

Entrepreneurial Skills, Significant Differences between Serbian and German Entrepreneurs

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Abstract

An extensive literature review reveals various authors acknowledge skills have an impact on entrepreneurial success. However, a lack of consensus regarding the main skills an entrepreneur needs is apparent. In this study, a contribution is made to the debate with empirical data and analysis, in two steps: by testing mean differences and reducing data with a principal components analysis. A sample of 394 potential entrepreneurs was administered the SAT-ECENT questionnaire, testing four skills: readiness to change, learning capacity, impact on people, and stress tolerance. The questionnaires were administered in Serbia ($n = 190$) and in Germany ($n = 204$). In this paper, evidence about two main issues is presented: Entrepreneurial skills vary significantly across countries, and the skill tolerance to stress plays an important role in explaining the variance in the development of entrepreneurial skills in the two countries. Discussion is focused on the research implications and relevance of the findings as well as the practical implications for entrepreneurship-promotion programs.

Keywords: Entrepreneurial skills, potential entrepreneurs, cultural differences, stress tolerance

JEL Classification codes: L26, J24

The development of small- and medium-size enterprises (SMEs) has long been on the political agenda in order to create employment and overall economic growth. Recent research supports the idea that the so-called entrepreneurial style has become indispensable for large business corporations given the increase of global competition and accelerated technological change. Numerous scientific efforts have been undertaken to measure entrepreneurship precisely (e.g., Baumol, 1968; Brunet & Alarcón, 2004; Muhanna, 2007; Shane, 1992; Wennekers, Van Wennekers, Thurik, & Reynolds, 2005) and identify key entrepreneurial skills (Brush, 2008; Gilbert, McDougall, & Audretsch, 2006; Hackler & Mayer, 2008; Lazear, 2004; McClelland, 1961; Rae & Carswell, 2001) so that the understanding achieved can be used to foster trainings and teaching programs.

The conducted research draws on a long-standing debate in the social sciences. The debate encompasses trait psychology, which reduces skills to inherent traits, as well as positions such as the social-constructionist perspective, which views skills as an entrepreneur's own construct; the systemic perspective, which views the socioeconomic macrosystem as the only factor of influence on an individual's skills; and interactionist sociology and other dual perspectives, where skills are perceived as created and as operating via social relationships.

The various historical and epistemological perspectives, along with contributions from practitioners' training programs, have contributed various and not always consistent lists of entrepreneurial skills. Since Schumpeter (1934), entrepreneurs have been considered a significant determinant of a country's economy, but constant debate about what makes an entrepreneur is evident.

This paper constitutes one more attempt to describe the nature of entrepreneurial skills. According to the dual social science paradigm and in line with the universal skills debate, the literature posits individual-level researchers should not underestimate the influence of contextual and macro factors on entrepreneurship, as exemplified by the different dynamics of entrepreneurial activity and skills. Our interest is in the analysis of skills of potential entrepreneurs in different countries. The study is focused on the debate about which individual variables make an entrepreneur. A descriptive review of the literature on entrepreneurial skills is presented and thereafter, in the methodology section, an outline of the data collection procedure, the measurement instrument, sample information, analytical techniques employed in the study, and the results are presented. The paper ends with discussion of the findings and the conclusions.

Literature Review

Approximations at a List of Entrepreneurial Skills

As rightly pointed out by McLarty and Dousios (2006), the term skill embraces the ideas of competence, proficiency, attributes, and the ability to do something well and is related closely to knowledge, expertise, and capability. According to research on new venture growth carried out by Gilbert et al. (2006), educational background; prior, related industry experience; and prior entrepreneurial or start-up experiences have well-established, direct effects on the sales and employment growth of new firms. Gilbert et al. (2006) paid attention to the different capabilities required of the entrepreneur and employees that depend on the strategy for a firm's growth: If it is internal growth (by innovation), the firm requires more creativity and technological capabilities than in the case for external growth (where other firms may possess ready assets). Similarly, international growth strategy requires the entrepreneur possess specific knowledge of the cultural background of the communities in which he or she operates, which may not be so necessary in the case of domestic growth.

Among the numerous views on entrepreneurial skills, Brush (2008) lists three major capabilities: visioning, bootstrapping, and social skills. In the literature, a *vision* is defined as "a pattern for future; having elements of time and scope, it is values driven, has a purpose, and often evokes a mental image or picture that can be communicated" (Brush, 2008, p. 23). The second key entrepreneurial capability, *bootstrapping*, refers to conserving financial resources and managing cash in order to start up a venture and make it grow. Finally, *social skills* are defined as learnable behaviors used by individuals in their interactions with others, which are particularly important for entrepreneurs to persuade others to join and commit themselves to their business ideas. These include persuasion, social adaptability, impression management, and social perception, as well as self-efficacy and emotional expressiveness.

In tandem with an extensive body of research, Markman and Baron (2003) pointed out that the chances of entrepreneurial success growing in the presence of personal characteristics and skills such as self-efficacy, ability to recognize opportunities, personal perseverance, human and social capital, and superior social skills are increased. Although some of these traits may be treated as personal characteristics, Markman and Baron affirmed that all of the characteristics and skills can be learned by means of appropriate short-term training. Such a perspective is rooted in theories of person-organization fit, according to which people choose jobs consistent with their attitudes, values, abilities, personality, and personal preferences; what is more, research supports that incompatibility of values between the employee and the organization is a predictable cause of employee turnover. As noted by Markman and Baron (2003), the individual-difference factors posited, in contrast to other aspects of personality, are open to modification through appropriate training. At the other end of the scale, Markman and Baron acknowledged these personal characteristics interact in complex ways with market forces, industry trends, new technological discoveries, and so on, to determine the success of entrepreneurial firms.

