

## EXTROVERTED PERSONALITY AS AN ADVANTAGE IN ENTREPRENEURSHIP

Drago Pupavac, PhD., Polytechnic of Rijeka  
Vukovarska 58, 51000 Rijeka, Republic of Croatia  
Telephone: 0038551353737, e-mail: [drago.pupavac@veleri.hr](mailto:drago.pupavac@veleri.hr)

### **ABSTRACT**

*Entrepreneurs are usually enthusiastic, driven personalities, unabashed of taking the initiative and leaping forward. Successful entrepreneurs are proactive and incessantly on the quest for new business opportunities. According to the five-dimensional model of personality, character traits befitting such behaviour are extroversion and an openness to new experiences. Extroversion is associated with higher performance in sales, management positions and jobs which require influence over other people (negotiations). Accordingly, the main objective of this study is to find out if students of professional and specialized studies at Polytechnic of Rijeka fit within these parameters and to point out the importance of extroverted personality in creating new business ventures. In order to prove or refute the given hypothesis that students of entrepreneurship are highly extroverted personalities, various scientific methods have been applied, including survey, descriptive statistics and comparison. Empirical study was conducted by survey at Polytechnic of Rijeka throughout the academic year 2012/2013, 2013/2014 and 2014/2015. 195 students of professional and specialized study of entrepreneurship were included in the poll, as well as 31 students of safety at work which were used as a control group. Research results indicate that the level of extroversion of entrepreneurship students is average and thus the set hypothesis was refuted.*

**Key words:** extroversion; entrepreneurs; entrepreneurship students

## 1. INTRODUCTION

Behaviour of individuals is highly influenced by their personality. Psychology of personality explores behaviour traits of individuals within a society and generally, behaviour of people. Personality is defined as a unique organization of character traits formed by mutual influence of an individual and their environment and determines a characteristic behaviour of an individual (Rot, 227). Jung made a distinction between two types of behaviour: introverted and extroverted (Zvonarevic, 1987). Accordingly, people have either introverted or extroverted personalities. Introverted personality is manifested by shyness, over thinking, emotional restraint, infrequent and weak relationships with other people, and focus on their own experiences. Extroverted personality is manifested by openness to other people and concrete reality, assertiveness, talkativeness, readiness to act, realistic expectations, interest in physical and social environment, good relationships with other people.

Personality is a valid predictor of an employee's job performance (Leutner, et al, 2014), as demonstrated extensively by criterion-related validity studies (e.g., Chamorro-Premuzic & Furnham, 2010; Ones, Dilchert, Viswesvaran, & Judge, 2007). The personality-performance link is found across all occupational groups, managerial levels, and performance outcomes (Barrick & Mount, 1991; Barrick, Mount, & Judge, 2001; Hurtz & Donovan, 2000). Whereas Conscientiousness and, to some degree, Emotional Stability, have been associated with higher job performance across most types of jobs; the relationship between other Big Five traits (e.g. Extroversion, Openness and Agreeableness) and job performance is more context-dependent (Barrick et al., 2001). For example, Extroversion predicts performance only in professions that involve social interaction, whereas Openness (Barrick & Mount, 1991) and Agreeableness (Salgado, 1997) only predict training proficiency but not subsequent job performance. In contrast, there is little consensus about the importance of personality as a predictor of entrepreneurial success (Baron, Frese, & Baum, 2007). Although recent meta-analytic studies did highlight significant associations between personality and entrepreneurship (Brandstätter, 2011), these findings are limited to business performance (multiple  $R = .31$ ; Zhao, Seibert, and Lumpkin, 2010), entrepreneurial intentions (multiple  $R = .36$ ; Zhao et al., 2010) and occupational status (multiple  $R = .37$ ; Zhao & Seibert, 2006). For instance, when entrepreneurship is defined in terms of occupational status (i.e., business ownership), data indicates that entrepreneurs tend to score significantly higher on Conscientiousness and Openness and lower on Neuroticism and Agreeableness than managers (Zhao & Seibert, 2006). Additionally, meta-analyses reveal that there is a particular personality profile associated with a person's willingness or intention to start a business (high Conscientiousness, Openness and Extroversion, and low Neuroticism; Zhao et al., 2010). In light of these findings, it could be suggested that the Big Five may also explain individual differences in entrepreneurial behaviours beyond business ownership or start up intention, such as opportunity recognition, opportunity exploitation, innovation, and value creation (Leutner, et al, 2014).

