

Shapero's Model: A Veritable Tool for Explaining Entrepreneurial Intentions and Attitudes among Management Technology Students in Mautech Yola, Adamawa State, Nigeria.

Julius Tumba Ndaghu ^{*1}, Joy A.M Gwems², Helavalada Wajiga³,
Mary Vasumu Augustine⁴

^{1, 3, 4} Department of management Technology, School of Management and Information Technology, Modibbo Adama University of Technology Yola, Adamawa State Nigeria.

²Department of Business Administration, Bingham University Karu, Nasarawa State, Nigeria

ABSTRACT: *Entrepreneurship is considered as a life blood for any meaningful growth and development around the world. Entrepreneurship process is initiated from the development of the entrepreneurial intentions. This is inclined to three fundamental variables; perceived desirability, propensity to act and perceived feasibility. The research work applied entrepreneurial intention model developed hypothetically in line with Shapero's Model. The sample size was 107 respondents. The data collection instruments were questionnaires. Data collected were analyzed by descriptive statistics and multiple regression analysis using SPSS version 16. The descriptive statistics were presented through percentages, means, standard deviations and frequencies. While this research was primarily directed toward university students, its conclusion was significant in providing answers to most issues concerning the circumstances surrounding entrepreneurship and business development among the Nigerian graduates. The study concludes that it was beneficial to offer entrepreneurship courses in view of the fact that it build up the intention and the fundamental aptitude to be an entrepreneur, also being an entrepreneur could bring about greater contentment in one's life . The research work recommends that entrepreneurship and business development curriculum should be expanded to cover other sensitive areas of businesses where the current curriculum does not. This will facilitate the students to have the understanding of the entrepreneurial environment and to have an indispensable aptitude required to become an entrepreneur. The research work further proposes that, the Nigerian government should make available resources such as funds for the graduates who want to become entrepreneurs since entrepreneurship is a kind of win- win partnership between the government and the entrepreneurs.*

Keywords: *Shapero's Model, Entrepreneurship, Entrepreneurial Intentions, Entrepreneurial Environment.*

I. INTRODUCTION

Entrepreneurship is a very essential career choice. People's vocational inclinations are gradually moving toward self-reliance. This is because of the changes in the political and socio-economical environment which have resulted in fewer opportunities for continuous public and private organizational employment. On the macro-level, econometric studies revealed that small and medium enterprises contribute considerably to job creation and economic growth (McStay D. 2008).

This research work present an special window of opportunity to examine the function of Shapero's model in explaining the attitude of management technology students towards entrepreneurship and business development program in the MAUTECH Yola Adamawa state.

II. OBJECTIVES OF THE STUDY

Normally Nigerian graduates have in the past had a guarantee of employment either with the government or in the private sector; hence the graduates were educated to be employment hunters instead of job creators. Therefore, despite this paradox, entrepreneurship and business development curriculum have paid little or no attention to entrepreneurial attitudes, beliefs and values of the students. According to Maina, (2006) Stimulating entrepreneurship interest among the undergraduate students is one sure way of curbing unemployment.

A Study also attempted to connect entrepreneurial intentions and venture creation (Carter et al, 2003). This research work seeks to relate the generally accepted model of entrepreneurial attitudes, by Shapero in the Nigerian environment, focusing on the final year undergraduates students of MAUTECH Yola, Adamawa state. The research seeks to clarify some particular state of affairs in the students' milieu, and to further consider some individual outlook that could have some considerable weight on their preference to choose and form new business ventures. There is only a few researches that has an actual Shaperos Model in clearing up the

importance of entrepreneurial attitudes amongst undergraduates students in tertiary institutions in Nigeria. Therefore this research work is determined to fill in the possible knowledge gap by examining the relevance of Shapero's model in revealing the determinants of intentions and attitudes of undergraduates of students towards entrepreneurship and business development.

