

ENTERPRISING TENDENCIES OF MANAGEMENT AND PSYCHOLOGY STUDENTS: DIFFERENCES AND COMMON ATTRIBUTES

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Abstract

The aim of study is to examine and compare the enterprising tendencies of management and psychology students. The main research question is to identify whether university students in these two fields of study differ in their enterprising tendencies and, if so, what are the differences and common attributes. In order to answer this research question we have measured the enterprising tendency and its components - entrepreneurial characteristics, using the General Enterprising Tendency v2 test (GET2test) of 325 university students of management and psychology. Our findings suggest that there are significant differences in favor of management students in terms of overall enterprising potential, as well as in four out of five its components (namely need for achievement, calculated risk taking, creative tendency and internal locus of control). In our study we discuss these findings and their implication, mainly from educational perspective.

Introduction

Nowadays economies are shaped by extreme dynamics of the environment, rapid changes and increasing cognitive complexity in all aspects of life. These trends lead to changing nature of interactions of individuals within the society, and to growing importance of enterprise and enterprising in various contexts of individual self-realization. One of such contexts is a professional work career that determines the nature of the entire productive life of an individual. Regardless the particular direction of professional career, enterprising concept becomes an important attribute. Enterprising tendency embodied in entrepreneurial characteristics is crucial not only for those who intend to pursue the entrepreneurial path as owner-managers of traditional for-profit businesses. It is equally essential for everyone who aims to start and successfully run projects in various environments, either as an employee, or in social and community ventures, education, science and technology, public sector or NGOs. Key role in development of entrepreneurial attributes is played by education. Even though universities usually stand at the end of the educational chain, with limited abilities to influence inputs (in terms of students and their characteristics) from pervious stages, they should contribute to building and developing enterprising tendencies of their students, and

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Suggested citation: HOLIENKA, M. and HOLIENKOVA, J. (2014) Enterprising tendencies of management and psychology students: differences and common attributes. *Comenius Management Review*. 8 (1). p.39-52.

navigate them to their application in their professional careers. Traditional perception of entrepreneurship education as exclusive attribute of business schools is overcome. Its role is no more limited to foster the formation of independent for-profit businesses among business students. In nowadays context, its aim is actually much broader - to enhance creativity, innovativeness and ability to identify opportunities and execute ideas, equipping students of any discipline with so called “enterprising mindset” that can be realized in huge variety of different professional (not only profit-oriented business) activities.

Despite this need, presence of true entrepreneurial education at non-business schools is still rather scarce, and distribution of enterprising tendencies formed by variety of entrepreneurial characteristics among students in different disciplines is uneven. To examine this difference, we have focused our investigation on students of two different fields - management (or business administration) and psychology. The first major of study is traditionally linked with enterprising (either independent or corporate), where management students are confronted mainly with its external forms, i.e. they are quite considerably being taught and prepared to perform enterprising actions. On the contrary, the psychology as a field of study traditionally evokes very little linkage with enterprising concept. Even though some part of psychology studies may draw attention to the essence of enterprising (as one of important human behaviors), students are taught rather “about” enterprising (to understand it) instead of “for” enterprising (to develop and perform it). Building on these presumptions, our aim was to empirically analyze the existence and nature of differences in overall enterprising tendency and its respective attributes, and to develop suggestions and implications especially from the perspective of entrepreneurial education programming.

The structure of this paper is conventional. In Section 1 we present the theoretical background and review of literature related to the topic of our study. In Section 2 we present the data and research methods used in our study. Section 3 presents the results of our analysis, and Section 4 discusses these results and their implications. Finally, section 5 concludes.

1 Theory and literature review

In the theory and literature review section we will explain the nature of enterprise and enterprising individuals, as well as to entrepreneurial characteristics. Finally, we will devote the attention to enterprising in the context of management and psychology studies.