Some authors have researched entrepreneurial skills using the human capital approach (Drakopolou Dodd & Anderson, 2007; Hackler & Mayer, 2008; Saar & Unt, 2008). As reported by Haber and Reichel

(2007), interviews with a sample of entrepreneurs from 305 small business ventures in the tourism industry in Israel revealed the impact of entrepreneurial skills to be the greatest out of all the factors affecting the sustainability of small ventures. Haber and Reichel viewed small venture sustainability from the perspective of resource accumulation, combining it with the entrepreneurial process, and they considered three factors that affect small venture sustainability: physical capital resources, organizational capital resources, and human capital resources. The findings revealed the human capital of the entrepreneur, particularly managerial skills, was the greatest contributing factor to subjective short-term and long-term performance and objective short-term performance. More recently, Unger, Rauch, Frese, and Rosenbusch (2011), in a meta-analysis review of 30 years, have found a small yet significant relationship between human capital and successful entrepreneurs. Unger et al. showed that this relationship has a bigger impact for knowledge and skills, i.e., outcomes of human capital investments, than for human capital investments (schooling or experience for instance) or has better results for human capital with high task-relatedness compared to low task-relatedness, between other results.

Balanced Skills

Recent research supports the view that one of the major factors increasing the probability of an individual becoming an entrepreneur is his or her possessing a balanced skill-mix (Lazear, 2004). This idea, denominated the jack-of-all-trades (JAT) theory, is based on substantial research from various countries. The theory is justified because entrepreneurs have to manage a variety of tasks and people, so they need to be well versed in a variety of fields, abilities that come from innate attitudes and the choice to acquire expertise in different fields. Based on professional itineraries of Stanford Master of Business Administration alumni, Lazear observed that alumni who ended up as entrepreneurs followed more general curricula, in contrast to the more specialist curricula taken by those who ended up working for others. The conclusion drawn was specialists tend to work for others, whilst generalists tended to become entrepreneurs. The latter may have possessed some innate generalist dispositions, but they enhance it by choosing corresponding educational and professional itineraries. "Those who are going to specialize invest in only one skill. Those who become entrepreneurs may invest in one skill, but if they do so, it will be the skill in which they are weak. But entrepreneurs are the only individuals who may invest in more than one skill" (Lazear, 2004, p. 209).

According to Silva (2007), cross-sectional tests of the JAT theory cannot control individuals' unobservable characteristics, such as family or regional background, which may also be responsible for skill accumulation and occupational choice. By applying panel data analysis (to a longitudinal survey of Italian families), a research technique different from the cross-sectional one used hitherto to test the JAT theory, Silva came to a different conclusion: An individuals' cross-disciplinary knowledge did not enhance their propensity to become entrepreneurs. Overall, Silva's analysis suggested, "If a JAT attitude matters for entrepreneurship, it does so as an innate ability. Previous claims, on the causal effect of acquiring a balanced skill-mix on the probability of becoming an entrepreneur, should be more cautiously interpreted" (p. 122).

The question as to whether entrepreneurial skills are essentially universal and general or whether entrepreneurs need to specialize in their respective fields recurs throughout the literature. The prevailing answer opts in favor of the former option because the vast majority of research studies consider general and not specialized skills, even if they treat such varied fields of entrepreneurship as IT, retail, and agriculture. An illustrative example is provided by Nuthall's (2006) study of family farm businesses in New Zealand, which was explicitly narrowed down to primary production. This type of production is based on land, labor, and capital, yet it is obvious that to make it productive, managerial skills are indispensable. Two surveys, one including all the members of the professional body of farm business consultants and the other a large sample of New Zealand farmers and horticulturists, identified a set of key skills divided into desired managerial attributes, personal attributes, and entrepreneurial skills. The conclusion of Nuthall's study fits in with most of the state of the art literature about entrepreneurship: There is no simple list of basic competencies but rather, a complex mixture of interrelated skills.

Dynamic Capabilities

Giunipero, Denslow, and Eltantawy (2005) argued that in the changing business environment of accelerated global competition, conservative business corporations, especially their purchasing/supply chain managers should adopt the “entrepreneurial style.” The formulated set of entrepreneurial skills draws on the classic work by Timmons (1994) who, after an extensive review of the literature, established a set of six key entrepreneurial skills: (a) commitment and determination, (b) leadership, (c) opportunity obsession, (d) tolerance of risk, (e) creativity, and (f) internal motivation. Giunipero et al. (2005) presented an extended list of entrepreneurial skills: interpersonal communication, ability to make decisions, ability to work in teams, negotiation, managing change, customer focus, influencing and persuasion, strategic thinking, problem solving, conflict resolution, leadership, creativity, organization/time management, inquisitiveness, written communication, risk taking, and salesmanship. Giunipero et al. emphasized the flexibility dimension of these traits, exemplified by three traits: tolerance of risk, creativity, and internal motivation, jointly denominated *flexibility skills* or *dynamic capabilities*. Giunipero et al.’s proposition referred to the previous literature, “Which described entrepreneurs by their ability to adapt to the changing demands of their customers and their businesses,” in contrast to established corporations’ rigidity (Giunipero et al., 2005, p. 612). Entrepreneurial flexibility entails the ability to handle uncertainty and make decisions using new and sometimes conflicting information and a high tolerance of ambiguity and changing situations.

