

The impact of entrepreneurship education on planned behavior

Noha Badr
Alaa El-Gharbawy
Mohamed Wahba
Alaa A. Bary

Arab Academy for Science, Technology & Maritime Transport. Egypt

Keywords

Entrepreneurship Education, Theory of Planned Behavior, Subjective Norms, Behavior Control, Entrepreneurship

Abstract

The main aim of this study is to explore the state of entrepreneurship education in Egyptian universities to fill the gap in entrepreneurship education research. A questionnaire was applied and employed in English face-to-face and online. Regression and SEM models had been fitted between research variables using SPSS and AMOS – version 24, so that the hypotheses could be tested. Finally, it was found that there is a significant positive effect of entrepreneurial education on Subjective Norms, Control, and Attitude, implying the significant effect on the overall planned behavior.

Introduction

With the development of several fields nowadays in Egypt, it becomes important to foster entrepreneurship, which is one of the highest priority in public policy. Therefore, entrepreneurship education in higher educational institutions should be promoted as a mechanism for educating and developing students for an entrepreneurial career and equipping them with the necessary skills and competences to compete in a rapidly globalizing marketplace.

Entrepreneurship education is believed to have invariable result in a comparable growth in the quantity and quality of entrepreneurial activity. However, the schools and colleges in which entrepreneurship courses are offered vary considerably from institution to institution. However, the teaching and assessment methods used in entrepreneurship education vary. Entrepreneurship education research in the USA, Europe, and even Asia is strongly presented in the literature. However, little is known about the nature of entrepreneurship education in Africa with the exception of some fragmented studies (Leitch and Harrison, 2008).

The main aim of this study is therefore to explore the state of entrepreneurship education in Egyptian universities to fill the gap in entrepreneurship education research. Policy makers, curriculum developers, and other stakeholders.

This research is illustrated into several sections. The next section presents the literature review about entrepreneurship education and the theory of planned behavior. The third one illustrates research design, framework, developed hypotheses and identifying data and employed statistical tools. Section four explains the findings of statistical analysis, and the final section presents the conclusion of this research.

Literature Review

This section is designed to explain the theoretical background of Entrepreneurship education and how it influences the behavior of students towards Entrepreneurship Intention and development.

Entrepreneurship Education

In this section, a review of the entrepreneurship education is provided including its dimensions of Experience, Action and Reflection. Experience is a philosophical construct as well as a common everyday practice; hence, it is both a theoretical and existential concept, which relates both to the public sphere and to private subjectivity (Jay, 2005). There are many contexts for understanding experience, like: philosophical, religious, aesthetic, political, cultural, social or historical. Experience has also influenced the

way that the learning process is nowadays understood, as it has, to some extent, reformulated both the aims of education and how contemporary pedagogy is applied, especially in regards to experience-based learning (Boud et al., 1985; Itin, 1999).

Historically, experience was related to education from the beginning of the existence of philosophical thought and the very first theories of knowledge, starting from Plato and Aristotle. However, up to the late twentieth century, experience was never unambiguously placed in the center of interest for education or philosophy of education. The meaning and the value of experience in education developed and grew out of the progressive educational movement in the USA, closely connected to the philosophical traditions of pragmatism and instrumentalism (Dewey, 1916/2007; Hickman, 1992). From a progressive educational perspective, both learning and experiencing is a lifetime process and goes together with human development (Dewey, 1916/2007).

To understand the concept of action, in a sense of executing a particular behavior in a particular situation, we need to refer back to ethics. For Aristotle, actions are done for the sake of things other than themselves and are aimed for some purpose (Ackrill, 1978). All action taken is, for Aristotle, leading toward achieving eudaimon (the highest good), which all human activity is directed toward. Aristotle distinguished between voluntary and involuntary, or non-voluntary, action. Voluntary action wears a notion of responsibility for its effects. It is guided by either desire or practical reason (Thomson et al., 2004). Stoics' philosophy of action also refers to the issue of appropriateness of actions and their virtuous nature. Humans need to be conscious of acting and understand their actions. From the ethical standpoint, the Stoics distinguish two different levels of appropriate actions: intermediate and perfect acts. They may share the same outward representation but they differ in human mindsets (Johnson, 2013). Intermediate acts are justifiable, whereas perfect ones are reasonable and harmonic, and executed by wise men (Johnson, 2013).