1.1 Enterprise and enterprising individuals

The concept of enterprise is used in various contexts with a number of different meanings. In our case we will refer to this terms as to a personal attribute, rather than to an activity or unit of economic organization. With this respect, the view of enterprise (or being enterprising) differs for example in its breadth. While the narrow view relates to entrepreneurship specifically concerning for-profit business ventures, a broader view has more general human meaning (Bjerke, 2013). As we have indicated in the introduction section, our understanding of this concept is rather broad and related to wide array of different contexts. Therefore, we will incline to understanding the enterprise (and the quality of being enterprising) as set of individual’s abilities to take initiative, discover and introduce new ideas, turn these ideas into real activities and take responsibility for their execution (Orbanova

and Velichova, 2013), irrespective the context where these abilities appear or are executed. Another classification of views on the enterprise concept differentiates between the perspectives of internal personality attributes of an individual, external environment where an individual lives and acts, and process of activities required for enterprising action (Mackova, 2010). In the light of this classification, we will deal with enterprise concept from the perspective of personality attributes, i.e. entrepreneurial characteristics forming the individual's enterprising tendency. Finally, the enterprise concept can be understood from external as well as from internal perspective (Orbanova and Velichova, 2013), where external perspective is perceived as an ability to identify, pursue and exploit an opportunity in particular competitive entrepreneurial environment, while internal perspective is perceived as a competency and particular dimension of individual's behavior. In this case, we will incline to the second view, since our investigation will be focused on the existence of internal entrepreneurial attributes rather than on presence of enterprising action.

The perspective on the enterprise concept that we follow determines also our inclination to the definition of an enterprising individual. With this respect, such individual can be defined as a person who sets up and runs a project in wide array of different contexts (Caird, 1990), where enterprising tendency can be understood as the set of psychological characteristics of such individual associated with his/her tendency to set up and manage projects (Caird, 1991). Since the traditional profit-oriented business venture is a considerable type of such projects, entrepreneurs can be understood as a subset of a wider category of enterprising individuals (Caird, 1990), who have shown and executed the tendency to start and manage projects - their business ventures. Because this subset has attracted the vast majority of scholars' and researchers' attention to enterprising individuals (the research on enterprising persons in different context is far not that frequent), knowledge on attributes of enterprising individuals has been based mostly on knowledge on entrepreneurial characteristics.

1.2 Entrepreneurial characteristics

Entrepreneurial characteristics can be understood as specific personality traits typical for entrepreneurs, i.e. individuals owning and managing entrepreneurial ventures and engaged in entrepreneurial projects in various stages of development. There has always been a controversy and lively debate among economists, psychologists or entrepreneurship scholars about the question whether and how personality traits should be considered in relation to entrepreneurship. Some of the first traditional works in this field established the picture of entrepreneurship as an human action related to particular qualities, such as risk taking (Knight, 1921), innovativeness, achievement orientation, dominance (Schumpeter, 1934), knowledge and entrepreneurial discovery (Hayek, 1941) or achievement motivation (McClelland, 1961). Several decades later, among other similar works, a provoking work by Gartner (1988) argued that asking "who is an entrepreneur?" is a wrong question. In other words, significant doubts have been proposed on attempts to define typical personality traits of an entrepreneur, as they were considered too diverse and inconsistent, descriptive and missing solid theoretical grounding, and often methodologically weak (Rauch and Frese, 2012). However, recently, the interest in a personality of an entrepreneur has come to revival. Of course, its nature is more sophisticated, and it relates to perspectives such as situational

considerations, testing of non-linear relationships, interconnection between personality traits and personal dynamics, focusing on proximal individual differences or dealing with cognitive abilities (Rauch and Frese, 2012). Offering this broad set of arguments, Rauch and Frese call for restoration of personality research in the field of entrepreneurship and suggest that certain specific personality traits play a considerable role in individual propensity to entrepreneurship, its various aspects and outcomes.

Drawing the attention to particular personality traits, existing literature and empirical evidence provide several suggestions about the specific personality traits which can be perceived as entrepreneurial characteristics. One of the efforts to summarize the individual differences determining entrepreneurship success is the conceptual model of entrepreneur’s personality characteristics and success proposed by Rauch and Frese (2007, 2012), presented in Figure 1.

The model by Rauch and Frese assumes that the effects of broad personality traits on business outcomes are not straightforward. Instead, broad personality traits influence traits which are specific/proximal to entrepreneurship that, in turn, influence goals and action strategies and, as a result, business success. Moreover, the effects of specific traits are hypothesized to be dependent on environmental variables. Finally, the model also assumes the influence of nonpersonality variables. As for the specific personality traits, the attributes with significant relationships with both business creation and business success, according to meta-analysis by the authors (Rauch and Frese, 2007) are: need for achievement, risk-taking, innovativeness, autonomy, locus of control and self-efficacy.

