

THE ENTREPRENEURIAL INTENTION BETWEEN PERSONALITY AND VALUES

Cismariu Liliana

Psih., Drd., Univ. „Alexandru Ioan”, Iași, Romania

liliana.cismariu@gmail.com

Abstract

Young and restless, full of initiative, eager for action, wishing and determining change, or on the contrary, examining the context, waiting and assessing the risk or expecting another offer. Who might influence their behavior? Their personality? Their values? Their education or some model?

These are questions we attempt to answer by studying the entrepreneurial intentions correlated with the personality and values of a sample of 300 MA students at the West University and the Politehnica University of Timișoara.

Key words: *entrepreneurial intentions, personality, values, economic crisis, young people*

JEL classification M21 Business Economics

1. Entrepreneurial intentions during the entrepreneurial process

In researchers' opinion (Baron, 2007), the entrepreneurial process begins with the entrepreneurial intention, the starting-up of the business being mainly influenced by the consistency of the psychological development and by the cognitive ability to anticipate the entrepreneurial tasks.

The entrepreneurial behavior might be considered a planned type of behavior for which the intention models are ideally convenient (Krueger & Carsrud, 1993; Krueger, Reilly, & Carsrud, 2000). The entrepreneurial intention will therefore represent a prior and determining element for the entrepreneurial behavior (Bird, 1988; Kolvereid, 1996).

Peterson and Roquebert (1993) described in detail the way in which family and community values influence beliefs related to entrepreneurship as a vehicle for achievement.

The studies carried out so far highlighted the importance of psychological factors, of factors related to social and observational learning, of cognitive factors, but there still remains a deficit of information about the study of the entrepreneurial behavior in a hostile context. This is why we believe it is suitable to launch a research on the entrepreneurial behavior during the global economic crisis, in the hope of obtaining additional information about the entrepreneurial intentions in the Western region of Romania.

2. The context of research

2.1 General purpose

Identifying the entrepreneurial intentions of young MA students during the economic crisis

2.2 Hypotheses

H₁ – The manifestation of the entrepreneurial intention is characterized by the existence of specific personality traits;

H₂ – The manifestation of the entrepreneurial intention is characterized by the existence of a specific system of personal values.

2.3 Participants

The research sample includes 300 MA students, among whom: 115 MA students at the West University Timișoara, Department of Psychology, Master in Work Psychology, Organizational Psychology and Traffic Psychology during the period 2009-2012, 115 MA students at the “Politehnica” University of Timișoara, Master in Business Administration, Quality Management for Technological Processes and Engineering and Management of Logistics Systems during the period 2009-2012 and 70 MA students at the West University of Timișoara, Department of Economic Sciences, Master in Entrepreneurial Management and Strategic Management of Organizations, during the period 2009-2012.

Differentiated according to the biological gender variable, the sample includes 224 female subjects and 76 male subjects, with an average age of 23.5.

2.4 Study variables

The analysis of the research hypotheses involves a correlational and a differential design.

2.4.1 The dependent variable:

The main dimension taken into consideration at this stage is represented by the “*entrepreneurial intention*” and operationalized by a series of indicators derived from the entrepreneurial intention questionnaire (EIQ), which form the analyzed variables.

2.4.2 The independent variable:

The general dimension „*personality structure*” was operationalized by means of personality factors measured with a personality inventory (BigFive Plus), and the „*personal value system*” was outlined by the indicators of a value measurement tool (the Schwartz value grill).

In the case of the differential plan of research, the independent variable “*type of professional formation*” was operationalized by means of the faculty attended by the subjects, as follows: 1 – Psychology; 2 – Politehnica; 3 – Economic sciences, the variable being, undoubtedly, categorical.

The research sample is aimed at students of the faculties determined by the independent variable, grouped according to its levels.

2.5 Tools

For this stage of the research the following tools were used:

2.5.1 The Entrepreneurial Intention Questionnaire (EIQ) is a tool translated and adapted after Liñán & Chen, 2009; Liñán & Moriano, 2007; Moriano, et al., 2007, in collaboration with the research group “SMEs and the Economic Growth” of the University of Seville, aims at identifying the entrepreneurial intentions of young people, grouped into the following assessment scales: entrepreneurial activity, entrepreneurship-based social values, entrepreneurial habits/abilities, education and experience, knowledge on entrepreneurship, assistance sources for entrepreneurs, entrepreneurial objectives, personal data, education level and occupation of parents, monthly income.

2.5.2 The BigFive Plus personality questionnaire (Constantin & Macarie 2012) is based on Costa and McCrae’s theory and represents a test meant to assess 5 personality dimensions, each dimension including 6 factors (facets) and each factor being measured by 8 dichotomous items (Costa & McCrae, 2003). Extraversion, Agreeableness,

Neuroticism, Conscientiousness and Openness are the five personality dimensions assessed by the BigFive Plus questionnaire.