In relation to entrepreneurship, and for understanding the entrepreneurial venturing process as a result of planned behavior, the interest is put more on purposeful doing, not "happenings" to a person or mechanical reactions to some stimulus (reflexive behavior). In regards to happenings, action is a physical behavior that is to be executed and that generates some consequences but focusing on happenings is unpredictable and will most likely lead to different outcomes every time one tries to understand why an entrepreneur acted in a certain way. Instead, the interest for action in entrepreneurship would be more informed through investigating the intentional actions of entrepreneurs and their reasons for acting in an entrepreneurial way, based on a purposeful decision to act in a given situation.

Actions are the behaviors executed by a human being in a particular situation. Action orientation in entrepreneurship education demonstrates the behavioral nature of entrepreneurs in the sense that individuals respond to the consequences of their actions and readjust to act again. However, learning cannot be perceived as solely "actual doing," which is a quite limited and mechanistic view. Taking action is only one part of the learning process, nevertheless crucial for enabling learning from experience. What is important to stress, as needed in entrepreneurship, is not just any action, but action that is deliberate and intentional, and by that, it includes human aspects too.

Reflection has always been connected to philosophy and learning (Dewey, 1916/2007; Jay, 2005), but its importance in education has, during the last couple of decades, grown, thanks to the new winds that are currently blowing in higher education. These winds are closely connected to a movement of directing learning from a teacher-centered approach toward a more student-centered approach (DuFour, 2004). Through this, the pedagogical pendulum has moved from didactics toward experience-based approaches (Gibb, 1987; Roberts, 2012). In this development, the aspects of action, experience and reflection are seen as important ingredients for the development of knowledge through education.

Reflection may take a form of an assessment of "how or why we have perceived, thought, felt or acted" (Mezirow, 1990, p. 6), be part of problem solving (Ferry and Ross-Gordon, 1998), or synthesis of knowledge had and acquired (Dewey, 1938), addressed as a 708-abductive process (Dewey, 1938; Peirce, 1992). Not all humans have the ability inherent to reflect, as a pre-requisite for reflection is to be present to the nature of the experience, and open to its potential meanings (Rodgers, 2002, p. 850). However, all humans have the ability to learn how to reflect and extract meaning from experiences undertaken (Boud et al., 1985; Dewey, 1910/1997).

Theory of Planned Behavior (TPB)

Ajzen (1999) stated that Theory of Planned Behavior (TPB) considered as an extension to the theory of reasoned action. Dawkins and Frass, (2005) and Ajzen (2015) illustrated that TPB is an extension of the theory of reasoned action as it includes perceived behavioral control construct. It has evolved to being the most popular and influential framework in the study of human action (Ang et al., 2015). Shin (2012) demonstrated that attitudes and norms have different impact on behaviors in different cultural settings; where attitudes, personal needs, and perceived rights have significant influence on the individuals' behaviors from individualistic cultures. Moreover, social norms, duties, and obligations have significant influence on the behaviors of people from collectivistic cultures. The relation between attitudes and behaviour has been an area of main concern in social psychology for decades, denoting that the ability of attitudes to foretell behaviour is actually quite poor. Perhaps the most significant attempts to cure this problem have been the initiation of the Theory of Reasoned Action (TRA) and its successor, the Theory of Planned Behaviour (TPB) (Rise et al., 2010).

Attitudes have been found to affect and predict many behaviours (Jalilvand and Samiei, 2012). In TRA, attitude is denoted as the evaluative effect of positive or negative feeling of individuals in carrying out a particular behaviour (Gopi and Ramayah, 2007). TPB describes attitude towards a behaviour as "the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question". Attitude toward the behaviour relates to the degree to which an individual has a favourable or unfavourable evaluation, or appraisal, of the aimed behaviour. Overall, the more favourable the attitude toward the behaviour, then the firmer will be an individual's intention to do the behaviour. Attitude was identified as "the user's evaluation of the desirability of his or her using the system," a function of the subjective probability that the usage behaviour will lead to a specific outcome and a rating of the desirability of the outcome.

