., & Fiet, J. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship Theory and Practice*, 38(2), 217-254.
- 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.
- Bakar, R., Islam, M. A., & Lee, J. (2015). Entrepreneurship education: Experiences in selected countries. *International Education Studies*, 8(1), 88-99.
- Barba-Sánchez, V., & Atienza-Sahuquillo, C. (2018). Entrepreneurial intention among engineering students: The role of entrepreneurship education. *European Research on Management and Business Economics*, 24(1), 53-61.
- Boldureanu, G., Ionescu, A. M., Bercu, A. M., Bedrule-Grigoruță, M. V., & Boldureanu, D. (2020). Entrepreneurship education through successful entrepreneurial models in higher education institutions. *Sustainability*, 12(3), 1267.
- Cem, I. Ş. I. K., Kucukaltan, E. G., Çelebi, S. K., Çalkın, Ö., Enser, İ., & Çelik, A. (2019). Tourism and entrepreneurship: A literature review. *Journal of Ekonomi*, 1(1), 1-27.
- Chee, W., & Nordin, N. (2020). Green entrepreneurial intention of MBA students: A Malaysian study. *International Journal of Industrial Management*, 5(1), 38-55.
- Chu, F., Zhang, W., & Jiang, Y. (2021). How does policy perception affect green entrepreneurship behavior? An Empirical Analysis from China. *Discrete Dynamics in Nature and Society*, 1-9.
- Crant, J. M. (1996). The proactive personality scale as a predictor of entrepreneurial intentions. *Journal of Small Business Management*, 34(3), 42-49.
- Dabale, W. P., & Masese, T. (2014). The influence of entrepreneurship education on beliefs, attitudes and intentions: A cross-sectional study of Africa University graduates. *European Journal of Business and Social Sciences*, 3(9), 1-13.
- Daniel, A. D., Costa, R. A., Pita, M., & Costa, C. (2017). Tourism education: What about entrepreneurial skills? *Journal of Hospitality and Tourism Management*, 30, 65-72.
- Del Río, M. D. L. C., Peris-Ortiz, M., Álvarez-García, J., & Rueda-Armengot, C. (2016). Entrepreneurial intentions and entrepreneurship education to university students in Portugal. *Technology, Innovation and Education*, 2(1), 1-11.
- Deveci, İ., & Seikkula-Leino, J. (2018). A review of entrepreneurship education in teacher education. *Malaysian Journal of Learning and Instruction*, 15(1), 105-148.
- Do, B. R., & Dadvari, A. (2017). The influence of the dark triad on the relationship between entrepreneurial attitude orientation and entrepreneurial intention: A study among students in Taiwan University. *Asia Pacific Management Review*, 22(4), 185-191.
- Douglas, E. J., & Shepherd, A. D. (2002). Self-employment as a career choice: Attitudes, entrepreneurial intentions, and utility maximization. *Entrepreneurship Theory and Practice*, 26(3), 81-90.
- Elzek, Y. S., Gafaar, H. A., & Abdelsamie, H. (2020). Practices of tourism innovation in tourism industry: The case study of Egypt. *Journal of the Faculty of Tourism and Hotels-University of Sadat City*, 4(1/2), 1-14.
- Fayolle, A. (2018). Personal views on the future of entrepreneurship education. *Entrepreneurship & Regional Development*, 25(7-8), 692-701.
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: A new methodology. *Journal of European Industrial Training*, 30(9), 701-720.
- Gibson, S. G., Harris, M. L., Mick, T. D., & Burkhalter, T. M. (2011). Comparing the entrepreneurial attitudes of university and community college students. *Journal of*

- Higher Education Theory and Practice*, 11(2), 1-8.
- Hair, J., Anderson, R., Tatham, R., & Black, W. (1992). *Multivariate data analysis, with readings*. New York, NY: Macmillan.
- Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- Hameed, I., Zaman, U., Waris, I., & Shafique, O. (2021). A serial-mediation model to link entrepreneurship education and green entrepreneurial behavior: Application of resource-based view and flow theory. *International Journal of Environmental Research and Public Health*, 18(2), 550.
- Himel, T., Muniandy, S., & AbdRahman, A. (2016). The relationship between self-efficacy, feasibility and awareness towards green entrepreneurial intention. *Science International*, 28(2), 2095-2103.