The direct and positive relationship between entrepreneurial skills and competencies and business success is probably the main reason guiding research efforts in the area, regardless of the theoretical framework used, comparative studies, qualitative, or quantitative approaches. In the former case, Phillips (2008) reminds us that “The Godfathers”, the older but successful entrepreneurs, of the eight techno-regions within his study, exhibit the typical psychological features of entrepreneurs described for many other researchers. In the second case, Blume and Covin (2011) and Chaston (2009) studied the relationship of intuitive skill with the venture founding process and entrepreneurs with the success of small firms. Blume and Covin stated that, although intuition can be part of an individual’s decision to catch a business opportunity, other variables interpreted by the entrepreneur can influence a decision. Chaston showed that there is no reason to prefer an intuitive-thinking style in the decision-making process for owners or managers of small firms, because there are also many examples of successful businesses that are governed by an analytical mindset. Finally, for the third case, Ahmad, Ramayah, Wilson, and Kummerow (2010) confirmed entrepreneurial competencies are strong predictors of successful entrepreneurial activities. In the particular case, a contextual variable was included, showing the business environment significantly moderates the relationship between entrepreneurial competencies and successful entrepreneurial activities. Overall, Ahmad et al. stated that understanding business success through the lens of entrepreneurial competencies, gives entrepreneurs sound inputs on the way they have to operate their businesses. In addition, entrepreneurial competencies provide entrepreneurs with useful insights on the positive and negative effects of their behaviors (Ahmad et al., 2010).

As is evident in the review of the literature presented, an extensive bibliography already exists on entrepreneurial skills where it is explicitly accepted that skills have an effect on entrepreneurial success. However, entrepreneurship research lacks consensus regarding the issue of what main skills a successful entrepreneur has or needs. In addition, the research in the entrepreneurial field comparing different countries has been focused particularly on cultural values (Busenitz, Gómez, & Spencer, 2000; Davidsson, 1995; Huisman, 1985; Lee & Peterson, 2000; McGrath, MacMillan, & Scheinberg, 1992; Mueller & Thomas, 2001; Noorderhaven, Thurik, Wennekers, & Van Stel, 2004; Tiessen, 1997). Apart from Global Entrepreneurship Monitor (GEM) studies, little research comparing particular sets of entrepreneurial skills in different countries has been attempted. In addition, research with potential entrepreneurs is scant despite their importance. Potential entrepreneurs are the starting point of the entrepreneurial decision-making process. Not every potential entrepreneur will become an entrepreneur, but every entrepreneur was once a potential entrepreneur. In this study, the aim is to fill both gaps: comparing particular sets of entrepreneurial skills in different countries and focusing on potential entrepreneurs.

In order to fill the gaps, we describe the similarities and differences in the skills of potential entrepreneurs from two culturally, politically, and economically diverse areas: Serbia and Germany. Potential entrepreneurs are defined as people who still have not started their businesses, but who can imagine doing so in the near future (European Certificate in Entrepreneurship – ECENT, 2006). Our underlying assumptions are that there is empirical evidence about the influence of the environment on behavior but

there is no doubt about the relevance of skills to carry out entrepreneurial activity. Our interest is in the analysis of the skills of potential entrepreneurs in different countries. The focus of the study is on the debate about what individual variables make an entrepreneur. Consequently, the research questions are the following: What are the most developed entrepreneurial skills that potential entrepreneurs have? Do these skills vary significantly across countries? Through the second question, we aim to analyze whether skills are consistent across cultures.

Context of Study: Serbia and Germany

The political changes in Serbia laid the foundations for making a clean break with the economic decline and ethnic and political unrest of the past decades, thus enabling the country to embark on the path towards economic, social, and political stability. Great attention is being placed upon the improvement of the business environment by removing unnecessary bureaucratic obstacles to the entry and growth of new private firms. Removing unnecessary bureaucratic obstacles is recognized in all transition countries as the primary engine of growth and job creation. In previous, centrally planned, economies, by law, private ownership was forbidden, and every entrepreneurial endeavor was carried out in the state-owned or socially-owned companies for the collective well-being. First, progress towards true entrepreneurial behavior for self-gain was enabled with changed regulations in 1989. Sudden and radical change in the economy has made an impact on the perception of entrepreneurs. As it is formulated in the regulation, an entrepreneur is a person that establishes legal entity for the sole purpose of independently reaching economic gain. This strict, formal interpretation has made comparisons of the number of entrepreneurs in many countries much harder. Nevertheless, comparing Total Early-Stage Entrepreneurial Activity (TEA)¹ values of Serbia, an upper-middle income economy trying to become part of the European Union, and Germany, the biggest European economy, one could conclude that the Serbian economy is *more entrepreneurial*. For example, in 2008, the TEA value in Serbia was 7.6 and in Germany 3.8. In 2009, this value in Serbia was 4.9 and 4.1 in Germany. In 2010, the German TEA was 4.2. No information exists for Serbia in the 2010 GEM report (GEM, 2008, 2009, 2010). Furthermore, improved conditions and high growth rates of the economy coupled with trendy self-employment has been shown to be additional boost to the self-confidence of entrepreneurs in Serbia, resulting in higher values being reported than were by respondents in Germany for the majority of behaviors.

In contrast, Germany is a country of little entrepreneurial activity compared to other countries involved in the GEM studies. Only 2.9% of the population tried to open a business until the middle of the year of 2006, as compared to 3.1% in 2005, and this number drops to 1.7% for the Eastern part of Germany. In addition, basic conditions for opening a business in Germany are considered only average compared to other countries included by the GEM, but were found to be improving compared to the previous year. It needs to be noted, however, from 2005 to 2006, a big decrease was observed (rank 10 to 20). Physical infrastructure, protection of intellectual property, corporate services, and the public sponsorship were ranked highly, the latter scoring first among participating countries. Weaknesses are predominantly present in the form of social values and norms, academic and non-academic education regarding entrepreneurship, and the support for women, which has been improving since 2003 (GEM, 2005, 2006, 2007, 2009).