III. LITERATURE REVIEW

Models that have confidence on Ajzen theoretical outline keeps on dominating some researches in intentions and attitudes. Intentions signify the extent of enthusiasm toward some upcoming targeted behavior (Akponi, M. 2009). Intentions vigorously predict and elucidate the behavior. On the other hand, attitudes in the direction of a behavior will surely have an effect on intentions. Exogenous dynamics use intentions and behavior through the attitudes. In their theory of reasoned action, attitudes in the direction of a behavior carry two factors: an attitude based on expectancies and an attitude based on social norms (Ajzen, 1987). Ajzen's theories of planned behavior take the attitude representing the beauty of a behavior and put in another attitude, perceived behavioral control. This characterizes perception that the behavior is within the decision maker's control, an indispensable prerequisite for the behavior to be individually feasible Aminu, A.A. (2009). Intentions at this point, connote the unambiguous aimed behavior of kick- starting an enterprise. This intended behavior is, by definition, deliberate (Audet, J. 2000)

IV. THE SHAPERO'S MODEL

Shapero's model of new-business origination states that the preferences to start new business enterprises call for first the initiator and then followed by precipitating event. Founders need to take into cognizance initiation of new businesses which would be realistic. Initiating a new business enterprise would need to a credible process of implementation. Moreover reliability needs an entry point for perceptions of feasibility and desirability in addition to the inclination to take action upon a given window of opportunity. Figure 1 graphically illustrate Shapero's model as applied to intentions. Each arrow represents a testable hypothesis.

Shapero suggested that the method of forming intentions is likely to be versatile and predisposition to act may cause a meandering weight on some relationships in the model, therefore there is a need to test for the moderating effects by propensity to act. Shapero further proposed that intentions might be a function of a threshold level of feasibility and desirability perceptions, thus we can take into cognizance the threshold effects.

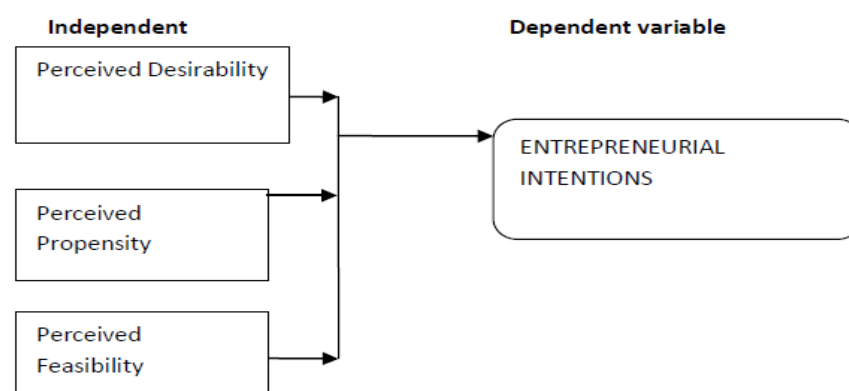
V. SHAPERO'S MODEL EXPLAINING ENTREPRENEURIAL INTENTIONS

Shapero (1982) has endorsed a model on factors that manipulates entrepreneurial intentions. He categorically states that desirability, feasibility and a propensity to act are the major issue controlling a person's intention to initiate a new business. In addition, some unambiguous desirability and perceived self-efficacy are portrayed as an essential fundamentals for the sensitivity of desirability and feasibility respectively.

Shapero recognized three categories of key changeable factors in this relationship;

- (i) One dependant variable, entrepreneurial intentions (EI), which correspond to the expected entrepreneurial behavior of the final year undergraduate students of MAUTECH who are the respondents in this study.
- (ii) Three Independent variables that corresponds to the individual attitudes of the respondents; these variables include; perceived desirability; perceived feasibility and propensity to act.

Figure 1: Shapero's Model of Entrepreneurial Intentions



Source: Van Auken, Fry and Stephens (2006).

VI. METHODOLOGY

The purpose of this research work was to explore the Shapero's model in determining the entrepreneurial intentions among final year undergraduate students of the department of management technology, MAUTECH Yola Adamawa state. The entrepreneurial process view personalities as the major point of study. Shapero's model was functional in the clarification of these intentions by examining the effect of perceived desirability; feasibility and propensity to act among individual students. The population was limited to all the final year undergraduate students of management technology MAUTECH, Yola Adamawa state. The identified respondents were those at the critical decision making points in their careers and included only the final year students, hence facilitating to ensure that entrepreneurial intentions or lack of it were really expressed.

