

PERSONALITY TRAITS IN ENTREPRENEURS AND SELF-EMPLOYED

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Abstract: *The paper presents the results of an exploratory research conducted on a population of 250 entrepreneurs and self-employed persons using the Entrepreneurial Personality Inventory (Luca & Cazan, 2011), the Locus of Control Scale (Levenson, 1981), and The Proactivity Scale (Bateman & Crant, 1993).*

The results show a strong association between proactivity and other traits considered as entrepreneurial: risk propensity, social skills, business skills, creativity, achievement motivation, resource organization, internal locus of control. Several group differences were explored based on demographic variables, but few significant differences were found. In our population, the gender differences in risk propensity are contradicting the literature of the field – the women are more risk-prone than men. Those who have a family tradition in business are more proactive than those who are the first in their family to start a business.

The results of the research will be used to refine the Entrepreneurial Personality Inventory and also to explore new relationships between personality traits, demographics, and entrepreneurial behaviour.

Key words: *entrepreneurial personality, personality traits, proactivity, locus of control, group differences, demographics.*

1. Introduction

Entrepreneurship is a distinct sector of activity, with specific dispositional requirements related to the unstructured situations in which entrepreneurs find themselves on a daily base, comparing to highly structured situations specific to employees working in organizations. One say about entrepreneurs is that they are "their own masters", but this autonomy comes with a huge responsibility for the outcomes. An entrepreneur has to be alert, proactive, anticipate, plan, implement decisions, make things happen. In unstructured situations, personality is important for structuring the behaviour, while in structured situations, external factors, such as role prescription are more important. This means that not everyone is attracted to an entrepreneurial career, and more, not everyone can succeed in such activities. In the end, only those having particular characteristics are fit for this type of activity.

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The existence of an entrepreneurial personality was a matter of debate in the last decades, as some researchers found proofs for the dispositional factors of entrepreneurial behaviour in terms of personality traits, while others denied any relationship between personality and entrepreneurial behaviour. Even if external factors are obviously involved in determining behaviour, the differences found at trait level between entrepreneurs and managers, for example (Brandstätter, 2011), lead to the conclusion that, in order to become and stay an entrepreneur, one needs some distinctive dispositions.

Specific entrepreneurial traits were considered to be achievement motivation, moderate risk propensity, internal locus of control (Chell, 2008), as well as innovativeness, proactivity, generalized self-efficacy, stress tolerance (Brandstätter, 2011). The entrepreneurial personality profile also includes opportunity recognition, tolerance for ambiguity, autonomy, entrepreneurial self-efficacy, social competence, extraversion, and intuition (Chell, 2008; Caliendo, Fossen & Kriticos, 2010 and 2014; Caliendo & Kriticos, 2012). Sánchez (2010) proposed a four-factor model, including: locus of control, entrepreneurial self-efficacy, proactivity and risk propensity.

Considering five meta-analyses, Brandstätter (2011) concludes that entrepreneurs have lower levels of Neuroticism and Agreeability, and higher levels of Extraversion, Openness to experience and Conscientiousness than the non-entrepreneurs, which confirms some earlier findings of Zhao & Seibert (2006), who found similar differences between entrepreneurs and managers. A more recent meta-analysis of Frese & Gielnik (2014) indicates that there are significant associations between entrepreneurial traits such as self-efficacy, achievement motivation, innovativeness, autonomy, (internal) locus of control and business creation, respectively business performance, but the effect of personality variables is different for business creation and performance.

2. Method

The present research is part of a larger research conducted on four different sub-populations: A – 215 students enrolled in entrepreneurial training courses (Luca & Cazan, 2011); B – 215 students in the same university not enrolled in the training, forming a paired sample (Luca, Cazan & Tomulescu, 2012; 2013). In order to refine the instrument designed for the research, we decided to add two new sub-populations: C – 250 entrepreneurs and self-employed (the population of the present study); D – 215 wage employed (Luca & Simo, in press).

Possessing entrepreneurial traits doesn't necessarily lead to an entrepreneurial career, but being an entrepreneur requires some specific dispositions. However, staying an entrepreneur despite the adversities of running an independent business, making daily entrepreneurial decisions, requires different traits than simply entering this career (Caliendo, Fossen, & Kriticos, 2014).

Because there is a big difference between the intention to start an independent business, or to enrol for entrepreneurship training (Luca & Cazan, 2011), and the actual running of a business, we aimed to explore if there are specific personality traits in entrepreneurs with a business older than 1 year. Although there are many indicators for measuring the success of a business, such as level of income, number of employees, or others, taking also into account the huge diversity of entrepreneurial activities of our participants, we considered that a minimal indicator for success could be the capacity to survive at least one year.

2.1. Participants

The characteristics of the population are as follows: 191 male and 59 females; 236 with bachelor level or above, 14 with lower education levels. As for the size of the business, 13 were self-employed, 80 worked in firms having 1 to 5 employees, 101 from firms having between 6 and 15 employees, 55 from firms having 16 to 100 employees, and 1 from a firm of more than 100 employees.