Methodology

In the current study, the level of development of entrepreneurial skills for potential entrepreneurs is analyzed and whether these skills change significantly across countries examined. Potential entrepreneurs from two countries have been chosen from Serbia, an upper-middle income economy trying to become part of the European Union, and Germany, the biggest European economy. The study is exploratory in character due to the lack of research comparing Serbian and German samples.

Measures

The SAT-ECENT questionnaire, a reliable and already validated instrument, was used to obtain information. This questionnaire is part of ECENT (2006) for which a competence orientated self-assessment tool for potential entrepreneurs was developed in order to measure relevant skills, motivation, personal

traits, and framework conditions.² In this paper, the skills-related section of the questionnaire is used. Previous work has not been published using this instrument; therefore, a detailed explanation on the instrument-building process along with validity and reliability information is provided.

The first tier was a two-wave Delphi study with 19 (1st wave) and 15 (2nd wave) practical experts in the field of entrepreneurship (successful entrepreneurs, consultants etc.), two from each participating country. They validated and estimated, twice, the importance and relevance of each presented item for a self-assessment questionnaire which measured entrepreneurial spirit in order to reduce the multitude of possible relevant scales and items. At the same time, they were asked to give feedback concerning the length of the questionnaire and how easily understood the items' wording was for the task group of 17 to 25 year olds. The length of the questionnaire was reduced by a statistical stop criterion (mean minus dispersion smaller than or equal to the centre of the importance/relevance scale) and the wording of the items was altered according to frequent answers of the experts. In the second tier about 600 participants of the task group, 100 from each participating country, completed the questionnaire (of 88 items) as a pre-test, combined with, three items measuring self-estimated and peer-estimated ability as a validity criterion. Reliability analysis of the scales led to the final form of the questionnaire, consisting of 73 items. (ECENT, 2006, p. 21).

A final version of the questionnaire has been tested with 1 347 potential entrepreneurs in the countries participating in the project. As mentioned, we used only the skills-related section of the questionnaire. The final version of this scale includes 14 behavioral items related to four skills (application to change, learning competence, impact on people, and tolerance for stress). Reliability has been calculated by means of internal consistency of each subscale: application to change, Cronbach alpha = 0.84; learning competence, Cronbach alpha = 0.73; impact and influence, Cronbach alpha = 0.7; and tolerance for stress, Cronbach alpha = 0.81). Validity was analyzed in two ways. First, content validity was established using the expert criteria of 15 international academics and practitioners with long-term experience in entrepreneur consultancy and entrepreneurs. The second approach consisted of three items used to specify an external validity criterion for entrepreneurial attitude: self-esteem of entrepreneurial efficiency, behavioral examples of entrepreneurial efficiency, and social esteem of entrepreneurial efficiency (ECENT, 2006).

Table 1

Skills and Behavioural Items

Readiness to change
1) I accept and easily adapt to change.
2) I respond to change with flexibility.
Learning competence
3) I can easily absorb and assimilate ideas and information.
4) I continually show interest in new developments and in keeping up to date.
5) My knowledge adds value to the work that I do.
6) I am quick to foresee difficult situations and come up with alternative solutions.
Impact
7) I inspire enthusiasm in the people that I work with.
8) I effectively present my ideas with conviction.
9) I am experienced in leading and motivating people.
10) I put a lot of effort in meeting set goals.
Tolerance for stress
11) I come up with continual good results under pressure.
12) I can maintain or even increase effort under stressful situations.
13) I remain composed in stressful conditions.
14) I can control stressful situations.

The SAT-ECENT questionnaire is a Likert-type scale with five alternative replies ranging from 1 (strongly disagree) to 5 (strongly agree). For the current study, in the reliability process for the scale, no item was eliminated from the countries' samples. For the sample from Serbia, the $\alpha = 0.82$, the scale mean = 54, and the standard deviation = 6.33, and for Germany, the $\alpha = 0.83$, the scale mean = 49.35, and the standard deviation = 6.82 were obtained. In Germany, the instrument was applied in the German language. Because Serbia did not participate in ECENT (2006), the scale was applied in the Serbian language after carrying out a back translation process from the English questionnaire.

The SAT-ECENT questionnaire defines the measured skills as follows: (a) readiness to change, or the ability to recognize, accept, and adapt to new situations; (b) impact on others, where personal impact means having the effect on others that the person intends and is influenced by the needs and style of the people to be influenced, the person attempting to have an influence, and what is appropriate for the situation; (c) learning competency is the willingness and the ability to acquire new knowledge and to use that knowledge at work; and finally, (d) tolerance for stress is the ability to maintain one's self-control under stressful situations involving delicacy, new or risky ventures, a heavy workload, and a lack of time while maintaining an appropriate performance level.

Respondents

To calculate the total for the potential entrepreneur population, the GEM (2010) information was used. The GEM defines *potential entrepreneurs* as the "Percentage of 18-64 population (individuals involved in any stage of entrepreneurial activity excluded) who intend to start a business within three years" (p. 63). This definition is similar to the one ECENT (2006) uses. Following the GEM (2009) report, Serbian potential entrepreneurs are 22% and Germans 5% of their respective populations. The GEM information for previous years was not available.

In total, 394 people responded to the questionnaire, 190 of which were living in Serbia and 204 in Germany. Information was compiled in relation to age (the mean = 27.27 and the standard deviation = 6.68 for Serbia, and the mean = 26.94 and the standard deviation = 6.42 for Germany) and gender (43.7% women and 56.3% men in Serbia, and 41.4% women and 58.6% men in Germany). The scale was completed by potential entrepreneurs, defined as people who still have not started their businesses but who can imagine doing so in the near future (ECENT, 2006). Potential entrepreneur means, basically, a person who is sensitive to entrepreneurship. The level of analysis carried out in the study was individual.