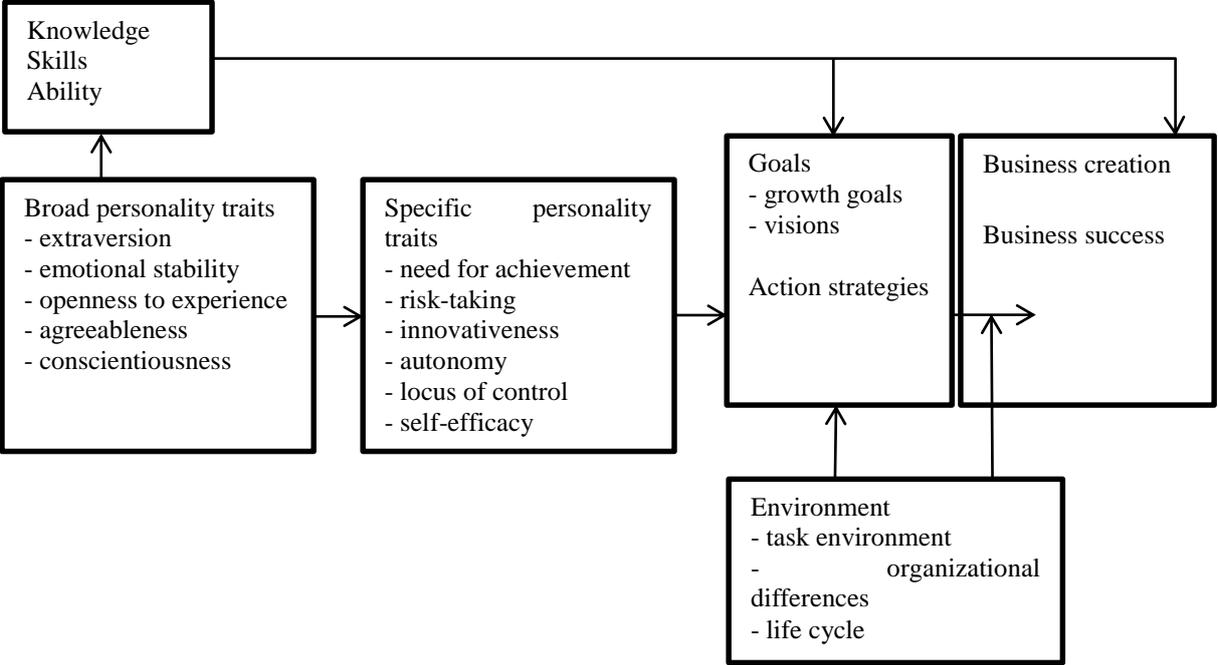


Figure 1: A model of entrepreneurs’ personality characteristics and success (Rauch and Frese, 2012)

A valuable effort to establish the specific attributes characteristic for enterprising individuals has been executed by Caird (1990, 1991, 1993), who derived these attributes from broad study of significant entrepreneurial characteristics. In her opinion, psychological

characteristics of entrepreneurs and enterprising people may be identical, the only difference being the entrepreneur's specific association with a business enterprise (Caird, 1990). Her understanding of the relationship between entrepreneurial characteristics and enterprising tendency is built on several assumptions. First, entrepreneurship is considered as one of the forms of the enterprise concept. Second, entrepreneurs represent a considerable (however, not the only) subset of enterprising individuals. Third, the attributes of entrepreneurs are used to determine the attributes of enterprising individuals in general. Finally, enterprising individuals exhibit high levels of enterprising tendency. Following these assumptions as well as the fact, that no other form of enterprising behavior has been studied in such extent than entrepreneurship, understanding the attributes of entrepreneurs has been used to understand and explain the attributes of enterprising behavior (Caird, 1991). In particular, the significant entrepreneurial characteristics proposed by Caird are: calculated risk-taking, creative tendency, high need for achievement, high need for autonomy, and an internal locus of control.

Calculated risk-taking. Risk-bearing is a significant feature of entrepreneurship. However, entrepreneurs cannot be generalized as universal risk-takers on any circumstances. Instead, they are rather risk-sensitive, and this sensitivity manifests in their behavior either as risk-avoidance or risk-taking, depending on particular reward situation. Thus, calculated risk-taking has been defined by Caird (1991) as the ability to deal with incomplete information and act on a risky option, that requires skill, to analyze challenging but realistic goals.