Research conducted by Lukes et al (2005) has shown that students of entrepreneurship,

unlike entrepreneurs, are open to new experiences, and are more conscientious and extroverted. However, entrepreneurs and students alike have scored the best on extroversion, which was an incentive for this very study. Accordingly, the basic hypothesis of this study is that entrepreneurs and students of entrepreneurship are more extroverted compared to an average cross-section of population. In order to prove or to refute this, various scientific methods have been used for this study, with survey and descriptive statistics being the most prominent.

## 2. THEORETICAL FRAME AND RESEARCH PROBLEM

The personality approach is one of the classical and early approaches to entrepreneurship. At the same time, it is one of the more controversial areas of research (Rauch & Frese, 2007). The personality approach to entrepreneurship has been criticized in the entrepreneurship literature with the following arguments (Aldrich & Wiedmayer, 1993; Brochhaus & Horowitz, 1985; Gartner, 1989; Low & MacMillan, 1988): Entrepreneurship requires too varied behaviours to be related to specific personality traits; personality traits are not strongly enough related to entrepreneurship to warrant further studies; and alternative views, such as ecological approaches, have been proposed that concentrate on environmental accounts (Rauch & Frese, 2007). These arguments were quite effective and led to the dominant position in entrepreneurship research that works on personality traits should be discontinued (Low & MacMillan, 1988). However, there is a recent revival of personality research in performance and leadership research and in many other areas of industrial/organizational psychology too. Research conducted by Lukes et al (2005) has garnered especially interesting results.

**Table 1. Comparison of Entrepreneurs and University Students**

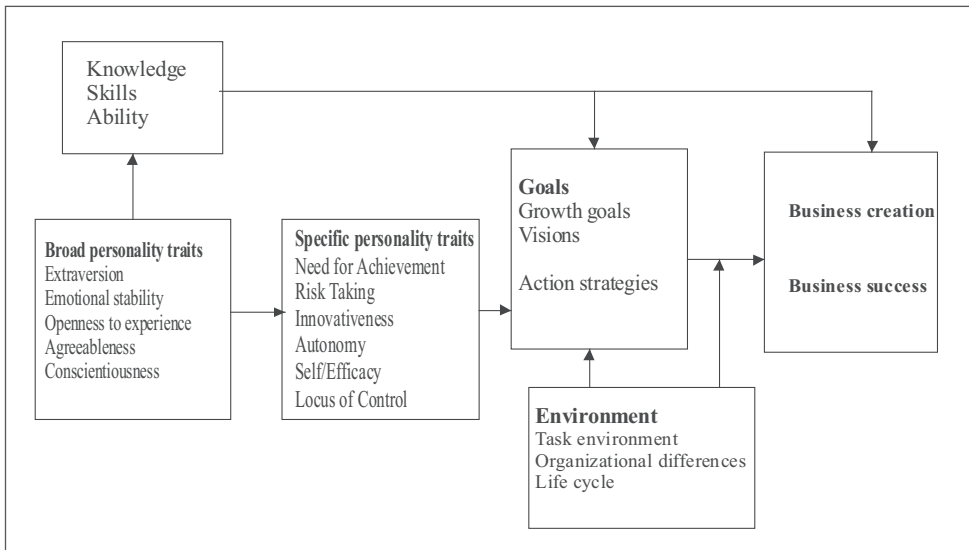
Personality traits	Entrepreneurs			UEP Students			Scale Reliability	F
	N	Mean	s.d.	N	Mean	s.d.	A	
General Self-efficacy	49	31,02	3,89	120	27,36	4,06	0,80	29,05***
Personal Initiative	51	3,75	0,43	120	3,24	0,51	0,70	39,25***
Extroversion	51	4,38	1,01	263	4,45	1,03	0,88	0,17
Agreeableness	51	4,33	0,82	261	4,30	0,76	0,68	0,07
Consciousness	51	4,11	0,86	263	4,28	0,94	0,80	1,47
Emotional Stability	51	4,60	0,58	262	3,97	0,91	0,78	22,72***
Openness to Experience	51	4,17	0,64	262	4,23	0,86	0,71	0,23
*** p < .001								

Source: Lukes, M., et al. (2005)

Data from Table 1 show that students of entrepreneurship, unlike entrepreneurs, are more open to new experiences, and have a higher level of consciousness and extroversion. But entrepreneurs have greater emotional stability and are slightly more agreeable. Author of this very study believes that the research by Lukes et al shows that: 1) relationship between personality traits and entrepreneurship should not be ignored and 2) extroverted personality is common to entrepreneurs and students alike.