Table 1: Demographic characteristics of respondents

Variable	Dimension	Frequency	Percentage
Gender	Male	79	73.8
	Female	48	26.2
	Total	107	100
Age	18-21	05	4.7
	22-25	68	63.6
	26-29	23	21.5
	30-33	07	6.5
	34 and above	4	3.7
	Total	107	100
	Marital Status	Single	95
Married		11	10.3
Divorced		01	0.9
Widowed		0	0.0
Total		107	100
Business background of Parents/ Guardian	Parent(s)/Guardian(s) have been in business.	63	58.9
	Parent(s)/Guardian(s) have not been in business.	44	41.1
	Total	107	100
Source: Field Survey, 2016			

Discussions: The research work targeted 107 respondents in collecting data with regard to the factors shaping entrepreneurial intentions among management students in MAUTECH. According to the findings, 73.8% of the respondents were male while 26.2% of the respondents were female. 41.1% of the students indicated that their parent(s)/guardian(s) have been in one form of business or the other, while 58.9% have said that their parent(s)/guardian(s) have not been in business.

VII. ANALYSIS AND RESULTS

Table 2: Perceived Desirability of entrepreneurship and business development courses which develop entrepreneurial characteristic.

	Impossible	Slightly possible	Neutral	possible	Very possible	mean	Stdev
Knowledge about the entrepreneurial environment	14	17	19	30	27	2.58	0.60
The preference to be an entrepreneur	18	14	17	24	34	2.62	0.58
The necessary abilities to be an entrepreneur	14	19	22	28	24	2.74	0.59
The intention to be an entrepreneur	21	29	22	24	11	3.43	0.62
Greater recognition of the entrepreneur's figure	16	19	17	28	27	2.59	0.60
Source: Field Survey, 2016							

The study wanted to find out the likelihood of offering entrepreneurship and business development program which increases the indicated entrepreneurial characteristics. According to this study, the respondents pointed out that it was very possible to take entrepreneurship and business development program since it increases the intention to be an entrepreneur as shown by a mean of 3.43, the respondents also stated that it was very possible to take entrepreneurship in order to increase the indispensable aptitude to be an entrepreneur as

pointed out by a mean of 2.74, the respondents further stated that it was possible to offer entrepreneurship and business development program since, it enhances the tendency to be an entrepreneur. Greater recognition of the entrepreneur's figure and knowledge about the entrepreneurial environment as shown by a mean of 2.59. This is in accord with research carried out by Shaver and Scott in 1991 on how an individual's aptitude is adequate to keep under control any likely hitch. These findings are also in line with the literature where Krueger et. Al, (2000) says that particular desirability is linked to individual's standards and vocational preferences; individuals who uphold self-determination would likely prefer to be an entrepreneur if he perceives entrepreneurship as a vocational option that is connected with an independent lifestyle.

Table 3: Extent that has helped develop any of the aspects

	Very great extent	Great extent	Moderate extent	Little extent	No extent	mean	Stdev
Knowledge about the entrepreneurial environment	14	17	24	35	17	2.63	0.61
The preference to be an entrepreneur	37	17	9	24	20	3.68	0.63
The necessary abilities to be an entrepreneur	7	31	17	15	37	2.72	0.59
The intention to be an entrepreneur	13	17	22	17	38	2.82	0.60
Greater recognition of the entrepreneur's figure	28	19	17	16	27	2.89	0.59

Source: Field Survey, 2016

This research work intends to find out the extent to which entrepreneurship and business development program had helped the respondents to enhance any of the mentioned features. The study revealed that, the entrepreneurship module has facilitated the respondents to pull out their preferences to be a business ventures owner to a very great extent as pointed out by a mean of 3.68, they also revealed that the program has helped them increase a greater recognition of the entrepreneur's figure as pointed out by a mean of 2.89. The study also showed that the program has helped the respondents boost their intention to be a business owner to a very great extent as pointed out by a mean of 2.82, moreover they specified that the program has helped them to boost their skill to be an entrepreneur and to advance know-how about their entrepreneurial environment to a great extent as shown by a mean of 2.72 and 2.63 respectively.