Attitude exhibits feelings that performing a behaviour would lead to a specific, and desirable, outcome, as a result of performing that behaviour (Baker, et al., 2007). Jalilvand and Samiei (2012) considered the target behaviour as the intention to travel, and the attitude is that toward visiting Isfahan. Also, Gopi and Ramayah (2007) deemed the two components of attitude as attitude towards physical object (internet, computer) and attitude towards behaviour or executing particular action (using internet for stock trading).

Subjective norm was suggested as a second determinant of intention. Within TPB, it is identified as "the perceived social pressure to perform or not to perform the behaviour" by the individual. Gopi and Ramayah (2007) also defined it as the individual's perception of the probability that the potential referent group or individuals approve or disapprove of carrying out the given behaviour. Individuals may be affected by family members, friends, colleagues and relatives (Jain et al., 2017). TPB views the role of social pressure to be more vital when the motivation to act in accordance with that pressure is greater. Motivation to comply is the degree to which the person desires to comply with the wishes of the other party. A component of subjective norm is normative belief, or the individual's perception of a substantial referent other's opinion about the individual's performance of the behaviour (Baker et al., 2007; Jalilvand and Samiei, 2012).

When Baker et al. (2007) applied TPB in the adoption context, subjective norm has been divided into two types of normative influence: including the influence of one's peers (e.g. peer influence); and the influence of one's superiors (e.g. superior influence). Although the judgements of these two distinct normative groups might vary from each other, they are still both anticipated to have a noteworthy influence on an individual's intention. Gopi and Ramayah (2007) suggested that since Subjective norm is revealed as a direct determinant of behavioural intention in TRA and TPB then it can be alleged that subjective norm have significant effect on intention to use internet stock trading as well. Also, there is a direct relationship between subjective norm and purchase intention when explicating attitudes toward purchasing counterfeit fashion goods among US college students (Jain et al., 2017).

In relating the TPB to current models of the transfer of training, the construct of subjective norm, apprehends under the wide category of work environment elements, such as work characteristics, post-training interventions, transfer climate, management and peer support and chance to transfer. Prevailing transfer literature has spent a great deal of effort on inspecting the effect of social support (mainly

supervisors, peers and subordinates) and organizational transfer climate on training transfer, but the outcomes are diverse. For example, quite a few recent studies about the effect of supervisory support on transfer motivation and training transfer have provided fluctuating results. Other than the possibility of the construct validity problem of the variables, one possible justification is that even if the transfer-enhanced behaviour from others would be sufficient for instigating positive trainees' transfer, these supporters may not be appreciated by the trainees (Cheng et al., 2015).

Perceived behavioural control is encompassed of two factors; control beliefs, which correlates to the sense of the self-availability of skills, resources and opportunities; and perceived facilitation, which correlates to an individual's consideration of the importance of those skills, resources and opportunities for the attainment of desired outcomes. Gopi and Ramayah (2007) assumed that since PBC is based partly on previous experience and partially from second hand information through the exchange of information by family, friends and factors then, it may constraint the level of perceived difficulty of carrying out the behaviour of interest. Given the expansion in resources (time, computer, network and money) and opportunities, the higher is the perceived control of the particular behaviour and thus the more probable is the implementation of the behaviour, in this case online stock trading transactions.

As per reviewing literature, it was observed that few studies had been tackling the subject in Egypt, with a less focus on Entrepreneurial Education. Therefore, this research is attempted to address the impact of Entrepreneurial Education, including Experience, Action, and Reflection, on Planned Behaviour dimensions, including Subjective Norms, Attitude and Perceived Control.

Research Methodology

According to Anselm Strauss and Juliet Corbin (1998), methodology in the field of social sciences is a mean of accumulating knowledge regarding the real world. A research purpose provides the basic directions for carrying out the research. The research purpose is to explain the impact of Entrepreneurial Education on the Planned Behavior in both; undergraduate and post graduates of the Egyptian universities. Accordingly, the entrepreneurial education had been investigated in the previous section and its dimensions had been developed to be Experience, Action and Reflection. Also, it had been claimed by Theory of planned Behavior (TPB) that behavior is interpreted by some personal values and attitude. The theory of planned behavior specified its dimensions to be; Subjective Norms, Perceived Behavioral Control and Attitude.