Creative tendency. Creativity is an important attribute of entrepreneurship crucial for both innovative as well as replicative entrepreneurship. While the first type of entrepreneurship needs creativity to enhance revolutionary innovation, the latter utilizes creativity to enable entering the market, producing the goods and services efficiently with limited resources, and winning a respective market share. Creative tendency has been defined by Caird (1991) as the tendency to be imaginative, innovative, curious and versatile. Creative ability requires both quantity and quality of ideas, together with flexibility and innovation in thinking.

Need for achievement. High entrepreneurial motivation (which is rather an achievement motivation than a goal motivation) is associated with need for achievement. Moreover, this attribute has been identified as important quality not only in case of entrepreneurs, but also for other enterprising groups other than business owner-managers (Caird, 1991). Entrepreneurs with high need for achievement e.g. take personal responsibility for and seek feedback about their performance, and search for new and better ways to improve their performance.

Need for autonomy, which can be understood as the need to do and say as one likes despite conventional expectations, belongs to strong reasons for starting an entrepreneurial ventures. The need for autonomy is related to various entrepreneurial attributes such as determination, self-reliance, inner control, calculated risk-taking, innovation or decision-making (Caird, 1991). While need for autonomy may strongly contribute to survival of business venture (because the entrepreneur tries hard to maintain his/her independent business), it can also actually obstruct venture growth when it prevents the necessary co-operation (Rauch and Frese, 2012)

Internal locus of control. The concept of locus of control describes the extent to which individuals believe that reinforcements are dependent upon their own behavior. The internal locus of control implies that one believes in controlling one's destiny and future. This construct is supposed to be important for entrepreneurs because believing in one's own active influence helps to increase the motivation to reach success (Rauch and Frese, 2012). Internal locus of control is associated with entrepreneurial attributes such as insight, initiative, achievement, assertion, independence, effectiveness, sociability or intellectual efficiency (Caird, 1990).

In addition to defining the above mentioned entrepreneurial characteristics that determine the enterprising tendency of an individual, Caird has also developed an instrument to measure the level of these characteristics together with the overall enterprising tendency (Caird, 1991). Thus, in our paper we will incline to her work and employ the proposed instrument to investigate for the answer to our research question.

2 Research data and method

2.1 Sample

Our research sample was created by 325 university students of the two analyzed majors (management and psychology) studying at two Slovak universities (Comenius University in Bratislava, Faculty of Management, and University of Ss. Cyril and Methodius in Trnava, Faculty of Arts). The only sampling criteria that we applied was an active university study (undergraduate or graduate), without any limitations for age or gender. In particular, the sample comprised of 157 management students and 168 psychology students. The respondents were selected using a convenience sampling approach. The data were collected from October 2013 to September 2014. All students were in their third year of undergraduate study (bachelor level), or in the first or second year of graduate study (master level), so we can expect their greater conformity with their field of study and its nature.

2.2 Variables

The overall level of enterprising tendency as well as the levels of particular entrepreneurial characteristics were measured using the General Measure of Enterprising Tendency, Version 2 (GET2 test) created by Sally Caird (1991).

GET2 test is a self-assessment scale comprising of 54 statements that aims to measure key attributes of enterprising individuals through evaluation of five main entrepreneurial characteristics, namely calculated risk taking, creative tendency, need for achievement, internal locus of control (each represented by 12 items) and need for autonomy (represented by 6 items). The overall enterprising tendency score is calculated as a total score of all items, with maximum of 54 points. The score of 44 to 54 points (high score) indicates that an individual is classified as very enterprising, the medium score (27 to 43 points) indicates possession of some enterprising qualities, while the low score (0 to 26 points) represents low levels of general enterprising tendency. The particular entrepreneurial characteristics are evaluated as follows: high (10 to 12 points on the 12 point scale/4 to 6 points on the 6 points scale), medium (7 to 9 points on the 12 point scale/3 points on the 6 point scale), an low (0 to 6 points on the 12 point scale/0 to 2 points on the 6 point scale).

The GET2 test scale has been translated to Slovak language following the requirements for research method translation, and it has been distributed in Slovak language version. The administration and evaluation of the questionnaire was following the original instructions. The internal consistency analysis on our sample of university students provided satisfactory value of Cronbach's alpha coefficient for the entire questionnaire ($\alpha=0.804$).