Table 4: Level of agreement with the given sentences

	Strongly agree	agree	undecided	disagree	Strongly disagree	mean	Stdev
Being an entrepreneur implies more advantages	13	20	27	17	30	2.49	0.60
A career as entrepreneur is attractive to me	14	18	24	17	34	2.61	0.59
If I had the opportunity and resources, I'd like to start a firm	14	12	41	16	24	2.93	0.59
Being an entrepreneur would entail great satisfactions	43	21	10	22	11	3.72	0.63
I would rather be an entrepreneur	16	36	14	16	25	3.04	0.59

Source: Field Survey, 2016

The study intended to find out the point of consistency of the respondents on the sentences involving the perceived desirability. The findings revealed that the respondents stoutly agreed that being an entrepreneur would signify a greater satisfactions as pointed out by a mean of 3.72, they strongly agreed that in the midst of different vocational options, they would prefer to be an entrepreneur as revealed by a mean of 3.04, they further decided that if they would have the chance and adequate capital, they would like to start a firm as revealed by a mean of 2.93, they also strongly agreed that a vocation as an entrepreneur would be attractive to them and that for them to be an entrepreneur suggest more merits than demerits revealed by a mean of 2.61 and 2.49 respectively.

Table 5: Perceived Feasibility- Level of detailed knowledge on measures to support firm creation.

	Absolute ignorance	Little ignorance	undecided	knowledgeable	Complete knowledge	mean	stdev
Specific training for young entrepreneurs	15	24	17	35	17	2.92	0.59
Loans in specially favourable terms	24	12	15	21	35	2.64	0.61
Technical aid to start the business	7	31	17	15	37	2.72	0.59
Business networks	13	17	22	17	38	3.11	0.60
Consulting services in favourable terms	15	13	31	27	21	2.94	0.59
Market accessibility in favourable terms	12	19	18	35	23	2.59	0.61
Favourable policies to start businesses	23	18	21	12	33	2.89	0.59
Readily available opportunity to start the businesses	34	25	15	16	17	3.44	0.62

Source: Field Survey, 2016

The research work intends to find out an in depth knowledge of the respondents on the process to sustain new business creation. The findings revealed that the respondents showed that they had a perfect information on the available chances to start a businesses and business as pointed out by a mean of 3.44 and 3.11 respectively. They also disclosed that they were well-informed on some of the strategies for students entrepreneurs, consulting services in favourable conditions to initiate new businesses ventures as shown by a mean of 2.92, they also disclosed that they were aware of the technical support to initiate new business ventures as revealed by a mean of 2.7, they also indicated that they were well - informed about loans in special and market openness in favourable conditions as pinpointed by a mean of 2.59.

Table 6: Level of agreement of the respondents on the given statements

	Strongly agree	agree	undecided	disagree	Strongly disagree	mean	Stdev
Entrepreneurial activity clashes with the culture in my religion	18	16	10	25	38	2.54	0.61
The entrepreneur's role in the economy is not sufficiently recognized	25	14	9	24	35	2.69	0.59
Many people consider hardly acceptable to be an entrepreneur	7	18	16	23	43	2.33	0.64
Entrepreneurial activity is considered too risky to be worth while	6	19	21	17	44	2.21	0.66
It is commonly thought that entrepreneurs take advantage of others	19	13	41	12	22	2.89	0.59

Source: Field Survey, 2016

The study wanted to find out the point of conformity of the respondents on the sentences relating to perceived viability. According to the result from this analysis , the respondents strongly agreed that it is generally believed that business owners will take advantage of others as revealed by a mean of 2.89, they also strongly agreed that the business owners function in the economy is not adequately acknowledged as disclosed by a mean of 2.69, they also agreed that entrepreneurial activity is considered too risky to be worthwhile as revealed by a mean of 2.21.

Table 7: Importance of the factors in making a choice whether to become an entrepreneur

	Not at all very important	Slightly important	neutral	important	Very important	mean	Stdev
Economic opportunity(Wealth)	36	23	14	17	17	3.43	0.61
Autonomy	22	20	9	20	36	2.80	0.59
Authority	17	16	37	17	20	2.72	0.60
Challenge	13	14	22	17	41	2.5	0.62
Self-realization and participation in the whole process	15	19	24	16	33	2.64	0.60
Source: Field Survey, 2016							

The study intends to find out the magnitude of some factors in making a choices to become an entrepreneur, the finding revealed that respondents disclosed that economic prospect is key in choosing to become a new business owner as indicated by a mean of 3.43, they also pointed out thatt autonomy is very important in making favourable choice to become a better entrepreneur as revealed by a mean of 2.80, they further stated that authority is very crucial in choosing to be an entrepreneur as shown by a mean of 2.72, the respondents also showed that self-realization and participation in the whole procedures is critical in choosing the vocational option of an entrepreneur as revealed by a mean of 2.64