Therefore, the research framework developed is illustrated using the following figure:

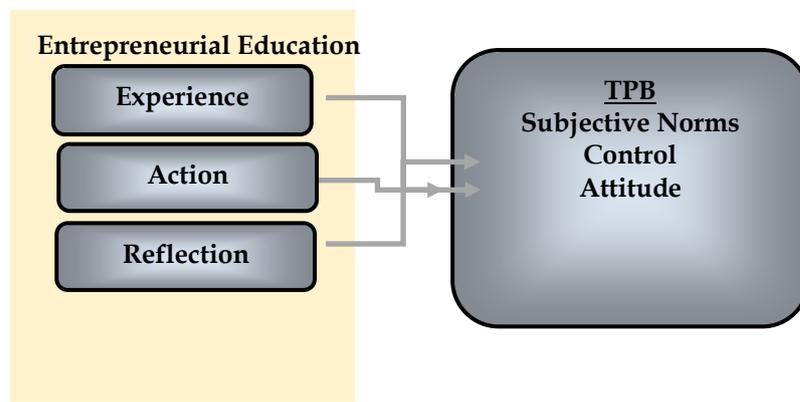


Figure 1 Research Framework

Thus, the research hypotheses could be stated as follows:

H₁: There is a significant positive effect of Entrepreneurial Education on Subjective Norms.

H_{1a}: There is a significant positive effect of Experience on Subject Norms.

H_{1b}: There is a significant positive effect of Action on Subject Norms.

H_{1c}: There is a significant positive effect of Reflections on Subject Norms.

H₂: There is a significant positive effect of Entrepreneurial Education on Behavior Control.

H_{2a}: There is a significant positive effect of Experience on Behavior Control.

H2b: There is a significant positive effect of Action on Behavior Control.

H2c: There is a significant positive effect of Reflections on Behavior Control.

H3: There is a significant positive effect of Entrepreneurial Education on Attitude.

H3a: There is a significant positive effect of Experience on Attitude.

H3b: There is a significant positive effect of Action on Attitude.

H3c: There is a significant positive effect of Reflections on Attitude.

The population of the study is represented by the students in the undergraduate stage who are supposed to be receiving entrepreneurial education courses in the Egyptian universities. A questionnaire was applied to factors tested and developed in English either face to face or online and included three parts and totally 51 questions. At the end of the questionnaire, some demographic questions from participants (Gender, Age, Income level and Education) were asked. A total of 400 questionnaires were collected. For analyzing data and evaluating results, SPSS and AMOS (version 24.00) were used. Descriptive analysis such as means, standard deviation and frequencies are calculated and regression and SEM models were conducted.

Findings

In this section, empirical study is conducted in order to test the research hypotheses. Table 1 shows the regression model for the effect of Experience on Subjective Norms, where there is a significant effect of Experience on Subjective Norms, as the corresponding P-values are less than 0.05 and the regression coefficients are greater than zero. In addition, R Square is 0.173, which means that Experience explains 17.3% of the variation in Subjective Norms.

Table 1: Regression Model of Experience on Subjective Norms

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square
	B	Std. Error	Beta			
(Constant)	0.998	0.064		15.612	0.000	0.173
Experience	0.403	0.041	0.416	9.783	0.000	

a Dependent Variable: Subjective Norms

Table 2 shows the regression model for the effect of Action on Subjective Norms, where there is a significant effect of Action on Subjective Norms, as the corresponding P-value is less than 0.05 and the regression coefficient is greater than zero. In addition, R Square is 0.051, which means that Experience explains 5.1% of the variation in Subjective Norms.

Table 2: Regression Model of Action on Subjective Norms

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square
	B	Std. Error	Beta			
(Constant)	1.174	0.085		13.774	0.000	0.051
Action	0.242	0.049	0.226	4.958	0.000	

a Dependent Variable: Subjective Norms

Table 3 shows the regression model where there is a significant effect of Reflection on Subjective Norms, as the corresponding P-value is less than 0.05 and the regression coefficient is greater than zero. In addition, R Square is 0.075, which means that Reflection explains 7.5% of the variation in Subjective Norms.

