

# Differences in the Human Capital of Female and Male Entrepreneurs – Evidence from the Republic of Serbia\*

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**Abstract:** The paper explores gender as a rarely studied aspect of entrepreneurship in the Republic of Serbia, with a focus on gender based differences in the components of entrepreneurs' human capital. The results indicate that the expected relationship between entrepreneurs' gender and the components of human capital was found in most cases. There were statistically significant differences regarding the field of education, the existence of previous management and prior entrepreneurial (ownership) experience, as well as differences related to the entrepreneurial self-efficacy in the field of marketing and general management. All these differences are in favour of male entrepreneurs.

**Keywords:** female entrepreneurship, human capital, gender gap, Serbia  
**JEL:** L26, J24, J16

## Introduction

The purpose of the paper is to analyze the gender aspect of entrepreneurship in the Republic of Serbia, with a more specific aim to determine whether there are gender-based differences, or a gender gap in the components of female and male entrepreneurs' human capital. Human capital consists of an individual's acquired characteristics that contribute to his/her productivity (Carter/Brush/Greene/Gatewood/Hart 2003). Investments in human capital are investments in knowledge and skills that are inseparable from the owner and which contribute to the future monetary and non-monetary benefits for the owner (Becker 1993). Education (level and field) and experience are usually analyzed as components of one's human capital (Coleman/Robb 2009; Lee/Jasper/Fitzgerald 2010). Human capital is regarded as one of the most important determinants of entrepreneurial activity and performance. As much as two-thirds of the SMEs' growth determinants in Storey's (2010) framework are related to the human capital of the entrepreneur. As the gender of the entrepreneur may imply certain characteristics of his/her human capital (Lee et al. 2010), human capital is often analyzed as a possible determinant of the gender gap in entrepreneurial activity and performance of female and male owned enterprises. Differences in educational background and work experience of women and men are perceived as reasons for the dominance of male entrepreneurs and for their better business performance.

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The Serbian Strategy for Support to the Development of Small and Medium Enterprises, Entrepreneurship and Competitiveness (for the period 2015-2020) indicates that female entrepreneurship is one of the specific areas of the total entrepreneurial activity that should be supported in order to achieve strategic goals in this field (Serbian Government 2015 b). The gender gap in human capital can produce a gender gap in the volume and the characteristics of entrepreneurial activity of women and men and in their entrepreneurial business performance (Minniti/Nardone 2007; Fairlie/Robb 2009; Parker 2009; Leoni/Falk 2010; Thébaud 2010; Bardasi/Sabarwal/Terrell 2011). Therefore, investigating the existence and the characteristics of the differences in human capital of female and male entrepreneurs can direct measures that should be defined to improve their competitiveness. Moreover, the existence of gender gap in the human capital of female and male entrepreneurs may indicate the need to appreciate these gender specificities of entrepreneurs' human capital and to define gender-sensitive measures when developing platforms to support entrepreneurial activities. In that sense, the existence of a gender gap in the human capital of female and male entrepreneurs will indicate that the *unequal* cannot be treated equally if one wants to achieve the same goal; which is to improve the competitiveness of the whole entrepreneurial sector.

Different training and educational programs are possible ways to support the entrepreneurial activities of women and the business performance of female entrepreneurs (Robichaud/Zinger/LeBrasseur 2007; Strier/Abdeen 2009; Verheul/Thurik/Grilo/van der Zwan 2012; Vossenber 2013). The logic that lies behind these programs is to bridge the gap in knowledge and skills that women possess and those that are necessary for starting-up and managing their own businesses. The existence of gender-based differences in the components of human capital of female and male entrepreneurs would require a gender-sensitive approach in shaping the content and other characteristics of training and educational programs. With the aim to examine the merits of that approach, and to point out certain aspects that should be emphasized when designing different training programs, this paper presents the results of research on the differences between human capital of female and male entrepreneurs in the Republic of Serbia, in terms of their educational background (level and field of education) and experience (the existence and the length of prior work experience in general, work experience in the industry, management and entrepreneurial experience). Moreover, the existence of differences in entrepreneurial self-efficacy, or in the female and male entrepreneurs' subjective assessment of their knowledge and skills needed for starting-up and success in managing their own businesses.

The remainder of this paper is structured as follows: a review of the relevant literature as a framework for defining the hypotheses and the hypotheses themselves are then presented in the second section. Sample and data gathering, variable measurements and the statistical methods that were used are explained

within the methodology section. The results are shown in the forth section, after which they are discussed and certain practical implications are pointed out. Finally, certain concluding remarks are given.