Undeniable relationship between personality and entrepreneurship is confirmed by Giesen-Amsterdam model presented in Figure 1.

**Figure 1. A model of entrepreneurs' personality characteristics and success**



Source: Rauch, A., Frese, M. (2007). Born to Be an Entrepreneur? Revisiting the Personality Approach to Entrepreneurship, in Baum, J., Frese, M., Baron, R. (Ed.), *The psychology of entrepreneurship*, Mahwah, NJ: Erlbaum, p. 47

The model describes how general (broad) personality traits may affect the personality dynamics of setting goals and developing strategies that, in turn, affect business creation and success. The model assumes that the effects of broad personality traits are not directly related to business outcomes, but they influence traits that are more specific/proximal to entrepreneurship, for example, need for achievement, risk taking, and inventiveness.

In 2013 entrepreneurship was a part of economic courses on five public universities in Croatia, three public and one polytechnic studies and on one public and one private college. In spite of this, there were no encouraging results. Only 4,7% of employed population in Croatia are self-employed entrepreneurs with other workers, and only 14,9% work alone. The number of small and medium businesses, as well as the numbers of employees there, was not augmented. It has even diminished in 2008 and 2012, while in 2011 and 2012

small and medium businesses have negative financial results. In 2012 small businesses have a loss of over one billion HRK (about 150 million euros), and medium businesses of 859 million HRK (about 113 million euros). Among countries with economies based on efficiency, in 2008 Croatia was an average country regarding young entrepreneurs, but in the years that followed, the number of young entrepreneurs in Croatia fell below the average, with 2010 being the country with the lowest share of young entrepreneurs. This situation sets questions for reasons of this trend and if students of entrepreneurship are able to go against the grain of times and current recession.

Accordingly, the basic hypothesis of this study is that more extroverted students of entrepreneurship could be an important indicator of their success in creating and developing new business ventures. The purpose of the research is to gain concrete insights about students' extroversion. The basic assumption of the study therefore is: students of entrepreneurship are highly extroverted personalities.

Research on extroverted/introverted personal traits of students at the Polytechnic of Rijeka has been conducted by poll. The questionnaire was anonymous and consisted of ten assertions. The students were asked to express the level of their (dis)agreement with the said assertions using marks from 0 to 4, according to Likert's scale. Instructions were given according to Goldberg et al (2006). Interpretation and analysis were conducted using McShane and Von Glinov (2010).

The research included first year regular and associate students of entrepreneurship (N=72; Mean 24,61; min 18, max 50; SD 8,5) and regular and associate students of specialized graduate studies of entrepreneurship in Rijeka during the academic years 2012/2013, 2013/2014 and 2014/2015 (N=123). Regular and associate students of safety at work (N=31) were used as a control group. Thus a database was created to be further processed and analysed using appropriate statistic methods.

### 3. RESEARCH RESULTS AND DISCUSSION

Table 2 shows the level of students' agreement with the assertions given in the questionnaire in the academic year 2014/2015.

**Table 2. Distribution of level of students' agreement with given assertions, which show their extroversion/introversion (N=72)**

How accurately does each of the statement listed below describe you?	Very accurate description of me	Moderately accurate	Neither accurate nor inaccurate	Moderately inaccurate	Very inaccurate description of me
I feel comfortable around people.	36	24	10	1	1
I make friends easily.	17	34	14	4	3
I keep in the background.	1	11	26	26	8
I don't talk a lot.	5	12	16	21	18
I would describe my experiences as somewhat dull.	1	5	16	26	24
I know how to captivate people.	2	25	32	11	2
I don't like to draw attention to myself.	18	18	22	13	1
I am the life of the party.	3	6	34	20	9
I am skilled in handling social situations.	12	38	20	2	0
I have little to say.	2	5	11	33	21

Source: Author's research

The questionnaire consisted of ten assertions. After the respondents expressed their level of agreement with them according to Likert's scale (Very accurate description of me ..., Very inaccurate description of me), each assertion was associated with the appropriate number of points (from 0 to 4) based on instructions from Table 3.