Table 3: Regression Model of Reflection on Subjective Norms

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	R Square
	B	Std. Error	Beta			
(Constant)	1.117	0.08		14.023	0.000	0.075
Reflection	0.296	0.049	0.274	6.097	0.000	

a Dependent Variable: Subjective Norms

Table 4 shows the regression model for the effect of Experience on Control, where there is a significant effect of Experience on Control, as the corresponding P-values are less than 0.05 and the

regression coefficients are greater than zero. In addition, R Square is 0.268, which means that Experience explains 26.8% of the variation in Control.

Table 4: Regression Model of Experience on Control

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square
	B	Std. Error	Beta			
(Constant)	0.859	0.065		13.276	0.000	0.268
Experience	0.54	0.042	0.518	12.948	0.000	

a Dependent Variable: Control

Table 6 shows the regression model for the effect of Action on Control, where there is a significant positive effect of Action on Control, as the corresponding P-values are less than 0.05 and the regression coefficients are greater than zero. In addition, R Square is 0.105, which means that Action explains 10.5% of the variation in Control.

Table 6: Regression Model of Action on Control

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square
	B	Std. Error	Beta			
(Constant)	1.011	0.089		11.359		0.105
Action	0.375	0.051	0.325	7.337	0.000	

a Dependent Variable: Control

Table 7 shows the regression model for the effect of Reflection on Control, where there is a significant positive effect of Reflection on Control as the corresponding P-values are less than 0.05 and the regression coefficients are greater than zero. In addition, R Square is 0.141, which means that Reflection explains 14.1 % of the variation in Control.

Table 7: Regression Model of Reflection on Control

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square
	B	Std. Error	Beta			
(Constant)	0.956	0.083		11.580	0.000	0.141
Reflection	0.437	0.050	0.376	8.666	0.000	

a Dependent Variable: Control

Table 8 shows the regression model for the effect of experience on Attitude, where there is a significant positive effect of Experience on Attitude, as the corresponding P-values are less than 0.05 and the regression coefficients are greater than zero. In addition, R Square is 0.294, which means that Experience explains 29.4 % of the variation in Attitude.

Table 8: Regression Model of Experience on Attitude

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square
	B	Std. Error	Beta			
(Constant)	0.804	0.054		14.753	0.000	0.294
Experience	0.484	0.035	0.542	13.799	0.000	

a Dependent Variable: Attitude

Table 9 shows the regression model for the effect of Action on Attitude, where there is a significant positive effect of Action on Attitude as the corresponding P-values are less than 0.05 and the regression coefficients are greater than zero. In addition, R Square is 0.055, which means that Action explains 5.5% of the variation in Attitude.

Table 9: Regression Model of Action on Attitude

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square
	B	Std. Error	Beta			
(Constant)	1.112	0.078		14.187	0.000	0.055
Action	0.232	0.045	0.235	5.16	0.000	

a Dependent Variable: Attitude

Table 9 shows the regression model for the effect of Reflection on Attitude, where there is a significant positive effect of Reflection on Attitude, as the corresponding P-values are less than 0.05 and the regression coefficients are greater than zero. In addition, R Square is 0.172, which means that Reflection explains 17.2 % of the variation in Attitude.

Table 9: Regression Model of Reflection on Attitude

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square
	B	Std. Error	Beta			
(Constant)	0.857	0.069		12.337	0.000	0.172
Reflection	0.414	0.042	0.415	9.756	0.000	

a Dependent Variable: Attitude

Table 10 shows the SEM analysis of the impact of Educational Entrepreneurship; Experience, Action and Reflection on Planned Behavior antecedents; Subjective Norms, Control, Attitude. It could be observed that there is a positive significant impact of Educational Entrepreneurship; Experience, and Reflection on Subjective Norms, as the estimates are 0.556, and 0.251 respectively, as well as P-values are all less than 0.05. On the other hand, Action is shown to have an insignificant influence on Subjective Norms, with P-value of 0.967, which is greater than 0.05. Also, the R square is 0.316, which means that the model explains 31.6% of the variation in Subjective Norms.

In addition, it could be observed that there is a positive significant influence of Educational Entrepreneurship; Experience, and Reflection on Control, as the estimates are 0.649, and 0.356 respectively, as well as P-values are all less than 0.05. On the other hand, Action is shown to have an insignificant influence on Control, with P-value of 0.836, which is greater than 0.05. Also, the R square is 0.419, which means that the model explains 41.9% of the variation in Control.