2.3 Analysis and test methods

The main aim of our study was to investigate for differences in the overall enterprising tendency as well as particular entrepreneurial characteristics between university students in two fields of study - management and psychology. The obtained data were analyzed using a non-parametric statistics with Mann-Whitney U test. This statistical method was selected due to comparison of two independent populations (management and psychology students) according to quantitative variable (overall enterprising tendency/entrepreneurial characteristics), as well as due to non-normal distribution of the data (tested with Shapiro-Wilk test, $p<0.05$). The analysis was executed in SPSS v.17 statistical software package.

3 Results

The results of our investigation are presented in two parts. First, we present our findings about differences between management and psychology students in overall enterprising tendency as well as in its particular components. Second, we provide the descriptive characteristics of the two analyzed groups, and we compare these groups by constructing their enterprising profiles.

We assumed that the difference in overall enterprising tendency between management and psychology students is statistically significant. The results of our analysis confirmed this assumption (Table 1).

Table 1: Comparison of overall enterprising tendency between management and psychology students

Overall enterprising tendency	Field of study	MR	Mann-Whitney U test	Significance (2-tailed)
	Management	186.40		
	Psychology	141.13	9513.500	0.000

Source: own elaboration

As can be seen in Table 1, results of Mann-Whitney U test suggest that differences in overall enterprising tendency between management and psychology students are statistically significant ($U=9512.500$, $p=0.000$). These results suggest that students in the compared fields of study exhibit different overall enterprising tendency, and this difference is in favor of management students. Therefore, according to our results, management students are significantly more enterprising than their counterparts majoring in psychology.

In accordance with our assumption regarding the overall enterprising tendency, we also expected the differences in particular entrepreneurial characteristics between management and psychology students to be statistically significant. In this case, our assumption was confirmed in case of four out of five entrepreneurial characteristics (Table 2).

Table 2: Comparison of entrepreneurial characteristics between management and psychology students

Subscale	Field of study	MR	Mann-Whitney U test	Significance (2-tailed)
Need for achievement	Management	185.67	9629.000	0.000
	Psychology	141.82		
Calculated risk taking	Management	182.70	10095.500	0.000
	Psychology	144.59		
Need for autonomy	Management	169.22	12211.000	0.236
	Psychology	157.18		
Internal locus of control	Management	175.32	11253.000	0.021
	Psychology	151.48		
Creative tendency	Management	178.04	10827.000	0.005
	Psychology	148.95		

Source: own elaboration

As can be seen in Table 2, the differences between management and psychology students measured using Mann-Whitney U test achieved the statistical significance level in case of four out of five entrepreneurial attributes. Namely, these attributes are: need for achievement (U=9629.000, p=0.000), calculated risk taking (U=10095.500, p=0.000), internal locus of control (U=11253.000, p=0.021), and creative tendency (U=10827.000, p=0.005). In contrast, the results between the analyzed majors in need for autonomy were not found to be significant. All of the observed differences are in favor of management students. Therefore, according to our results, management students, in comparison to their psychology counterparts, are more intensively focused on achieving a success, have higher ability to calculate whether the value of potential success outweighs the risk related to consequences of possible failure, have stronger belief in controlling their own future and destiny, and exhibit greater tendency to be imaginative, innovative, curious and versatile.

The second step of our analysis is focused on providing descriptive statistics on the levels of overall enterprising tendency as well as particular entrepreneurial characteristics of management and psychology students, and construction of their enterprising profiles. Descriptive statistics is presented in Table 3.

Table 3: Descriptive statistics for management and psychology students

Subscale	Field of study	N	Mean	Score	Std dev
Overall enterprising tendency	Management	157	34.5732	Medium	7.33555
	Psychology	168	31.4107	Medium	6.34377
Need for achievement	Management	157	7.5669	Medium	2.28786
	Psychology	168	6.5893	Low	1.87109
Calculated risk taking	Management	157	8.5605	Medium	2.17308
	Psychology	168	7.6964	Medium	2.06412
Need for autonomy	Management	157	3.2611	Medium	1.35470
	Psychology	168	3.0595	Medium	1.32096
Internal locus of control	Management	157	8.0764	Medium	2.20297
	Psychology	168	7.6607	Medium	1.82737
Creative tendency	Management	157	7.1083	Medium	2.06801
	Psychology	168	6.4048	Low	2.34518