**Table 3. Scoring Instructions**

For statement items 1, 2, 6, 8, 9	For statement items 3, 4, 5, 7, 10
Very accurate description of me = 4 Moderately accurate = 3 Neither accurate nor inaccurate = 1 Moderately inaccurate = 1 Very inaccurate description of me = 0	Very accurate description of me = 0 Moderately accurate = 1 Neither accurate nor inaccurate = 2 Moderately inaccurate = 3 Very inaccurate description of me = 4

Source: McShane, Steven; Von Glinov, Mary Ann (2010). Organizational Behaviour, 5th edition, Boston [etc.], McGraw-Hill/Irwin., p. 514.

Scores range from 0 to 40. Low scores indicate introversion; high scores indicate extroversion. Each of the students could assess their level of extroversion compared to the average level of their colleagues' extroversion (cf. Table 6) or to compare their results with the scale given in Table 4.

**Table 4. IPIP Introversion-extroversion**

IPIP Introversion-extroversion	Interpretation
35 to 40	High extroversion
28 to 34	Moderate extroversion
21 to 27	Between extroversion and introversion
7 to 20	Moderate introversion
0 to 6	High introversion

Source: McShane, Steven; Von Glinov, Mary Ann (2010). *Organizational Behaviour*, 5th edition, Boston [etc.], McGraw-Hill/Irwin., p. 514.

**Table 5. Individual results of introversion and extroversion levels shown by students of the specialized graduate studies of entrepreneurship.**

IPIP Introversion-extroversion	Interpretation	2012/2013	2013/2014	2014/2015	Total
35 to 40	High extroversion	2	4	1	7
28 to 34	Moderate extroversion	8	20	13	41
21 to 27	Between extroversion and introversion	21	21	11	53
7 to 20	Moderate introversion	6	3	12	21
0 to 6	High introversion	-	1	-	1

Source: Authors' research

The average number of scored points for extroversion is shown in Table 6.

**Table 6. Students average number of scored points for extroversion**

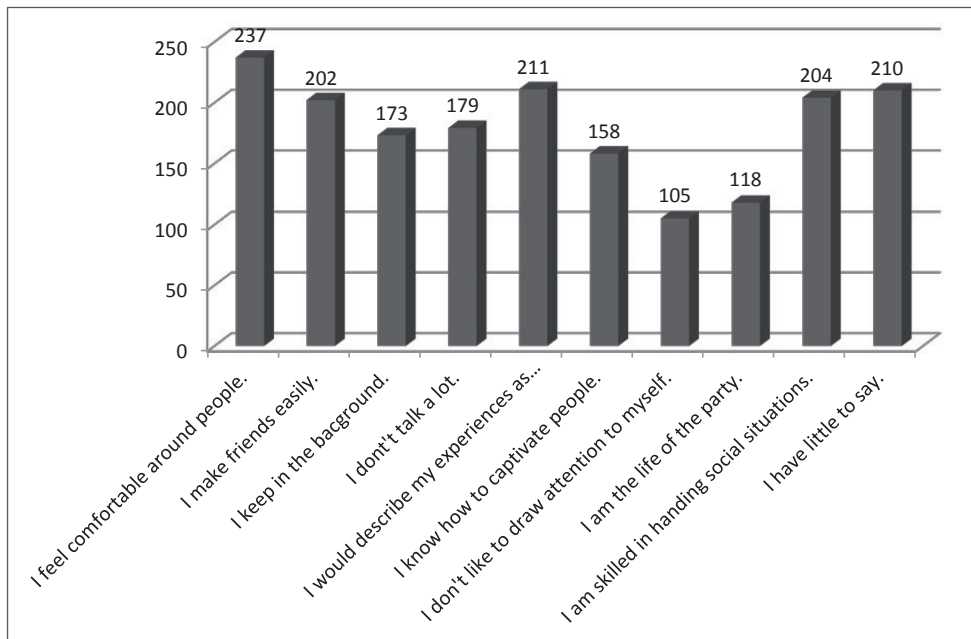
Study	Average scores
Students of professional study of entrepreneurship 2014/2015 (N=72)	24,96 (full-time students 25,03; part-time students 24,91) (male 26,2; female 24,48)
Students of specialized study of entrepreneurship 2014/2015 (N=37)	24,19 (full-time and part-time students)
Students of specialized study of entrepreneurship 2013/2014 (N=49)	26,48 (full-time students)
Students of specialized study of entrepreneurship 2012/2013 (N=38)	26,21 (full-time students)
Students of security at work (control group) (N=31)	24,84 (full-time and part-time students)