Moreover, it could be observed that there is a positive significant influence of Educational Entrepreneurship; Experience, Action, and Reflection on Attitude, as the estimates are 0.280, 0.154, and 0.346 respectively, as well as P-values are all less than 0.05. Also, the R square is 0.237, which means that the model explains 23.7% of the variation in Attitude.

Table 10: SEM Analysis of Educational Entrepreneurship on Planned Behavior antecedents

			Estimate	P-value	R Square
Subjective Norms	<---	Experience	.556	***	0.316
Subjective Norms	<---	Action	-.004	.967	
Subjective Norms	<---	Reflection	.251	***	
Control	<---	Experience	.649	***	0.419
Control	<---	Action	.017	.836	
Control	<---	Reflection	.356	***	
Attitude	<---	Experience	.280	***	0.237
Attitude	<---	Action	.154	.043	
Attitude	<---	Reflection	.346	***	

Figure 2 shows the SEM model conducted using AMOS. The model fit indices; CMIN/df = 1.682, GFI = 0.946, CFI = 0.964, AGFI = 0.929, and RMSEA = 0.039 are all within their acceptable levels.

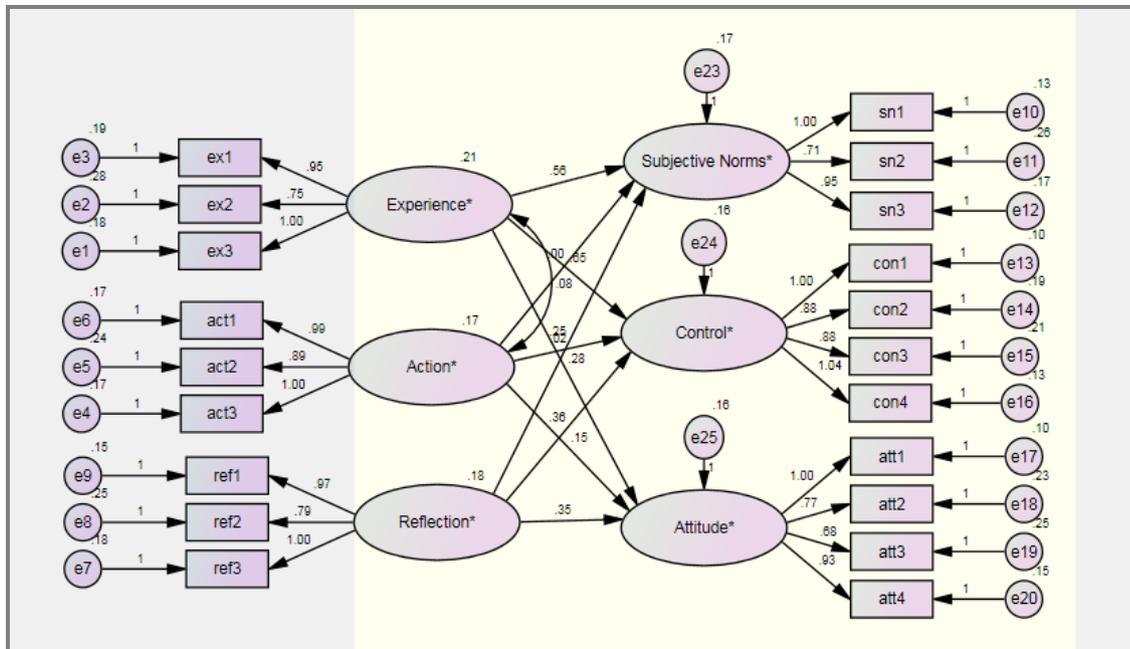


Figure 2: Impact of Entrepreneurial Education on Planned Behavior antecedents

Conclusion

This research aim includes many objectives that differ between exploring the state of entrepreneurial education in Egyptian universities and its impact on the planned behavior of students, and therefore its effect on development in Egypt. So, all steps followed in this research, including literature review, selecting the research method, targeting population and sample study, and finally analyzing data, mainly serve these referred objectives. Testing hypotheses reached the same results that shown by the reviewed literature, as all effects of entrepreneurial education; experience, action, and reflection, on the theory of planned behavior; subjective norms, control, and attitude, are significant and positive, as the correspondent P-values are less than 0.05 and the values of coefficients are greater than zero. Moreover, it could be observed that the impact of the entrepreneurship education is the highest on Control, with R square of 0.419. The impact of entrepreneurship education on subjective norms comes in the second rank, with R square of 0.316, while the least impact of entrepreneurship education is found on Attitude, with R square of 0.237.