2.5.3 The Schwartz Value Survey (SVS). This value measurement scale, developed by Schwartz, has known several development stages. The initial validation study of this tool was performed based on the data gathered from subjects (students and teachers) in 38 countries (Schwartz, 1992); later, the model's structure was confirmed by a replica-study including 1993 additional samples (Schwartz, 1999). The Schwartz model is supported also by the results of more recent studies (Fischer et al., 2010).

During this research we used the 57-item SVS version, translated into Romanian. It is a tool meant to assess 10 personal values (conformity, tradition, benevolence, universalism, self-direction, stimulation, hedonism, achievement, power and security) both as fundamental, general life principles and as guidelines in personal life.

2.6 Research development procedure

In order to start the research procedure, the tools mentioned in the previous section were prepared. The MA student groups were selected according to their access to the theoretical formation in the entrepreneurial field (courses included in the curriculum) from different faculties, in order to obtain a relevant picture of the young people's entrepreneurial intentions in the context of the economic crisis.

The survey application time being rather long, this action took place on several occasions during seminars, in group sessions.

2.6.1 Checking the research hypotheses

The analysis of the research hypotheses involves a correlational and a differential design.

Characteristics of the research sample

Table 1 Structure of the research sample according to faculty type

		Frequency	Percentage	Valid Percentage	Cumulated Percentage
Valid	Economic Sciences	70	23.3	23.3	23.3
	Politehnica	115	38.3	38.3	61.7
	Psychology	115	38.3	38.3	100.0
	Total	300	100.0	100.0	

■ Stiinte economice
 ■ Politehnica
 ■ Psihologie

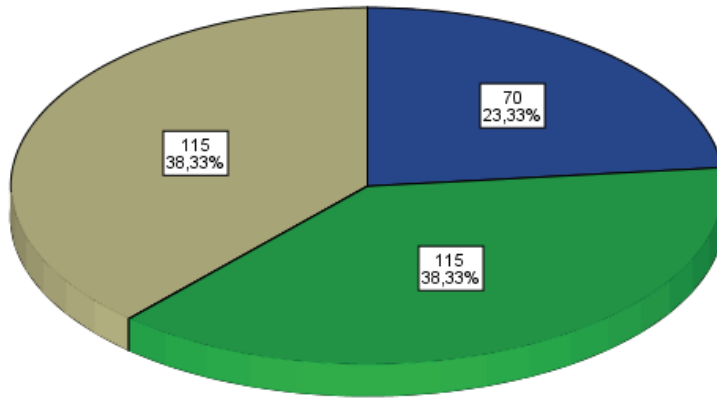


Fig. 1 Structure of the research sample according to faculty type

According to the independent variable “faculty type”, the research sample includes 300 students, the ones from Politehnica and the ones from Psychology having equal shares of 38.3% (115 persons), while the subjects from the Faculty of Economic Sciences are reduced in number – 23.3% (70 persons). We notice that from the perspective of the subjects’ number, the latter is enough for using the parametric data analysis, the law of large numbers being fulfilled.

Hypothesis 1 (H₁) – The manifestation of the entrepreneurial intention is characterized by the existence of specific personality traits;

Since the distributions of the five dimensions of the BigFive Plus personality inventory do not present the characteristics of a normal distribution, the use of the Student’s t-test in order to see which dimensions differentiate the subjects is not recommended. This is why we shall resort to the nonparametric test comparing the two populations from which the samples are drawn, namely the U Mann-Whitney test.

Table 2 Results of the nonparametric U Mann-Whitney test related to personality dimensions

	Entrepreneurial intention	N	Mean of ranks	Sum of ranks
Extraversion	Yes	170	138.29	23509.50
	No	125	161.20	20150.50
	Total	295		
Agreeableness	Yes	171	161.48	27612.50
	No	123	128.07	15752.50
	Total	294		

	Entrepreneurial intention	N	Mean of ranks	Sum of ranks
Neuroticism	Yes	164	125.00	20500.50
	No	124	170.29	21115.50
	Total	288		
Conscientiousness	Yes	165	140.85	23241.00
	No	121	147.11	17800.00
	Total	286		
Openness	Yes	168	148.44	24938.00
	No	127	147.42	18722.00
	Total	295		

	Extraversion	Agreeableness	Neuroticism	Conscientiousness	Openness
Mann-Whitney U	8974.500	8126.500	6970.500	9546.000	10594.000
Wilcoxon W	23509.500	15752.500	20500.500	23241.000	18722.000
Z	-2.284	-3.337	-4.579	-.635	-.102
Sig.	.022	.001	.000	.526	.918