Procedure

Each participant who met the characteristics of the unit of study completed the questionnaire voluntarily and anonymously with a hard-copy version of the questionnaire. The study was carried out with potential entrepreneurs with whom the researchers had personal contact, which means the sample was drawn up based on convenience. In addition, two organizations, one in Germany and one in Serbia, which group entrepreneurs and potential entrepreneurs for training purposes, provided a number of respondents to the sample.

Results

To achieve the objective of this study, two stages of analysis were involved. First, descriptive statistics (means and standard deviations) were computed in order to develop a country-based rank. Independent samples *t*-tests were used to evaluate significant differences in means between German and Serbian entrepreneurs for each item. Second, a reduction procedure was used in order to categorize the collected data into logical component subscales. Principal components analysis was employed with 14 behavioral items related to four entrepreneurial skills. Cronbach's coefficient *alpha* was used to assess the reliability of the questionnaire in each sample.

Table 2
Country-Based Skills Ranking

Ranking		Behaviour/skill	Mean (SD)		Sig. <i>t</i> - test
Serbia (<i>n</i> = 190)	Germany (<i>n</i> = 204)		Serbia	Germany	
5	7	I accept and easily adapt to change.	4.02 (0.73)	3.54 (0.77)	0.000
6	3	I respond to change with flexibility.	4.01 (0.66)	3.66 (0.72)	0.000
4	2	I can easily absorb and assimilate ideas and information.	4.14 (0.71)	3.74 (0.79)	0.000
2	9	I continually show interest in new developments and in keeping up to date.	4.20 (0.74)	3.49 (0.82)	0.000
3	1	My knowledge adds value to the work that I do.	4.18 (0.75)	3.76 (0.82)	0.000
10	12	I am quick to foresee difficult situations and come up with alternative solutions.	3.74 (0.71)	3.42 (0.76)	0.000
9	11	I inspire enthusiasm in the people that I work with.	3.74 (0.85)	3.45 (0.90)	0.001
7	5	I effectively present my ideas with conviction.	3.88 (0.84)	3.57 (0.87)	0.000
13	14	I am experienced in leading and motivating people.	3.36 (1.00)	3.12 (1.01)	0.016
1	8	I put a lot of effort in meeting set goals.	4.28 (0.82)	3.50 (0.98)	0.000
12	13	I come up with continual good results under pressure.	3.47 (1.00)	3.41 (0.91)	0.522
14	6	I can maintain or even increase effort under stressful situations.	3.32 (0.95)	3.55 (0.88)	0.012
8	10	I remain composed in stressful conditions.	3.86 (0.78)	3.47 (0.91)	0.000
11	4	I can control stressful situations.	3.73 (0.72)	3.63 (0.83)	0.233

The results of statistical analysis shown in Table 2 indicate respondents in each country reported different development levels in their entrepreneurial skills. Table 2 also shows the level of agreement among the potential entrepreneurs, as measured by the standard deviation of their responses, for each item.

Statistically significant differences were found between respondents from the two different countries for all of the items, except in the items “I come up with continual good results under pressure” and “I can control stressful situations.” Potential Serbian entrepreneurs rate themselves higher than do their German peers for the whole group of items, except for the item “I can maintain or even increase effort under stressful situations” ($p < 0.05$).

Data were reduced by means of principal components analysis. As expected, upon rotation, four components were extracted from each sample. Table 3 shows the factorial structure of the instrument for the German sample and Table 4 for the Serbian sample. In the German sample, the components explain 61.87% of the total variance, while in the Serbian sample, the components were found to explain 61.53% of the total variance. Even though some similarities were apparent, the factorial structures were different for each sample. This suggests cultural differences might influence the way potential entrepreneurs perceive their skills.

Table 3
Principal Components: Germany

	Components			
	1	2	3	4
<i>Tolerance to stress</i>				
I can control stressful situations.	0.803			
I can maintain or even increase effort under stressful situations.	0.754			
I come up with continual good results under pressure.	0.711			
I remain composed in stressful conditions.	0.705			
<i>Learning competence</i>				
My knowledge adds value to the work that I do.		0.771		
I continually show interest in new developments and in keeping up to date.		0.655		
I can easily absorb and assimilate ideas and information.		0.654		
I am quick to foresee difficult situations and come up with alternative solutions.	0.352	0.357		
<i>Impact on people</i>				
I inspire enthusiasm in the people that I work with.			0.799	
I am experienced in leading and motivating people.			0.774	
I effectively present my ideas with conviction.			0.646	
<i>Readiness to change</i>				
I accept and easily adapt to change.				0.828
I respond to change with flexibility.				0.759
I put a lot of effort in meeting set goals.				0.495
Percentage of explained variance	19.440	15.130	13.970	13.320
Cronbach's alpha	0.796	0.673	0.702	0.630

Note. Extraction method: Principal component analysis; rotation method: varimax with Kaiser normalization, rotation converged in 7 iterations.

Table 4
Principal Components: Serbia

	Components			
	1	2	3	4
<i>Impact on people</i>				
I inspire enthusiasm in the people that I work with.	0.758			
I am experienced in leading and motivating people.	0.719			
I effectively present my ideas with conviction.	0.705			
I am quick to foresee difficult situations and come up with alternative solutions.	0.439	0.347		
<i>Tolerance for stress</i>				
I can maintain or even increase effort under stressful situations.		0.888		
I come up with continual good results under pressure.		0.817		
I remain composed in stressful conditions.		0.540		
I can control stressful situations.		0.424		
<i>Readiness to change</i>				
I accept and easily adapt to change.			0.862	
I respond to change with flexibility.			0.771	
I can easily absorb and assimilate ideas and information.			0.562	
<i>Learning competence</i>				
I put a lot of effort in meeting set goals.				0.802
I continually show interest in new developments and in keeping up to date.				0.724
My knowledge adds value to the work that I do.				0.625
Percentage of explained variance	17.760	15.530	14.330	13.890
Cronbach's alpha	0.737	0.732	0.701	0.646

Note. Extraction method: Principal component analysis; rotation method: varimax with Kaiser normalization, rotation converged in 6 iterations.