Finally, Stakeholders in Egypt; as policy makers and curriculum developers can benefit from results found by this research. They can implement effective efforts to achieve such development at many different levels of society that mainly depend on education, as it shown by the research findings that applying entrepreneurial education in Egypt can be a good method.

References

- Ackrill, J.L., 1978. Aristotle on action. *Mind*, 87(348), pp.595-601.
- Ajzen, I., 1999. Dual-mode processing in the pursuit of insight is no vice. *Psychological Inquiry*, 10(2), pp.110-112.
- Boud, D., Keogh, R. and Walker, D., 1985. Promoting reflection in learning: A model. *Reflection: Turning experience into learning*, pp.18-40.
- Burgoyne, J.G. and Hodgson, V.E., 1983. Natural learning and managerial action: A phenomenological study in the field setting. *Journal of management studies*, 20(3), pp.387-399.
- Cheng, E.W., Sanders, K. and Hampson, I., 2015. An intention-based model of transfer of training. *Management Research Review*, 38(8), pp.908-928.
- Cheng, Y., Liang, J. and Leung, L., 2015. Social network service use on mobile devices: An examination of gratifications, civic attitudes and civic engagement in China. *new media & society*, 17(7), pp.1096-1116.
- Cope, J. and Watts, G., 2000. Learning by doing—an exploration of experience, critical incidents and reflection in entrepreneurial learning. *International Journal of Entrepreneurial Behavior & Research*, 6(3), pp.104-124.
- Cope, J., 2005. Toward a dynamic learning perspective of entrepreneurship. *Entrepreneurship theory and practice*, 29(4), pp.373-397.