Source: own elaboration

The mean values of overall enterprising tendency (Table 3) suggest that both management and psychology students exhibit on average medium levels of enterprising tendency (management: $M=34.5732$, $SD=7.33555$; psychology: $M=31.4107$, $SD=6.34377$). Medium enterprising tendency indicates that an individual is likely to have strengths in some of the entrepreneurial attributes and might be enterprising in some contexts. However, he/she is probably unlikely to start an innovative growth-oriented business venture, but might be rather able to express his/her enterprising potential through intrapreneurial activities or in the free time (e.g. through voluntary community projects). Because psychology students exhibited lower average enterprising tendency, the above mentioned characteristics may be generally of lower intensity, with more frequent inclination towards rather supportive than leading and proactive role in one's activities. On the contrary, management students with their relatively higher enterprising tendency (still within the medium range) are more likely to exhibit enterprising behavior, such as setting up projects, exploiting opportunities, utilizing resources, or focusing on innovative and growth-oriented activities. Of course, as indicated by medium evaluation of overall enterprising tendency, frequency of such events will be rather limited.

Further insights on the nature of differences between management and psychology students can be obtained after examining the average evaluation of particular entrepreneurial characteristics. The two analyzed groups of students differ especially in need for achievement and in creative tendency. While management students exhibit on average medium levels in both attributes, mean values of their psychology counterparts indicated low levels of these characteristics. Medium level of *need for achievement* exhibited by management students ($M=7.5669$, $SD=2.28786$) suggests that they may possess drive towards achievement, but incline to considering rather 'tried and tested' enterprising ideas. On the contrary, low level of this attribute (indicated for psychology students, $M=6.5893$, $SD=1.87109$) indicates lower prioritization of achievement, meaning that running an enterprise would be too much hard

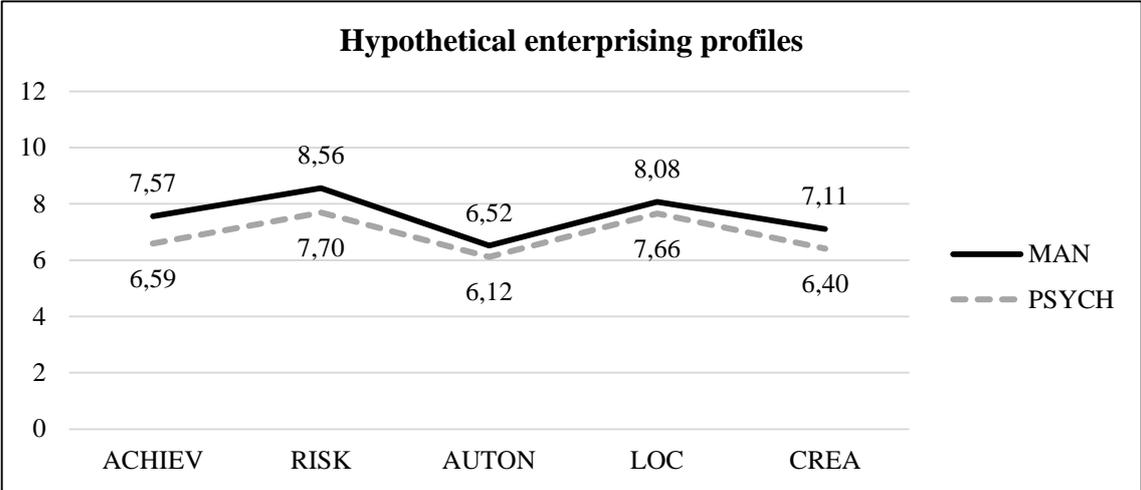
work and commitment. As for *creative tendency*, medium average level achieved by management students ($M=7.1083$, $SD=2.06801$) indicates preference to somehow more straightforward rather than completely novelty enterprising ideas, while average low level in case of psychology students ($M=6.4048$, $SD=2.34518$) suggests that they might be satisfied with proven, traditional approaches. In addition to the two above mentioned attributes, management and psychology students exhibit significant differences also in calculated risk taking and internal locus of control, even though average scores of both groups fall into medium scoring in these characteristics. The medium score of *calculated risk taking* (management: $M=8.5605$, $SD=2.17308$; psychology: $M=7.6964$, $SD=2.06412$) indicates that individuals would be probably happiest with established and less risky enterprising ideas or projects where a partner takes the risk, even if it might include sacrificing some of the potential rewards. As for *internal locus of control*, the medium score (management: $M=8.0764$, $SD=2.20297$; psychology: $M=7.6607$, $SD=1.82737$) indicates that individuals, although having some entrepreneurial qualities, may need to develop their self-confidence and enterprising skills, and exert greater control over the development of their ideas. Without greater self-confidence, they may over-rely on others, which could increase the risk of the project. Finally, our findings did not show any significant difference between management and psychology students in case of *need for autonomy*. In this case, both groups exhibited medium average levels of this characteristic (management: $M=3.2611$, $SD=1.35470$; psychology: $M=3.0595$, $SD=1.32096$). Such evaluation indicates, that individuals would be probably equally happy to work as an employee as a part of an organizational team or on their own projects, so own project are not their only option. Also, to start own projects, individuals with medium need for autonomy might need to develop stronger independent leadership qualities.