- Huang, P., Wu, K., & Fan, C. (2020). Study on the intermediary of entrepreneurial attitude and the adjustment of personal traits under the background of entrepreneurship education. *The International Journal of Electrical Engineering & Education*, 1-11, doi:10.1177/0020720920940590
- Hussain, I., Nazir, M., Hashmi, S. B., Di Vaio, A., Shaheen, I., Waseem, M. A., & Arshad, A. (2021). Green and sustainable entrepreneurial intentions: A mediation-moderation perspective. *Sustainability*, 13(15), 8627.
- Ismail, N., Jaffar, N., & Hooi, T. S. (2013). Using EAO model to predict the self-employment intentions among the universities' undergraduates in Malaysia. *International Journal of Trade, Economics and Finance*, 4(5), 282-287.
- Jahani, S., Babazadeh, M., Haghighi, S., & Cheraghian, B. (2018). The effect of entrepreneurship education on self-efficacy beliefs and entrepreneurial intention of nurses. *Journal of Clinical & Diagnostic Research*, 12(6), 18-21.
- Jones, C. (2019). A signature pedagogy for entrepreneurship education. *Journal of Small Business and Enterprise Development*, 26(2), 243-254.
- Karali, S. (2013). *The impact of entrepreneurship education programs on entrepreneurial intentions: An application of the theory of planned behavior* (Master Thesis, Erasmus University of Rotterdam).
- Kumara, S. P. A. P. (2012). Undergraduates intention towards entrepreneurship: Empirical evidence from Sri Lanka. *Journal of Enterprising Culture*, 20(1), 105-118.
- Kuratko D. F. (2005). The emergency of entrepreneurship education: Development, trends and challenges. *Entrepreneurship Theory and Practice*, 29(5), 577-597.
- Kusumojanto, D. D., Indrayani, I., & Hapsari, N. T. (2021). Internalization of entrepreneurship education in tourism awareness groups: Evidence from Indonesia. *Jurnal Pendidikan Ekonomi & Bisnis*, 9(1), 72-83.
- Lindner, J. (2018). Entrepreneurship education for a sustainable future. *Discourse and Communication for Sustainable Education*, 9(1), 115-127.
- Mahendra, A. M., Djatmika, E. T., & Hermawan, A. (2017). The effect of entrepreneurship education on entrepreneurial intention mediated by motivation and attitude among management students, State University of Malang, Indonesia. *International Education Studies*, 10(9), 61-69.
- Mamman, J. (2019). Entrepreneurship education and self-employment intention: The case of students in Kwara State Universities, *Africa Journal of Technical & Vocational Education & Training*, 4(1), 128-138.
- Mentoor, E. R., & Friedrich, C. (2007). Is entrepreneurial education at South African universities successful? An empirical example. *Industry and Higher Education*, 21(3), 221-232.
- Moreno, J., Castillo, L., & Triguero, M. (2012). The effect of business and economics education programs on students' entrepreneurial intention. *European Journal of Training and Development*, 36(4), 409-425.
- Nabi, G., Liñán, F., Krueger, N., Fayolle, A., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277-299.
- Ndou, V., Mele, G., & Del Vecchio, P. (2019). Entrepreneurship education in tourism: An investigation among European Universities. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 25, 100175.
- Nuringsih, K., Nuryasman, M. N., & IwanPrasodjo, R. A. (2019). Sustainable entrepreneurial intention: The perceived of triple bottom line among female students. *Jurnal Manajemen*, 23(2), 168-190.
- Okeke, M., Okonkwo, G., & Oboreh, J. (2016). Entrepreneurship education as a catalyst for entrepreneurial inclination in selected universities in the South-East Zone. *Arabian Journal of Business and Management Review*, 5(11), 13-22.
- Olufunso, O. F. (2010). Graduate entrepreneurial intention in South Africa: Motivation and obstacles. *International Journal of Business and Management*, 5(9), 87-98.
- Patrisia, D., Abror, A., Doriza, S., & Maulida, E. (2019). The entrepreneurial attitudes of higher education students. *Advances in Economics, Business and Management Research*, 65, 576-579.