Source: Author's research

Based on data from tables 5 and 6, it can be concluded that: a) there are no significant differences in the level of extroversion between regular and associate students of professional and specialized studies of entrepreneurship, b) there are no significant differences in the level of extroversion between students of professional and specialized studies of entrepreneurship and professional studies of safety at work, c) students of professional and specialized studies of entrepreneurship are in between extroversion and introversion on average.

The total number of points gained on certain assertions which were used to estimate the level of students' extroversion is shown in Figure 2.

**Figure 2. The scored number of points for assertions used to estimate the level of need for social approval.**



Source: Author's research

Picture 2 shows that students scored the least on assertions I don't like to draw attention to myself (105), I am the life of the party (118), I know how to captivate people (158) and I keep in the background (173). Entrepreneurs are usually associated with extroversion and good communication skills, so there is some encouragement in the fact that the students scored the best on the assertion I feel comfortable around people (237).



## 4. CONCLUSION

One of the most important elements of personality theory is that people possess specific personality traits. The most widely respected model of personality traits is the Big five model: conscientiousness, agreeableness, neuroticism, openness to experience and extroversion. Extroverted people are outgoing, talkative, sociable, and assertive. Extroverts get their energy from the outer world, people and things around them. Behaviour of people with high scores on extroversion and openness to experience is aimed at achieving goals, managing their environment, and advancing themselves in teams.

Accordingly, the research conducted in this study had two basic hypotheses: 1) the relationship between personality traits and entrepreneurship should not be ignored and 2) extroversion is the basic character trait of entrepreneurs and students of entrepreneurship. The research conducted over three consecutive academic years on students of professional and specialized studies of entrepreneurship in Rijeka has refuted the given hypothesis about their high level of extroversion. Students were, on average, in between introversion and extroversion, as well as students of safety at work who were used as a control group. Only 5.7% of students of entrepreneurship have shown a high level of extroversion.

## EKSTROVERTIRANOST KAO POŽELJNA CRTA OSOBNOSTI PODUZETNIKA

dr. sc. Drago Pupavac, prof. v. š., Veleučilište u Rijeci  
Vukovarska 58, 51000 Rijeka, Republika Hrvatska  
Telefon: 0038551353737, e-mail: [drago\\_pupavac@veleri.hr](mailto:drago_pupavac@veleri.hr)

### SAŽETAK

*Poduzetnici su najčešće ljudi puni entuzijazma koji preuzimaju inicijativu i vode projekte naprijed. Uspješni poduzetnici su proaktivni, neprestano u potrazi za poslovnim prilikama. Crte osobnosti koje prema petodimenzionalnom modelu osobnosti najbolje opisuju takvo ponašanje su ekstrovertiranost i otvorenost prema iskustvu. Ekstrovertiranost se povezuje s višim performansama u prodaji, menadžerskim poslovima i poslovima u kojima je potrebno utjecati na druge (pregovaranjima). U skladu s tim, temeljna zadaća ovoga rada jest istražiti ekstrovertiranost studenata stručnog i specijalističkog diplomskog studija Veleučilišta u Rijeci te ukazati na važnost ove dimenzije ličnosti u kreiranju novih poslovnih pothvata. Da bi se dokazala ili opovrgnula postavljena hipoteza o iznad prosječnoj ekstrovertiranosti studenata stručnog studija poduzetništva korištene su brojne znanstvene metode od kojih se izdvajaju metoda anketiranja, metoda deskriptivne statistike i komparativna metoda. Empirijsko istraživanje provedeno je metodom anketiranja na Veleučilištu u Rijeci akademske 2012./2013., 2013./2014. i 2014./2015. godine. Anketiranjem je obuhvaćeno 195 studenata stručnog i specijalističkog diplomskog studija Poduzetništva i 31 student stručnog studija Sigurnosti na radu koji su poslužili kao kontrolna grupa. Rezultati istraživanja ukazuju na prosječnu razinu ekstrovertiranosti studenata stručnog studija Poduzetništva čime je opovrgnuta postavljena hipoteza.*