The hypothetical enterprising profile of an individual can be constructed as a composition of scores in the different evaluated attributes, i.e. the five main entrepreneurial characteristics. Similarly, the same logic can be applied when constructing a profile of a group, but in this case, mean values of the particular attributes will be considered. Following this approach, we have constructed the enterprising profiles of management and psychology students (Figure 2).

The hypothetical enterprising profiles of management and psychology students displayed on Figure 2 suggest two main findings. First, both groups of students have very similar composition of the profile (note: score for need for autonomy was recalculated to fit the 0-12 points scale) and exhibit similar relative balance of the evaluated entrepreneurial personality attributes. Both management and psychology students achieve the highest values among the analyzed attributes in case of calculated risk taking. On the contrary, in both cases the need for autonomy was the lowest evaluated entrepreneurial characteristic. The second main finding visualized by the enterprising profile is that the qualitative level of management students' profile is clearly higher than the profile of their psychology counterparts. Of course, this finding has already been provided by respective testing method (that provided evidence for statistical significance of this difference) as well as by the descriptive statistics results, so the visualization just underlines the main message of our results: management students exhibit

consistently higher levels of enterprising tendency and its components - particular entrepreneurial characteristics, than students majoring in the field of psychology.

Figure 2: Hypothetical enterprising profiles of management and psychology students



Source: own elaboration

4 Discussion

The results of our analysis suggest that the levels of overall enterprising tendency as well as its four (out of five) components - particular entrepreneurial characteristics, differ significantly between management and psychology university students. These findings contribute to the existing body of knowledge. Unlike the previous similar study (Mesarosova and Mesaros, 2011) we have identified differences between students from different disciplines. However, while the compared groups of students in the study by Mesarosova and Mesaros fell into the same group of sciences, the disciplines analyzed in our study were more heterogeneous (social vs. behavioral sciences).

Because the overall enterprising tendency results from the level of particular entrepreneurial attributes, our investigation was especially focused on the understanding of these attributes. We attempt to explain the observed differences and their origins in the specific nature of management and psychology as fields of study. The rationale behind the existence of these origins is twofold. One, there might be a study field selection bias, when students aiming to utilize their enterprising potential through starting a business career would decide to study management, that includes entrepreneurship or business administration. Two, equally important is the effect of the study field, in terms of both hard and soft factors that are fostered and developed (i.e. knowledge taught, skills acquired, culture promoted or behavior enforced).

The biggest and statistically significant difference between management and psychology was observed in need for achievement. In our opinion, this difference could be contributed to the different role that achievement plays in these two fields of study. While

future psychologists are not implicitly encouraged to develop their need to achieve the unlimited success in their profession (which is obvious due to the nature of this profession), future managers will play on much broader field with more opportunities (sometimes presented to them by different success stories and role models as unlimited). They also have more ways how they can develop their actions towards achievement, and this broad horizon is emphasized practically throughout their entire studies.

The second biggest and statistically significant difference could be observed in case of calculated risk taking. In this case, according to our understanding, future psychologist have more linked career path that will guide them through more structured and regulated environment. Such environment usually does not offer many huge-growth potential opportunities. Therefore, their career development is naturally rather gradual and goes step by step, while highly risky options are rather not existent for psychologists on this way. On the other hand, future managers will encounter variety of options with wide array of risk attached to them, both in fields of corporate venturing and especially entrepreneurship. In such context, the general rule that higher risk yields higher returns works very well as a main principle, so managers are encouraged to weigh potential gains and losses.