For three personality dimensions we notice the existence of significant differences between subjects who intend to act as entrepreneurs and those who don't pursue the same thing. It is the case of *extraversion* ($z=2.28$; $p<0.05$), subjects who don't intend to become entrepreneurs present a higher level of extraversion ($m_r=161.20$) as compared to those who wish to become entrepreneurs ($m_r=138.29$), the latter being rather introvert. Similarly, *agreeableness* manages to differentiate significantly the subjects ($z=3.33$; $p<0.01$). Subjects wishing to become entrepreneurs have significantly higher scores for agreeableness ($m_r=161.48$), they are more agreeable as compared to those who don't have the same intention ($m_r=128.07$). The highest differentiation capacity is however registered in the case of neuroticism ($z=4.57$; $p<0.01$). Subjects who don't wish to become entrepreneurs are characterized by significantly higher scores for *neuroticism* ($m_r=17.29$) as compared to those who have this intention ($m_r=127$). The other two dimensions, conscientiousness and openness, do not differentiate the two categories of subjects. Indeed, the manifestation of the entrepreneurial intention is characterized by the existence of certain specific personality traits, such as reduced neuroticism, high agreeableness and propensity towards introversion.

Hypothesis 2 (H₂) – The manifestation of the entrepreneurial intention is characterized by the existence of a specific system of personal values;

The same characteristics of the distributions of the 10 personal value indicators make us use the nonparametric U Mann-Whitney test for the analysis.

Table 3 Results of the nonparametric U Mann-Whitney test related to personal values

	Entrepreneurial intention	N	Mean of ranks	Sum of ranks
Conformity	Yes	173	145.74	25212.50
	No	127	156.99	19937.50
	Total	300		
Tradition	Yes	172	145.97	25107.50
	No	126	154.31	19443.50
	Total	298		
Benevolence	Yes	173	152.94	26458.50
	No	126	145.96	18391.50
	Total	299		
Universalism	Yes	172	145.90	25095.50
	No	127	155.55	19754.50
	Total	299		
Self-direction	Yes	173	151.11	26141.50
	No	127	149.67	19008.50
	Total	300		

	Conformity	Tradition	Benevolence	Universalism	Self-direction
Mann-Whitney U	10161.500	10229.500	10390.500	10217.500	10880.500
Wilcoxon W	25212.500	25107.500	18391.500	25095.500	19008.500
Z	-1.113	-.826	-.690	-.954	-.142
Sig.	.266	.409	.490	.340	.887

	Entrepreneurial intention	N	Mean of ranks	Sum of ranks
Stimulation	Yes	173	158.46	27413.50
	No	127	139.66	17736.50
	Total	300		
Hedonism	Yes	172	152.82	26285.50
	No	126	144.96	18265.50
	Total	298		

Achievement	Yes	172	163.29	28086.00
	No	127	132.00	16764.00
	Total	299		
Power	Yes	173	161.42	27926.50
	No	127	135.62	17223.50
	Total	300		
Security	Yes	173	150.98	26120.00
	No	127	149.84	19030.00
	Total	300		

	Stimulation	Hedonism	Achievement	Power	Security
Mann-Whitney U	9608.500	10264.500	8636.000	9095.500	10902.000
Wilcoxon W	17736.500	18265.500	16764.000	17223.500	19030.000
Z	-1.860	-.781	-3.104	-2.550	-.113
Sig.	.063	.435	.002	.011	.910

Only two personal values differentiate students who want to become entrepreneurs from those who don't have the same intention. These are *achievement* ($z=3.10$; $p<0.01$) and *power* ($z=2.55$; $p<0.05$), meaning that students with entrepreneurial intentions consider achievement and power as personal values ($m_r=163.29$, $m_r=161.42$ respectively) in a more significant way as opposed to those who don't display such intentions ($m_r=132$, $m_r=135.62$ respectively).

Hypothesis 3 (H₃) – The type of university formation exerts a significant effect upon the entrepreneurial intention.

The analysis of the way in which the type of faculty attended influences the entrepreneurial intention, although it was done based on a differential research design, can be equally approached correlationally by means of the contingency tables method, similar to the one used for the analysis of the first two hypotheses.

Table 4 Contingency concerning the relationship between the studies attended and the entrepreneurial intention

		Entrepreneurial intention		Total
		Yes	No	
Research Group	Economic Sciences	45	25	70
	Politehnica	65	50	115
	Psychology	63	52	115
Total		173	127	300