Table 8: Propensity to Act, the Behaviors to develop enterprise

	Very great extent	Great extent	Moderate extent	Little extent	No extent	mean	Stdev
Exporting a significant share of production	3	18	48	21	17	2.6	0.62
Introducing regularly new products	17	34	31	14	11	3.62	0.61
Introducing regularly new processes of production	14	5	30	36	22	3.42	0.60
Enlarging your firm	13	6	32	35	21	2.52	0.60
Developing R&D projects	7	9	29	27	39	2.50	0.62
Planning the different areas of the firm	15	4	25	36	27	2.51	0.62
partnering with other firms	6	5	28	26	41	2.0	0.70
Offer specialized training for employees	17	19	27	40	4	2.7	0.59
Source: Field Survey, 2016							

This research study sought to find out the extent to which the respondents would carry out the acknowledged behaviours to grow their business ventures. the findings also disclosed that, bringing in latest processes of production will develop their new businesses to a very great extent as depicted by a mean of 3.62, it further depicted that introducing frequently new products for the consumers expands the business ventures to a very great extent as depicted by a mean of 3.42 ,they also showed that launching peculiar training for employees can expand the business venture to a very great extent as depicted by a mean of 3.1 ,they also indicated that expanding the business process can fast track development of the business to a great extent as revealed by a mean of 2.7,they further disclosed that exporting a significant share of production can develop the new business to a great extent as revealed by a mean of 2.6, this was in accordance with studies carried out by Krueger in 1993. The study establishes that when predisposition to act was low, entrepreneurial intentions were not likely to develop, and perception of desirability becomes sole predictor of intentions.

VIII. REGRESSION ANALYSIS

A multiple regression analysis was carried out using the statistical package SPSS version 16. This was to assess relationship with other variables (independent) on the entrepreneurial intentions among management technology students of MAUTECH.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.784(a)	0.647	0.586	0.93542

Coefficient of determination clarify the degree to which variation in the dependent variable can further be explained by the percentage change in the dependent variable (Entrepreneurial Intentions) that is explained by the independent variables (Perceived Desirability, Propensity to Act, Perceived Feasibility). The three independent variables that were analyzed explained that only 64.7% of the aspect influencing entrepreneurial intentions among management technology students of MAUTECH as represented by the R Square. Consequently some dynamics which have not been studied under this research contributes 35.3% of the entrepreneurial intentions among the students of management technology, MAUTECH Yola. Thus there is a need for a further research to be carried out in order to explore the other attribute that influences entrepreneurial intentions among the management technology students of MAUTECH Yola.

Table 11: ANOVA (b)

Model	Sum of Squares	Df	Mean Square	F	Sig.
1. Regression	37.648	3	12.893	14.894	0.000(a)
residual	21.657	26	0.872		
Total	60.326	29			

- a. **Predictors:** (Constant), perceived desirability, propensity to act, perceived feasibility.
- b. Dependent Variable: entrepreneurial.

The significance value is 0.000 which is less than 0.05 as a result the model is statistically important in predicting how apparent desirability, propensity to act and perceived feasibility to have an effect on the entrepreneurial intentions among the management technology students of MAUTECH Yola Adamawa state. The F critical at 5% level of significance was 1.32. Since F calculated is greater than the F critical (value = 14.894), this indicates that the overall model was significant.

Model	Unstandardized Coefficients	Standardized Coefficients Beta	t	Sig.
	B			
1 (Constant)	0.235		0.290	0.004
Perceived desirability.	0.821	0.769	5.869	0.000
Propensity to act	0.141	0.148	0.935	0.008
Perceived feasibility	0.086	0.123	0.688	0.007

Dependent Variable: Knowledge of the entrepreneurial environment. The researcher carried out a multiple regression analysis to explain the entrepreneurial intentions among the management technology students of MAUTECH Yola Adamawa state.