**Ključne riječi:** ekstrovertiranost; poduzetnici; studenti poduzetništva

## LITERATURE

1. Aldrich, E., & Wiedenmayer, G. (1993). From traits to rates: An ecological perspective on organizational foundations, In Katz, A., Brochhaus, R., *Advances in entrepreneurship, firm emergence, and growth* (Vol. 1, pp. 145-195). Greenwich, CT: JAI Press.
2. Baron, R. A., Frese, M., & Baum, J. R. (2007). Research Gains: Benefits of closer links between I/O psychology and entrepreneurship. In J. R. Baum, M. Frese, & R. A. Baron (Eds.), *The psychology of entrepreneurship* (pp. 347–373). Mahwah, NJ: Erlbaum.
3. Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance. A meta-analysis. *Personnel Psychology*, 44, 1–26.
4. Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new Millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, 9, 9–30.
5. Brandstätter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses. *Personality and Individual Differences*, 51, 222–230.
6. Brochhaus, H., & Horowitz, S. (1985). The psychology of the entrepreneur, In D.L. Sexton & R.W. Smilor (Eds.) *The art and science of entrepreneurship* (pp.25-48). Cambridge, MA: Ballinger.
7. Chamorro-Premuzic, T., & Furnham, A. (2010). *The psychology of personnel selection*. New York: Cambridge University Press
8. Gartner, W.B. (1989). Who is the entrepreneur? is the wrong question? *Entrepreneurship Theory and Practice*, 12(2), 47-68.
9. Goldberg, et al. (2006.). The International Personality item Pool and the Future of Public-Domain Personality Measures, *Journal of Research in Personality*, 40, p.84-96.
10. Hurtz, G. M., & Donovan, J. J. (2000). Personality and job performance: The Big Five revisited. *Journal of Applied Psychology*, 85(6), 869–879.
11. Leutner, F., et al (2014). The relationship between the entrepreneurial personality and the Big Five personality traits, *Personality and Individual Differences*, 63, 58–63.
12. Low, B., & MacMillan, B.C. (1988). Entrepreneurship : Past research and future challenges, *Journal of Management*, 14(2), 139-162.
13. Lukes, M., et al (2005). Psychology of Entrepreneurship Research Findings and Educational Consequences, XII. EAWOP congress, Istanbul.
14. McShane, Steven; Von Glinov, Mary Ann (2010). *Organizational Behaviour*, 5th edition, Boston [etc.], McGraw-Hill/Irwin.
15. Ones, D. S., Dilchert, S., Viswesvaran, C., & Judge, T. A. (2007). In support of personality assessment in organizational settings. *Personnel Psychology*, 60, 995–1027.
16. Rauch, A., Frese, M. (2007). Born to Be an Entrepreneur? Revisiting the Personality Approach to Entrepreneurship, in Baum, J., Frese, M., Baron, R. (Ed.), *The psychology of entrepreneurship*, Mahwah, NJ: Erlbaum.
17. Rot, N. (1985). *Opšta psihologija*, Zavod za udžbenike i nastavna sredstva, Beograd.
18. Salgado, J. F. (1997). The five factor model of personality and job performance in the European Community. *Journal of Applied Psychology*, 82(1), 30–43.
19. Zhao, H., & Seibert, S. E. (2006). The Big Five personality dimensions and entrepreneurial status: A meta-analytical review. *The Journal of Applied Psychology*, 91, 259–271.
20. Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 36, 381–404
21. Zvonarević, M. (1987). *Psihologija*, Školska knjiga, Zagreb.