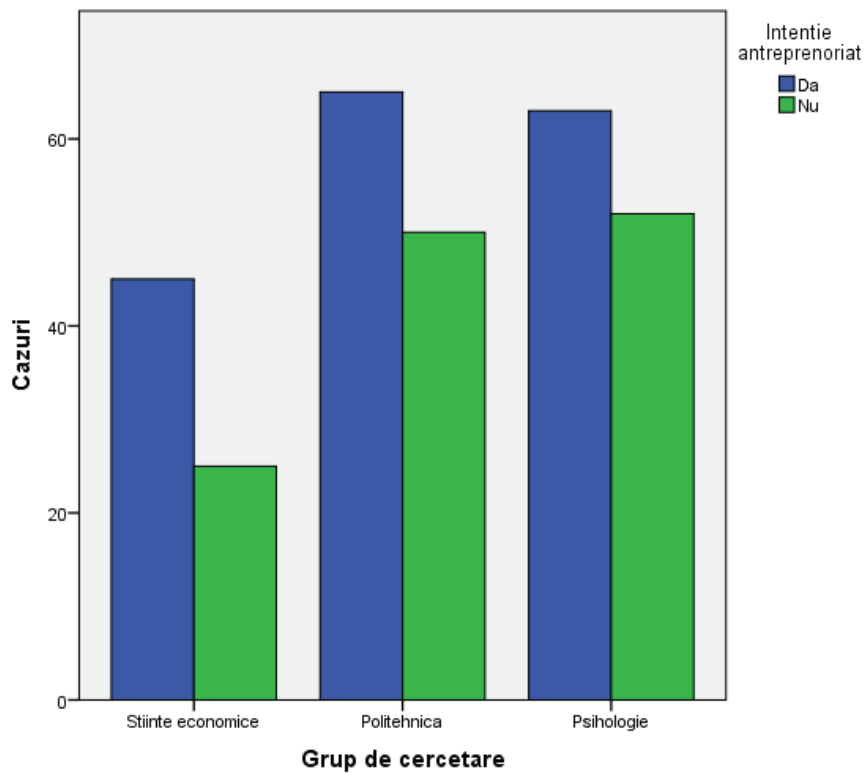


Fig.2 Research group

Table 5 Contingency coefficients concerning the relationship between the entrepreneurial intention and the studies attended

	Value	df	Sig.
Pearson Chi-Square	1.710	2	.425
Likelihood Ratio	1.729	2	.421
Linear-by-Linear Association	1.448	1	.229
N	300		

It is impossible to detect the existence of a relationship between the entrepreneurial intention and the studies attended by the students, no significant connection existing between the two variables.

By using the stepwise regression (Backward) we obtained the following formula:

$$P_{(int.ant|student)} = \frac{1}{1 + e^{-(-0,147 - 4,959 \times Nevr + 5,113 \times Agre + 0,150 \times Reali - 1,141 \times Extr + 0,048 \times Puter)}}$$

3. Conclusions

Out of the 300 MA students participating in the present research, 74.67%, namely 224 are girls and 25.33% - 76 boys. Girls are predominant both in the Faculties of Psychology (115 subjects) and Economic Sciences (70 subjects), and in the master programs with an entrepreneurial component organized by the Politehnica University of Timișoara (115 subjects). An excessive feminization of the research sample can be noticed, which could affect certain aspects of the research.

For three personality dimensions we notice the existence of significant differences between subjects who intend to act as entrepreneurs and those who don't pursue the same thing. It is the case of *extraversion* ($p < 0.05$), subjects who don't intend to become entrepreneurs display a higher level of extraversion as compared to those who wish to become entrepreneurs, the latter being rather introvert. Similarly, *agreeableness* manages to differentiate significantly the subjects ($p < 0.01$). Subjects wishing to become entrepreneurs have significantly higher scores for agreeableness, they are more agreeable as compared to those who don't have the same intention. The highest differentiation capacity is however registered in the case of neuroticism ($p < 0.01$). Subjects who don't wish to become entrepreneurs are characterized by significantly higher scores for *neuroticism* as compared to those who have this intention. The other two dimensions, conscientiousness and openness, do not differentiate the two categories of subjects.

Indeed, the manifestation of the entrepreneurial intention is characterized by the existence of certain specific personality traits, such as reduced neuroticism, high agreeableness and propensity towards introversion.

Only two personal values differentiate students who want to become entrepreneurs from those who don't have this intention. They are *achievement* ($p < 0.01$) and *power* ($p < 0.05$), meaning that students with entrepreneurial intentions consider achievement and power as personal values in a more significant way as opposed to those who don't display such intentions.

The accuracy of the classification is better for students who decide to become entrepreneurs (82.5%) and poorer for those who don't decide for this (50.8%) when we use all five predictor variables (extraversion, agreeableness, neuroticism, achievement, power).

After the data analysis in the first phase, we were able to notice that, on an intentional level, the decision to become an entrepreneur is not influenced by the studies attended, but by a certain personality structure and the presence of certain values belonging to subject's own value system. Extraversion and neuroticism reduces the probability of becoming an entrepreneur, while agreeableness, power and achievement increase it, as previous analyses also indicated. A student determined to become an entrepreneur should, first of all, not be neurotic, and secondly he/she should be agreeable, should consider achievement as a value, should not be too extrovert and should value power.

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