For the German sample, the component *tolerance to stress* explains the biggest variance (19.44%). The second component, *learning competence*, explains 15.13% of the variance. In the Serbian, one the component, namely, *impact on people*, explains 17.76% of the variance, while the second, *tolerance to stress*, explains 15.53%. In the case of Germany, the four extracted components reproduce the original four SAT-ECENT questionnaire's item-constellations, with the exception of the item "I put a lot of effort in meeting set goals," which has its highest correlation in the component *readiness to change*, which originally belonged to the *impact on people* component. The Serbian sample shows a somewhat diffuse pattern. The only component that has the same four original items is *tolerance for stress*. With respect to the other three components, one item belonged to a different dimension in the SAT-ECENT questionnaire.

Discussion and Conclusion

Whereas many individually relevant determinants of entrepreneurship have been explored extensively, differences across countries have remained unexplored (Freytag & Thurik, 2007). Moreover, while numerous studies have investigated the skills of current entrepreneurs, the literature on potential entrepreneurs is scarce. Through the two research questions, namely, what are the most developed entrepreneurial skills that potential entrepreneurs have, and do these skills vary significantly across countries, both issues could be addressed by comparing two samples of potential entrepreneurs from two different countries.

Serbian and German respondents reported different development levels of entrepreneurial skills. The results show the most prevalent skill varies in each sample, in Germany, "my knowledge adds value to the work that I do" (*learning competence*) and in Serbia, "I put a lot of effort in meeting set goals" (*impact on people*). The responses to the second research question were positive, but the skills vary significantly. In Serbia, the highest valued skill is related to the effort in meeting goals, and in Germany, to the value that one's own knowledge adds. In addition, the respondents in Serbia reported higher values than did the respondents in Germany in all except one item, namely, "I can maintain or even increase effort under stressful situations." These findings indicate there are cultural variables that explain the self-perceived development of entrepreneurial skills among respondents from different countries. Although there is nothing in this study that provides empirical evidence about the existence of cultural differences, a hypothetical explanation using Schwartz's (2006) cultural values theory is proposed.

Cultural values express what is considered good and desirable in a culture (Schwartz, 2011). Schwartz's (2011) cultural values theory identifies three bipolar cultural orientations: intellectual and affective autonomy vs. embeddedness, egalitarianism vs. hierarchy, and harmony vs. mastery. These seven cultural orientations provide normative responses that prescribe how institutions should function and how individuals should behave (Schwartz, 2006). We propose the autonomy vs. embeddedness cultural dimension explains the differences in the results between the Serbian and German samples. Cultures that emphasize autonomy treat individuals as autonomous entities; they encourage individuals to pursue their personal preferences, abilities, and ideas. Schwartz divides the concept of autonomy into intellectual and affective autonomy. Cultures that highly value intellectual autonomy expect people to be in charge of their own lives and express their own ideas and abilities. Cultures that highly value affective autonomy induce people to pursue positive personal experiences (Schwartz, 2011). On the other hand, the cultural orientation embeddedness is based on the notion that individuals are embedded in the social group. Cultures characterized by embeddedness do not encourage autonomic behavior, but rather, emphasize the status quo. In fact, cultures characterized by embeddedness discourage behavior that might disrupt traditions and group solidarity (Schwartz, 2011).

In Schwartz's (2006) cultural values research, Germany score higher than Serbia in intellectual and affective autonomy, whereas Serbia has a higher score for embeddedness. In this research, the highest ranked item in Germany is *learning competence*, which is an individual skill. The emphasis that autonomous cultures place on encouraging individuals to pursue their personal preferences and abilities suggests a close relationship with autonomy as a cultural orientation. The highest score in the Serbian sample is for the item *impact on people*, a group-oriented skill, suggesting a link with the cultural value of embeddedness. We are not proposing a causal explanation of values for the way potential entrepreneurs perceive their skills. Rather, we propose a feasible hypothesis about the correlation between cultural values and how the development of these entrepreneurial skills is perceived.

When analyzing the four components in both samples, more differences emerge. *Tolerance for stress* is a skill that explains the highest variance for potential German entrepreneurs whereas in the Serbian sample, it

is *impact on people* followed by *tolerance to stress* that explains the highest variance. In spite of the fact that a particular cultural framework could account for these differences between respondents in the two countries, it is remarkable that stress tolerance plays such an important role for explaining the behavior of potential entrepreneurs. This means people who plan to set up their companies in the near future behave in a way that self-control is extremely relevant to maintaining an appropriate level of performance.

The prevailing conclusion flowing from state-of-the-art managerial skills is that entrepreneurial skills tend to be more general than specialized. However, it is important to point out that possessing specialized skills may acquire greater importance in certain industry contexts such as high-technology industries that may demand higher human capital than do typical retail SMEs for example.

Limitations

A series of limitations are noted with respect to the research conducted and two limitations in particular: First, although the findings show that some cultural factors exist that have a role in explaining the variation in perceived personal skills, an empirically-based explanation is not offered. Second, given the sample size in both cases, generalizing the findings to the countries' populations is not possible.