- Corbett, A.C., 2005. Experiential learning within the process of opportunity identification and exploitation. *Entrepreneurship Theory and Practice*, 29(4), pp.473-491.
- Dawkins, C.E. and Frass, J.W., 2005. Decision of union workers to participate in employee involvement: An application of the theory of planned behaviour. *Employee Relations*, 27(5), pp.511-531.
- Dewey, J., 1916. Nationalizing education. *The Journal of Education*, 84(16 (2102)), pp.425-428.
- Dewey, J., 1938. 1997. *Experience and education*.
- Dewey, J., 2007. *Experience and education*. Simon and Schuster.
- Dhliwayo, S., 2008. Experiential learning in entrepreneurship education: A prospective model for South African tertiary institutions. *Education+ Training*, 50(4), pp.329-340.
- DuFour, R., 2004. What is a "professional learning community"? *Educational leadership*, 61(8), pp.6-11.
- Edelman, L.F., Manolova, T.S. and Brush, C.G., 2008. Entrepreneurship education: Correspondence between practices of nascent entrepreneurs and textbook prescriptions for success. *Academy of Management Learning & Education*, 7(1), pp.56-70.
- Ferry, N.M. and Ross-Gordon, J.M., 1998. An inquiry into Schön's epistemology of practice: Exploring links between experience and reflective practice. *Adult Education Quarterly*, 48(2), pp.98-112.
- Fiet, J.O., 2001. The theoretical side of teaching entrepreneurship. *Journal of business venturing*, 16(1), pp.1-24.
- Freire, P. and Macedo, D., 1996. A dialogue: Culture, language, and race. *Breaking free: The transformative power of critical pedagogy*, pp.199-228.
- Gibb, A.A., 1987. Enterprise culture—its meaning and implications for education and training. *Journal of European Industrial Training*, 11(2), pp.2-38.
- Gopi, M. and Ramayah, T., 2007. Applicability of theory of planned behavior in predicting intention to trade online: Some evidence from a developing country. *International Journal of Emerging Markets*, 2(4), pp.348-360.
- Hickman, C., 1992. *Mind of a manager soul of a leader*. University of Texas Press.
- Itin, C.M., 1999. Reasserting the philosophy of experiential education as a vehicle for change in the 21st century. *Journal of experiential Education*, 22(2), pp.91-98.
- Jain, M., Miller, L., Belt, D., King, D. and Berwick, D.M., 2006. Decline in ICU adverse events, nosocomial infections and cost through a quality improvement initiative focusing on teamwork and culture change. *BMJ Quality & Safety*, 15(4), pp.235-239.
- Jay, M., 2005. *Songs of experience: Modern American and European variations on a universal theme*. Univ of California Press.
- Johnson, M., 2013. *The body in the mind: The bodily basis of meaning, imagination, and reason*. University of Chicago Press.
- Kolb, D., 1984. Experiential learning as the science of learning and development.
- LoBiondo-Wood, G. and Haber, J., 2014. *Nursing Research-E-Book: Methods and Critical Appraisal for Evidence-Based Practice*. Elsevier Health Sciences.
- Mezirow, J., 1990. How critical reflection triggers transformative learning. *Fostering critical reflection in adulthood*, 1, p.20.
- Packer, M.J. and Goicoechea, J., 2000. Sociocultural and constructivist theories of learning: Ontology, not just epistemology. *Educational psychologist*, 35(4), pp.227-241.
- Peirce, C.S., 1992. Reasoning and the Logic of things: The Cambridge Conferences Lectures 1898. edited by Kenneth Laine Ketner; with an introduction by Kenneth Laine Ketner and Hilary Putnam.
- Politis, D., 2005. The process of entrepreneurial learning: A conceptual framework. *Entrepreneurship theory and practice*, 29(4), pp.399-424.
- Politis, D., 2008. Does prior start-up experience matter for entrepreneurs' learning? A comparison between novice and habitual entrepreneurs. *Journal of small business and Enterprise Development*, 15(3), pp.472-489.
- Rae, D. and Carswell, M., 2001. Towards a conceptual understanding of entrepreneurial learning. *Journal of small business and enterprise development*, 8(2), pp.150-158.
- Rae, D., 2000. Understanding entrepreneurial learning: a question of how?. *International Journal of Entrepreneurial Behavior & Research*, 6(3), pp.145-159.
- Rasmussen, E.A. and Sørheim, R., 2006. Action-based entrepreneurship education. *Technovation*, 26(2), pp.185-194.
- Revans, R.W., 1982. *The origins and growth of action learning*. Studentlitteratur.
- Reza Jalilvand, M. and Samiei, N., 2012. The effect of electronic word of mouth on brand image and purchase intention: An empirical study in the automobile industry in Iran. *Marketing Intelligence & Planning*, 30(4), pp.460-476.
- Rideout, E.C. and Gray, D.O., 2013. Does entrepreneurship education really work? A review and methodological critique of the empirical literature on the effects of university-based entrepreneurship education. *Journal of Small Business Management*, 51(3), pp.329-351.
- Rise, J., Sheeran, P. and Hukkelberg, S., 2010. The role of self-identity in the theory of Planned behavior: A meta-analysis. *Journal of Applied Social Psychology*, 40(5), pp.1085-1105.

- Roberts, J.W., 2012. *Beyond learning by doing: Theoretical currents in experiential education*. Routledge.
- Rodgers, C., 2002. Defining reflection: Another look at John Dewey and reflective thinking. *Teachers college record*, 104(4), pp.842-866.
- Shin, D.H., 2012. Cross-analysis of usability and aesthetic in smart devices: what influences users' preferences?. *Cross Cultural Management: An International Journal*, 19(4), pp.563-587.
- Tenenbaum, G., Naidu, S., Jegede, O. and Austin, J., 2001. Constructivist pedagogy in conventional on-campus and distance learning practice: An exploratory investigation. *Learning and instruction*, 11(2), pp.87-111.
- Teo, T. and Beng Lee, C., 2010. Explaining the intention to use technology among student teachers: An application of the Theory of Planned Behavior (TPB). *Campus-Wide Information Systems*, 27(2), pp.60-67.
- Thompson, S.C., Gregg, L. and Niska, J.M., 2004. Professional learning communities, leadership, and student learning. *RMLE Online*, 28(1), pp.1-15.
- White Baker, E., Al-Gahtani, S.S. and Hubona, G.S., 2007. The effects of gender and age on new technology implementation in a developing country: Testing the theory of planned behavior (TPB). *Information Technology & People*, 20(4), pp.352-375.
-