The equation for the three variables ($Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$) becomes: $Y = 0.821X_1 + 0.141X_2 + 0.086 X_3 + 0.235$ Where Y is the dependent variable (entrepreneurial intentions), X_1 is the perceived desirability variable, X_2 is propensity to act and X_3 is perceived feasibility. From the regression equation found, taking all other aspect into account (perceived desirability, propensity to act, perceived feasibility) constant at zero, entrepreneurial intentions will be 0.235. The data analysis revealed that taking all other independent variables at zero, a part increase in perceived desirability will lead to a 0.821 increase in entrepreneurial intentions; a unit increase in propensity to act will lead to a 0.115 increase in entrepreneurial intentions, a unit increase in perceived feasibility will lead to a 0.092 increase in entrepreneurial intentions. These deduce that perceived desirability contribute more to entrepreneurial intentions among the management technology students of MAUTECH Yola Adamawa state followed by the propensity to act strategies. At 5% level of significance and 95% level of confidence, perceived desirability had a 0.000 level of significance, propensity to act showed a 0.008 level of significant, perceived feasibility established a 0.007 level of significant thus, the most significant factor is perceived desirability.

IX. CONCLUSION

The research work concludes that it was promising to offer entrepreneurship and business development program since it was establish that it could create intentions which can produce the aptitude and enthusiasm to become an entrepreneur. In addition, being a business ventures owner could entail great satisfactions through employment generation, improvement of gross domestic products (GDP), improvement in the living standard, economic independence, harnessing the available local resources, reducing unrest and social tensions and bringing about development in all parts of Nigeria. Initiating frequently new methods and new goods or services for the consumers will surely go a long way in the growth and development of businesses. Finally, the economic opportunity and autonomy are very critical in deciding whether to be an entrepreneur or not, and that

establishing the type of vocational option an entrepreneur actually prefers will correspond to his/her entrepreneurial achievements.

X. RECOMMENDATIONS

This research work recommends that entrepreneurship and business development curriculum should be expanded to cover other sensitive areas of businesses where the current curriculum does not.

This will facilitate the students to have the understanding of the entrepreneurial environment and to have the indispensable aptitude required to become an entrepreneur. The research work additionally proposes that, the Nigerian government should make available resources as funds for the graduates who want to become entrepreneurs since entrepreneurship is a win-win partnership between the government and the entrepreneurs. Furthermore, the work recommends that the Nigerian government should develop research and development projects that will assist in providing the adequate information with respect to the practice of entrepreneurship. In addition, professional training should be provided to the imminent entrepreneurs in order to boost the efficiency and effectiveness of the goods and services provided to their consumers. Finally, the study recommended that entrepreneurial organizations should form trade fairs and seminars as it will go a long way in ensuring that the entrepreneurial functions and responsibilities are satisfactorily recognized in the Nigerian economy.

References

- [1] Ajzen, I. (1987). Attitudes, traits and actions: *Dispositional prediction of behavior in social psychology*. Advances in Experimental Social Psychology, 20, 1-63. Baruch, Y. (2004), *Managing Careers*, Pearson, Harlow.
- [2] Akponi, M. (2009). entrepreneurship education (EE) for all students in higher education institutions in Nigeria: a means to sustainable development. *Journal of sustainable development in Africa* (volume 11, no.1, 2009).
- [3] Aminu, A.A. (2009). *Entrepreneurship theory and practice*, Compaq publishers, Maiduguri, Nigeria.
- [4] Audet, J. (2000). Evaluation of two Approaches to Entrepreneurial Education Using an intentions based Model of venture Creation. *Academy of Entrepreneurship Journal* 6 (1): 57 – 63
- [5] Auken, H., Fry, F., Stephens, P. (2006), The influence of role models on entrepreneurial intentions, *Journal of Developmental Entrepreneurship*, Vol. 11 No.2, pp.157-67.
- [6] Carter, N., Gartner W., Shaver K. & Gatewood E. (2003). The career reasons of nascent entrepreneurs. *Journal of Business Venturing*, 18: 13-39. CBK Annual Economic Review, (2002).
- [7] Krueger N.F.J., Reilly, M.D. & Carsrud A.L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5): 411-432
- [8] Maina, P W. (2006) *Integrated Entrepreneurship Education*, Botswana; Uganda and Kenya Review Commissioned by World Bank.
- [9] McStay D. (2008). An investigation of undergraduate student self-employment intention and the impact of entrepreneurship education and previous entrepreneurial experience, School of Business, Bond University the Australia.
- [10] Shapero, A. & Sokol, L. (1982). *The social dimensions of entrepreneurship*. In *The Encyclopedia of entrepreneurship* (pp. 72-90). Englewood Cliffs, NJ: Prentice Hall.