Research and Practical Implications

The fact that an individual has a positive attitude toward or opinion of entrepreneurship or identifies a business opportunity does not necessarily mean that he or she will actually engage in entrepreneurial activities. Although the perceived opportunities and opinions toward entrepreneurship may be improved by other country-level variables, such as economic growth, cultural values, national entrepreneurship policies, or even role models, there are more factors at play. *The most direct cause of entrepreneurship is the entrepreneur.* The entrepreneur possesses volition and choice and is, therefore, the agent of his or her own actions (Binswanger, 1991). As presented in the literature review section, extensive research has proved that entrepreneurial action is closely related to the existence of certain skills. Therefore, skills can be the significant factor in the transition from potential entrepreneurship to entrepreneurial action. The findings indicate two main implications for research. First, because skills are not perceived in the same way across countries, cross-cultural models should be applied to properly analyze what the relevant skills in each country are and which are the factors that affect those skills. Second, how to go about analyzing the decision that potential entrepreneurs make when they decide to start up a new business could be a new direction for scholars. In this sense, tolerance to stress as an entrepreneurial skill deserves more attention. Further research could look into the tolerance to stress value as a factor explaining the transition from potential entrepreneurship to actual entrepreneurship.

Most research suggests entrepreneurial skills can be learned through formal education and professional experience. However, the impact of formal education on skills development is debatable because previous results are inconsistent, although they tend to confirm the positive impact of education. Overall, the issue of context-specific skills requires further study within the framework of intercultural studies. The findings about how relevant tolerating stress is in explaining the behavior of potential entrepreneurs has implications for entrepreneurship-promoting activities and entrepreneurial education programs because the findings suggests to include instruments to teach people how to deal with delicate, new, and risky situations, heavy workloads, and lack of time is essential.

Endnotes

- ¹ TEA includes individuals who have taken some actions toward starting a new company and individuals who have been running their own businesses for less than 42 months (GEM, 2010).
- ² A partnership that includes universities, universities of applied science, institutions of education, school and economics from several European countries stands behind this instrument. The European Union Commission has funded the project. For more information, access www.ecent.org

References

- Ahmad, N., Ramayah, T., Wilson, C., & Kummerow, L. (2010). Is entrepreneurial competency and business success relationship contingent upon business environment?: A study of Malaysian SMES. *International Journal of Entrepreneurial Behaviour and Research*, 16(3), 182-203. dx.doi.org/10.1108/13552551011042780
- Baumol, W. (1968). Entrepreneurship in Economic Theory. *American Economic Review*, 58(2), 64-71.
- Binswanger, H. (1991). Volition as cognitive self-regulation. *Organizational Behavior and Human Decision Processes*, 50(2), 154-178. dx.doi.org/10.1016/0749-5978(91)90019-P
- Blume, B., & Covin, J. (2011). Attributions to intuition in the venture founding process: Do entrepreneurs actually use intuition or just say that they do? *Journal of Business Venturing*, 26(1), 137-151. dx.doi.org/10.1016/j.jbusvent.2009.04.002
- Brunet, I., & Alarcón, A. (2004). Teorías sobre la figura del emprendedor [Theories about the entrepreneur's figure]. *Papers: Revista de Sociología*, 73, 81-103. Retrieved from <http://ddd.uab.cat/pub/papers/02102862n73/02102862n73p81.pdf>
- Brush, C. G. (2008). Pioneering strategies for entrepreneurial success. *Business Horizons*, 51(1), 21-27. dx.doi.org/10.1016/j.bushor.2007.09.001
- Busenitz, L. W., Gómez, C., & Spencer, J. W. (2000). Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of Management Journal*, 43(5), 994-1003. dx.doi.org/10.2307/1556423
- Chaston, I. (2009). Entrepreneurs, intuition, and small-business performance. *Journal of CENTRUM Cathedra*, 2(1), 37-45. dx.doi.org/10.7835/jcc-berj-2009-0021
- Davidsson, P. (1995). Culture, structure and regional levels of entrepreneurship. *Entrepreneurship & Regional Development*, 7(1), 41-62. dx.doi.org/10.1080/08985629500000003
- Drakopolou Dodd, S., & Anderson, A. R. (2007). Mumpsimus and the mything of the individualistic entrepreneur. *International Small Business Journal*, 25(4), 341-360. dx.doi.org/10.1177/0266242607078561
- European Certificate in Entrepreneurship. (2006). *Are you an entrepreneur? User Guide*. Retrieved from [http://www.ecent.org/eцент.nsf/Alles/D17F5CECC94D4371C12573A000690FFB/\\$file/User guide.pdf](http://www.ecent.org/eцент.nsf/Alles/D17F5CECC94D4371C12573A000690FFB/$file/User%20guide.pdf)
- Freytag, A., & Thurik, R. (2007). Entrepreneurship and its determinants in a cross-country setting. *Journal of Evolutionary Economics*, 17(2), 117-131. dx.doi.org/10.1007/s00191-006-0044-2
- Gilbert, B., McDougall, P., & Audretsch, D. (2006). New venture growth: A review and extension. *Journal of Management*, 32(6), 926-950. dx.doi.org/10.1177/0149206306293860
- Giunipero, L. C., Denslow, D., & Eltantawy, R. (2005). Purchasing/supply chain management flexibility: Moving to an entrepreneurial skill set. *Industrial Marketing Management*, 34(6), 602-613. dx.doi.org/10.1016/j.indmarman.2004.11.004
- Global Entrepreneurship Monitor. (2005). Global reports. Retrieved from <http://www.gemconsortium.org/>
- Global Entrepreneurship Monitor. (2006). Global reports. Retrieved from <http://www.gemconsortium.org/>
- Global Entrepreneurship Monitor. (2007). Global reports. Retrieved from <http://www.gemconsortium.org/>
- Global Entrepreneurship Monitor. (2008). Global reports. Retrieved from <http://www.gemconsortium.org/>
- Global Entrepreneurship Monitor. (2009). Global reports. Retrieved from <http://www.gemconsortium.org/>
- Global Entrepreneurship Monitor. (2010). Global reports. Retrieved from <http://www.gemconsortium.org/>
- Haber, S., & Reichel, A. (2007). The cumulative nature of the entrepreneurial process: The contribution of human capital, planning and environment resources to small venture performance. *Journal of Business Venturing*, 22(1), 119-145. dx.doi.org/10.1016/j.jbusvent.2005.09.005
- Hackler, D., & Mayer, H. (2008). Diversity, entrepreneurship, and the urban environment. *Journal of Urban Affairs*, 30(3), 273-307. dx.doi.org/10.1111/j.1467-9906.2008.00396.x
- Huisman, D. (1985). Entrepreneurship: economic and cultural influences on the entrepreneurial climate. *European Research*, 13(4), 10-17.
- Lazear, E. P. (2004). Balanced skills and entrepreneurship. *American Economic Review*, 94(2), 208-211. dx.doi.org/10.1257/0002828041301425
- Lee, S. M., & Peterson, S. J. (2000). Culture, entrepreneurial orientation, and global competitiveness. *Journal of World Business*, 35(4), 401-416. dx.doi.org/10.1016/S1090-9516(00)00045-6
- Markman, G. D., & Baron, R. A. (2003). Person-entrepreneurship fit: Why some people are more successful as entrepreneurs than others. *Human Resource Management Review*, 13(2), 281-301. dx.doi.org/10.1016/S1053-4822(03)00018-4
- McClelland, D. C. (1961). *The achieving society*. Princeton, NJ: D. van Nostrand Company.