Another considerably and significantly different attribute between management and psychology students was creative tendency. The higher level of this attribute among management students may be caused by quite systematic development of creativity embedded in management study. Future managers are exposed to creativity development by practicing creative techniques, working on projects or case studies with need to find innovative solutions in competitive environment. In their future professional career in extremely dynamic competitive environment, goals will be rarely set from the beginning. Moreover, management science and best practices are always one step behind the practice, putting great emphasis on creativity and invention. Thus, management students are guided to be able to work in such uncertain environment and creatively adapt to changes and new challenges. On the other hand, while future psychologist also need to be creative, this attribute is usually not systematically incorporated in their curricula. Instead, they are trained to apply structured thinking and problem solving, and they will frequently deal with cases where the goal is set from the beginning. Of course they will have to creatively find ways to achieve the goals, but the borders are usually set by known directions, techniques, methods. Thus, the implicit need to use creativity in such context is lower.

Interestingly, despite different average values (with the difference being in favor of management students, thus in line with the pattern in other four attributes), our findings did not prove statistically significant difference in need for autonomy. In our opinion, this may be contributed to the fact that need for autonomy is rather related to personality and personal preferences universally irrespective the field of study or planned professional career, than being context-specific in management vs. psychology context.

Despite in our opinion quite understandable difference between psychology and management students, we do not advocate for the status quo. Conversely, we argue that the levels of the entrepreneurial characteristics and the overall enterprising tendency should be further developed and reinforced in both fields of study. The reason is very obvious, the situation nowadays does not bring the need for entrepreneurship per se, but rather a need for

enterprising spirit and skills and their realization in various contexts (e.g. entrepreneurship, intrapreneurship, social and community ventures, education, science and technology, public sector or NGOs), for the benefit of particular individuals as well as of the entire society. Enterprising is an important and sustainable prerequisite in any professional context, irrespective its particular form. Students of psychology will need the enterprising qualities to systematically build and develop their professional career, constantly educate themselves and innovate, and build own professional identity. Accordingly, management students will need to be enterprising to run their own business or work as professional executives or project managers. Moreover, they would also need to support an enterprising culture in their organizations. The entire management profession is about leadership and development of new directions, opportunities and ideas, i.e. about application of enterprising qualities in different contexts.

The strongest weapon in the fight for improved entrepreneurial attributes is undoubtedly the entrepreneurship education. Even though universities usually represent the final stage of education before entering the professional career, and their possibilities are to certain extent limited by the input from previous educational stages, they should keep on mind the importance of supporting the enterprising spirit and entrepreneurial attributes, hand in hand with developing corresponding entrepreneurial skills. Entrepreneurship education should not be exclusively for management or business studies. It plays equally important (if not even more important) role in other fields preparing students for all sorts of different professions. Irrespective the particular career focus, individuals who exhibit ability and willingness to take initiative, discover and introduce new ideas, turn these ideas into real activities and take responsibility for their execution can create value for themselves and the entire society in any context. Of course, the content of entrepreneurship education should be adjusted according to the particular field of study, as well as according to levels of enterprising characteristics and skills. While students with higher levels of enterprising tendency would benefit the most from education aimed at strengthening and capitalizing their potential by supporting initiation and development of projects, especially businesses, students with lower levels may find useful educational activities aimed to develop their enterprising life skills and competencies and guide about their usage in different contexts.

Conclusion

In conclusion, our study provided evidence on significant difference between management and psychology students in terms of overall enterprising tendency as well as four out of five its particular components. We have discussed these findings, their potential origins as well as their implications and challenges for entrepreneurship education, in order to foster the enterprising spirit that is so important among university students in nowadays society.

Our study also brings several implications for further research in this field. Future works should focus on validation of the findings about differences between the study fields by expanding the analysis to other fields of study. Especially, attention should be paid to technical fields as well as to creative areas (such as fine arts or performing arts). Also, we

encourage the development of longitudinal studies that would investigate for the stability of entrepreneurial characteristics vs. effects of study field, e.g. by examining students at the point of entry to university, and after their completion of undergraduate and graduate level.

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