2.2. Measures

The participants were asked to fill in the following questionnaires:

- Entrepreneurial Personality Inventory (Luca & Cazan, 2011) – consisting of 113 items, organized in 7 sub-scales: Risk propensity (21 items, $\alpha = .82$); Social skills (14 items, $\alpha = .75$); Business skills (17 items, $\alpha = .89$); Creativity (17 items, $\alpha = .89$); Independence (17 items, $\alpha = .79$); Achievement motivation (17 items, $\alpha = .85$); Resource organization (10 items, $\alpha = .81$).
- Multi-dimensional Locus of Control Scale (Levenson, 1981) – consisting of 24 items organized in 3 sub-scales of 8 items each: Internal LOC ($\alpha = .86$); External LOC—others ($\alpha = .87$); External LOC—Chance ($\alpha = .84$).
- Proactive Personality Scale (Bateman & Crant, 1993) – consisting of 17 items ($\alpha = .93$)³.
- Demographic questionnaire, aiming the following variables: activity sector; size of the business; position in the firm (owner, associate, administrator); if the business is a family business; the age of the present business; the existence of other businesses in which the respondent is involved; geographical area; rural/urban situated business.

3. Hypotheses and Results

Proactivity is a general disposition to intervene in the environment and to change it, instead of only reacting to the events (Bateman & Crant, 1993). Running a business means being in a perpetual alertness, being a prospector, identifying opportunities, making quick decisions, making things happen. Proactivity seems to be an essential ingredient for the entrepreneurial endeavour and success. Therefore, we expect that:

H1 – *Proactivity is positively associated with entrepreneurial traits (Risk propensity, Social skills, Business skills, Creativity, Independence, Achievement motivation, and Resource organization).*

In our population of entrepreneurs, proactivity is very significantly associated with risk propensity, social skills, business skills, creativity, independence, achievement motivation and resource organization (see Table 1). These results are consistent with the findings of Chan, Uy, Chernyshenko, Ho, & Sam (2015), who found positive correlations of Proactivity with specific entrepreneurial traits (Entrepreneurial motivation, Leadership) and personality factors (Extraversion, Agreeableness, Conscientiousness, Emotional stability and Openness to experience) and with the research of Bateman & Crant (1993) who found that proactivity overlaps with need for achievement and need for dominance (p. 126).

³ All Cronbach's α values were calculated for the population of present research.

Correlations between Proactivity and other entrepreneurial traits Table 1

	Risk propensity	Social skills	Business skills	Creativity	Independence	Achievement motivation	Resource organization
Proactivity	.593**	.631**	.627**	.655**	.659**	.648**	.614**

** $p < .001$; $N = 250$

Similar results were reported by Bergeron, Schroeder, & Martinez (2014) who found associations between the trait proactivity and propensity for “doing more than required” in organizations, i.e. task behaviours, organizational citizenship behaviours and perceived role breadth.

Being proactive means at the same time believing that you can rely on internal resources in order to attain goals and obtain results, rather than expecting some external forces (others, chance) to intervene. Therefore, we expect that:

H2 – *Proactivity is positively associated to internal Locus of control.*

Correlation between Proactivity and Locus of Control scales Table 2

	Internal LOC	External LOC (others)	External LOC (chance)
Proactivity	.577**	.128*	.220**

* $p < .05$; ** $p < .001$; $N = 250$

In the population of entrepreneurs of our research, the association of proactivity and internal locus of control is highly significant, while the other correlations, with external locus of control – others and chance – are much weaker (see Table 2). Similar results ($r = .33$; $p < .01$; $N = 818$) were found by Sánchez & Licciardello (2012) with a single score locus of control scale, with higher score relevant for internal locus of control.

In previous researches, the entrepreneurial traits tend to be inter-associated and associated with business creation and business success (Brandstätter, 2011). Altınay, Madanoglu, Daniele, & Lashley (2012) found, for example, a negative association between locus of control and risk taking propensity, while Caliendo, Fossen & Kriticos (2014) found positive association between internal locus of control and agreeableness, risk tolerance, respectively negative association between internal locus of control and neuroticism and conscientiousness. Considering these findings, we expect that:

H3 – *Internal locus of control is positively associated to the entrepreneurial traits (Risk propensity, Social skills, Business skills, Creativity, Independence, Achievement motivation, and Resource organization).*

In our population, internal locus of control is highly significantly associated with the specific entrepreneurial traits: risk propensity, social skills, business skills, creativity, independence, achievement motivation and resource organization (see Table 3). Similar results were found by Sánchez, & Licciardello (2012) for correlations between locus of control and risk propensity ($r = .29$), as well as with other variables such as entrepreneurial self-efficacy.