- Qazi, W., Qureshi, J. A., Raza, S. A., Khan, K. A., & Qureshi, M. A. (2020). Impact of personality traits and

- university green entrepreneurial support on students' green entrepreneurial intentions: The moderating role of environmental values. *Journal of Applied Research in Higher Education*. doi:10.1108/JARHE-05-2020-0130
- Ranasinghe, B., & Ajward, R. (2019). Factors affecting green entrepreneurial intention among small and medium enterprise owners in western province, Sri Lanka. *Proceeding – 19th Kuala Lumpur International Business, Economics and Law Conference*, 193-208. Bandar BaruBangi, Malaysia.
- Ratten, V., & Jones, P. (2021). COVID-19 and entrepreneurship education: Implications for advancing research and practice. *The International Journal of Management Education*, 19(1), 100432.
- Ratten, V., & Usmanij, P. (2021). Entrepreneurship education: Time for a change in research direction? *The International Journal of Management Education*, 19(1), 100367.
- Ruskovaara, E., & Pihkala, T. (2015). Entrepreneurship education in schools: Empirical evidence on the teacher's role. *The Journal of Educational Research*, 108(3), 236-249.
- Sánchez, C. (2011). University training for entrepreneurial competencies: Its impact on intention of venture creation. *International Entrepreneurship and Management Journal*, 7, 239-254.
- Shariff, M., & Saud, M. (2008). An attitude approach to the prediction of entrepreneurship on students at institution of higher learning in Malaysia. *International Journal of Business and Management*, 4(4), 129-135.
- Suwardi, D., Machmud, A., & Supardi, E. (2021). Opportunity recognition and green entrepreneurial intention: The moderating effect of entrepreneurship education. *Jurnal Pendidikan Bisnis dan Manajemen*, 7(1), 42-55.
- Taatila, V. (2010). Learning entrepreneurship higher education. *Journal of Education and Training*, 5(2), 48-61.
- Tan, K., Suhaida, S., & Leong, Y. (2013). Self-efficacy and green entrepreneurship. *IOP Conference Series: Earth and Environmental Science*, 16, 012119. doi:10.1088/1755-1315/16/1/012119
- Thomassen, M. L., Middleton, K. W., Ramsgaard, M. B., Neergaard, H., & Warren, L. (2020). Conceptualizing context in entrepreneurship education: A literature review. *International Journal of Entrepreneurial Behavior & Research*, 26(5), 863-886.
- Ummah, S. (2009). Entrepreneurial motivation and self-employment intention: An empirical study on management undergraduates in Sri Lanka. *Journal of Management*, 5(1), 87-96.
- Uvarova, I., Mavlutova, I., & Atstaja, D. (2021). Development of the green entrepreneurial mindset through modern entrepreneurship education. *IOP Conference Series: Earth and Environmental Science*, 628, 012034. doi:10.1088/1755-1315/628/1/012034
- Volkman, C. K., & Audretsch, D. B. (2017). Introduction: The mandate for entrepreneurship education. In *Entrepreneurship Education at Universities* (pp. 1-10). Springer, Cham.
- Walter, S. G., & Block, J. H. (2016). Outcomes of entrepreneurship education: An institutional perspective. *Journal of Business Venturing*, 31(2), 216-233.
- Welsh, D. H., Tullar, W. L., & Nemati, H. (2016). Entrepreneurship education: Process, method, or both? *Journal of Innovation & Knowledge*, 1(3), 125-132.
- Yasir, N., Mahmood, N., Mehmood, H., Babar, M., Irfan, M., & Liren, A. (2021). Impact of environmental, social values and the consideration of future consequences for the development of a sustainable entrepreneurial intention. *Sustainability*, 13(5), 2648. doi: 10.3390/su13052648
- Yi, G. (2021). From green entrepreneurial intentions to green entrepreneurial behaviors: The role of university entrepreneurial support and external institutional support. *International Entrepreneurship and Management Journal*, 17(2), 963-979.
- Zain, M., Akram, M., & Ghani, E. (2010). Entrepreneurship intention among Malaysian business students. *Canadian Social Science*, 6(3), 34-44.
- Zampetakis, L., Kafetsios, K., Bouranta, N., Dewett, & T., Moustakis, V. (2009). On the relationship between emotional intelligence and entrepreneurial attitudes and intentions. *International Journal of Entrepreneurial Behavior and Research*, 15(6), 595-618.
- Zhao, H., Hills, G. E., & Seibert, S. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265-1272.