- McGrath, R. G., MacMillan, I. C., & Scheinberg, S. (1992). Elitists, risk-takers, and rugged individualists? An exploratory analysis of cultural differences between entrepreneurs and non-entrepreneurs. *Journal of Business Venturing*, 7(2), 115-135. dx.doi.org/10.1016/0883-9026(92)90008-F
- McLarty, R., & Dousios, D. (2006). Dynamics and patterns of skills within small and medium-sized enterprises. *Strategic Change*, 15(4), 175-186. dx.doi.org/10.1002/jsc.755
- Mueller, S. L., & Thomas, A. S. (2001). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing*, 16(1), 51-75. dx.doi.org/10.1016/S0883-9026(99)00039-7
- Muhanna, E. (2007). Conceptual analysis of determinants of entrepreneurship: A South African Perspective. *Problems and Perspectives in Management*, 5(1), 95-102. Retrieved from http://businessperspectives.org/journals_free/ppm/2007/PPM_EN_2007_01_Muhanna.pdf
- Noorderhaven, N., Thurik, R., Wennekers, S., & Van Stel, A. (2004). The role of dissatisfaction and per capita income in explaining self-employment across 15 European countries. *Entrepreneurship Theory and Practice*, 28(5), 447-466. dx.doi.org/10.1111/j.1540-6520.2004.00057.x
- Nuthall, P. L. (2006). Determining the important management skill competencies: The case of family farm business in New Zealand. *Agricultural Systems*, 88(2-3), 429-450. dx.doi.org/10.1016/j.agsy.2005.06.022
- Phillips, F. (2008). The Godfathers: Characteristics and Roles of Central Individuals in the Transformation of Techno-Regions. *Journal of CENTRUM Cathedra*, 1(2), 74-89. dx.doi.org/10.7835/jcc-berj-2008-0014
- Rae, D., & Carswell, M. (2001). Towards a conceptual understanding of entrepreneurial learning. *Journal of Small Business and Enterprise Development*, 8(2), 150-158. dx.doi.org/10.1108/EUM00000000006816
- Saar, E., & Unt, M. (2008). Selective mobility into self-employment in post-socialist transition: Early birds, later entrants, quitters and shuttles. *International Small Business Journal*, 26(3), 323-349. dx.doi.org/10.1177/0266242608088741
- Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Cambridge, MA: Harvard University Press.
- Schwartz, S. H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology*, 5(2), 137-182. dx.doi.org/10.1163/156913306778667357
- Schwartz, S. (2011). Values: Cultural and individual. In F. J. R. Van de Vijver, A. Chasiotis, & S. M. Breugelmans (Eds.), *Fundamental questions in cross-cultural psychology* (pp. 463-492). New York, NY: Cambridge University Press.
- Shane, S. (1992). Why do some societies invent more than others? *Journal of Business Venturing*, 7(1), 29-46. dx.doi.org/10.1016/0883-9026(92)90033-N
- Silva, O. (2007). The jack-of-all-trades entrepreneur: Innate talent or acquired skill? *Economics Letters*, 97(2), 118-123. dx.doi.org/10.1016/j.econlet.2007.02.027
- Tiessen, J. H. (1997). Individualism, collectivism, and entrepreneurship: A framework for international comparative research. *Journal of Business Venturing*, 12(5), 367-384. dx.doi.org/10.1016/S0883-9026(97)81199-8
- Timmons, J. A. (1994). *New venture creation: Entrepreneurship for the 21st century* (4th ed.). Burr Ridge, IL: Irwin Press.
- Unger, J., Rauch, A., Frese, M., & Rosenbusch, N. (2011). Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, 26(3), 341-358. dx.doi.org/10.1016/j.jbusvent.2009.09.004
- Wennekers, S., Van Wennekers, A., Thurik, R., & Reynolds, P. (2005). Nascent entrepreneurship and the level of economic development. *Small Business Economics*, 24(3), 293-309. dx.doi.org/10.1007/s11187-005-1994-8

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