Correlations between the LOC scales and the entrepreneurial traits Table 3

	Risk propensity	Social skills	Business skills	Creativity	Independence	Achiev. motivation	Resource organiz.
Internal LOC	.524**	.563**	.561**	.572**	.549**	.591**	.529**
External LOC (others)	.234**	.065	.171**	.135*	.027	.097	.128*
External LOC (chance)	.299**	.161*	.254**	.242**	.112	.186**	.160*

* $p < .05$; ** $p < .001$; $N = 250$

The field literature confirms the common sense, i.e. women are less prone to engage in entrepreneurship than men (Caliendo & Kriticos, 2012; Verheul, Thurik, Grilo, & Van der Zwan, 2012) and they have lower levels of entrepreneurial traits such as: risk propensity and competitiveness (Bönte & Piegeler, 2013). Sánchez, & Licciardello (2012) found that men have higher levels of entrepreneurial intention, entrepreneurial self-efficacy, internal locus of control, risk-taking propensity, and proactivity than women. Drawing on these findings, we expect that:

H4 – *Men have higher levels of entrepreneurial traits than women.*

Significant mean differences in entrepreneurial traits between male and female Table 4

	Sex	N	Mean	S. D.	t	df	p
Risk propensity	M	191	65.96	11.31	-2.03	117.37	.045
	F	59	68.90	9.17			
Resource organization	M	191	32.53	6.81	-1.97	248	.050
	F	59	34.49	6.25			

For all measured traits, we found no significant differences between men and women, except for two traits, risk propensity and resource organization, for which women have significantly higher levels of the scores (see Table 4).

At first glance, the more entrepreneurial the individual is, the larger his/her endeavour should be. Having more employees is a definite sign of entrepreneurial success, therefore we expect that:

H5 – *Entrepreneurs from bigger firms have a higher level of entrepreneurial traits than those from smaller firms.*

In our population, no significant differences were found, even if the mean scores for risk propensity and independence were higher in entrepreneurs involved in businesses with more than 15 employees. In their meta-analysis, somehow similar findings were reported by Rauch & Frese (2007b) and Frese & Gielnik (2014) for the effects of entrepreneurial traits, such as risk propensity and autonomy, on business performance, based on correlative approaches.

There is a lot of debate on the native nature of entrepreneurial traits (Rauch & Frese, 2007a; Fisher, & Koch, 2008; Nicolaou & Shane, 2009, Nicolaou & Shane, 2010; Johnson, Freeman, & Staudenmaier, 2015; Boz, & Ergeneli, 2014), as well as on the social learning processes and the influence of family on business orientation (Carr, & Sequeira, 2007; Chell, 2008; Altinay, Madanoglu, Daniele, & Lashley, 2012; Royo,

Sarip, & Shaari, 2015). Considering the family as a perfect example of genetic and environmental factors correlation, in which the individual gets the hereditary influences on personality as well as the role models, we expect that:

Table 5

Significant mean differences in entrepreneurial traits between entrepreneurs according to business size

	Size of business	N	M	SD	t	df	p
Risk propensity	Up to 15 employees	194	65.92	10.78	-1.84	247	.067
	Over 15 employees	56	68.96	10.99			
Independence	Up to 15 employees	194	54.54	9.14	-1.90	247	.057
	Over 15 employees	56	57.20	9.11			

H6 – *Entrepreneurs working in a family business have a higher level of entrepreneurial traits than those working in a non-family owned business.*

Table 6

Significant mean differences in entrepreneurial traits between entrepreneurs coming from family and non-family businesses

	Is the present business a family business?	N	M	SD	t	df	p
Independence	Yes	33	57.88	8.74	1.82	248	.069
	No	217	54.76	9.21			
Proactivity	Yes	33	59.52	11.74	2.06	248	.040
	No	217	54.52	13.14			

In our sample, significant differences were found only for proactivity and some tendency for differentiation in independence, for both traits the individuals from family business having higher levels of the traits.

4. Conclusions

Our sample of entrepreneurs provided some relevant results concerning the relationships between entrepreneurial traits, as well as demographic group differences. Our findings are consistent with other researches which found specific entrepreneurial traits associated with other, more general, traits such as proactivity and internal locus of control. In our research, proactivity and internal locus of control is highly significantly associated with the specific entrepreneurial traits, meaning that the entrepreneurs tend to have a specific configuration of traits that ensure the survival and success in their activity. Some specific group differences were found between men and women in risk propensity and resource organization, but our findings contradict those in the literature: women are more risk prone and higher in resource organization than men, but no other sex differences were significant for the other traits measured.

The entrepreneurs coming from family businesses were higher in proactivity and independence comparing to those from non-family businesses. Close to these results, group differences according to business size were found for risk propensity and

independence: entrepreneurs from larger businesses were higher in these two traits than those from smaller ones, but the differences were not so large as to allow inferences on the relationship between those traits and business success.

Although the population of the research is a rare one, and difficult to approach, the findings on 250 participants indicate that the relationships between the measured traits are consistent, but only further comparisons with non-entrepreneur groups will allow sound inferences on the differentiation of entrepreneurs as a group at personality level and on the relationship between personality and success in entrepreneurship.

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