## Literature Review

The level and field of education are two aspects that specify education as a component of human capital. During the process of formal education one can acquire knowledge, abilities and skills which are necessary to identify and exploit business opportunities. That is why education is seen as one of the determinants of entrepreneurship. Analytical skills, understanding of market processes and general and specific knowledge acquired during education can foster confidence and make it easier to face the challenges during the start-up phase and after, while performing the entrepreneurial activity (Parker 2009; Verheul et al. 2012). In that way, a higher level of formal education, encourages, or facilitates the initiation of entrepreneurial activities. Generally speaking, formal education of an entrepreneur affects his/her productivity and business performance (Manolova/Carter/Manev/Gyoshev 2007). Fairlie and Robb (2009) state that the entrepreneur's formal education is positively associated with growth of sales revenue, profits and survival rates of both, men- and women-owned enterprises. As an educational variable, the field of education is another important determinant of the entrepreneurial activity because a certain field of education presupposes the type of acquired knowledge and skills. In addition to its influence on business outcomes, the entrepreneur's human capital, primarily his/her field of education, can direct the choice of a specific industry to start-up own business (Leoni/Falk 2010). By creating the so-called 'knowledge corridor', the entrepreneur's human capital determines the type of business opportunities that he/she will identify, thus directing them toward certain types of businesses (Miniti/Nardone 2007; Lee/Marvel 2014). Thus, for example, women-owned enterprises are rarely present in the fast growing fields of the advanced technologies (Lee/Marvel 2014), since women are generally less likely educated in the field of engineering (Klapper/Parker 2010). Examining the impact of education on self-employment in Austria, Leoni and Falk (2010) find that women are educated mostly in those fields that have lower self-employment rates. Moreover, Manolova et al. (2007) find that entrepreneurs' growth expectations are not related to their level of education as such, but to their education if it is acquired in the field of engineering and economics. Similarly, Winn (2005) reports that knowledge and skills in the field of management and techniques, have more influence on business success than those acquired in the humanities.

At the general population level, there is no significant gender gap concerning the level of education. Moreover, in most EU countries and in Serbia as well, women make up more than a half of the graduates (EC 2010; SORS 2015 b). Similarly, most studies suggest that there are no significant differences in the level of

education of female and male entrepreneurs (Loscocco/Robinson 1991; Loscocco/Robinson/Hall/Allen 1991; Brush 1992; Coleman/Robb 2009; Fairlie/Robb 2009; Aterido/Hallward-Driemeier 2011; Huarng/Mas-Tur/Hui-Kuang 2012) or, even, that female entrepreneurs have higher level of education (Morris/Miyasaki/Watters/Coombes 2006; Robichaud et al. 2007; Lee et al. 2010; Kamberidou 2013; Lee/Marvel 2014). While there is no gender gap regarding levels of education, significant differences do exist in the field of education of female and male entrepreneurs (Huarng et al. 2012; Lee/Marvel 2014). This segregation is particularly pronounced in the area of the tertiary education (Leoni/Falk 2010). As a result, social sciences and humanities are the dominant field of education for the largest number of female entrepreneurs, and women in general (Bowen/Hisrich 1986; Menezis/Diochon/Gasse/Elgie 2006; Blagojević-Hjusun 2012). This clear division into female and male educational choices is partly a result of a prior socialization of women and men (Leoni/Falk 2010). During their early socialization women are generally discouraged from the sciences and mathematics and directed to areas that are oriented towards people (Win 2005). As a result, women more often pursue degrees in social sciences and arts, while engineering and technical sciences are more common choices for men (Klapper/Parker 2010; Lee/Marvel 2014). Moreover, there are certain indications that the systems of primary and secondary education in most countries are designed in such a way to provide greater support to the development of mathematical competences of men (Pavlović-Babić/Baucal 2013). The socially rooted notion that men are more competent in the field of natural sciences and technology may result in an unjustified lower self-confidence of women in this area. Thus, for example, the study of mathematical abilities of female and male students showed that male students rated their math skills better, even though, in real terms, their skills were the same as those of female students (Thébaud 2010). In line with these results, the following hypothesis is defined:

*Hypothesis 1: Female and male entrepreneurs in the Republic of Serbia have similar levels of education but there are gender based differences in the field of the education of entrepreneurs, with female entrepreneurs being more frequently educated in the field of social sciences and humanities.*

An entrepreneur's experience is the second component of human capital that may affect entrepreneurial choices and productivity. Work experience, as an informal way of acquiring knowledge and skills, can be an important determinant that increases the likelihood that one will choose to become an entrepreneur. In that regard, there is almost universal agreement that work experience generally promote self-employment of individuals (Parker 2009). The significance of the work experience stems from the practice relevant skills and knowledge that can be acquired during the performance of a specific task. Therefore, the en-

trepreneur's experience is considered to be an important determinant of the entrepreneurial performance. In addition to education, the reason for slower growth or absence of growth of enterprises may be the lack of different types of the entrepreneur's work experience (Kalleberg/Leicht 1991; Cliff 1998). Likewise, there is empirical evidence to suggest that the entrepreneur's experience is a human capital component that explains a significant part of the gender gap in entrepreneurial performance (Loscocco/Robinson 1991; Loscocco et al. 1991; Manolova et al. 2007).

An entrepreneurs' experience is a multidimensional component of human capital consisting of general work experience, industry-related, management, current and prior entrepreneurial (ownership) experience (Cliff 1998; Huarng et al. 2012). Compared to men, women in general have less work, current and prior entrepreneurial, management and industry-related experience (Rietz/Henrekson 2000; Walker/Webster 2006; Klapper/Parker 2010; Thébaud 2010), while their professional careers are more discontinuous (Huarng et al. 2012). Regarding their experience, female entrepreneurs are disadvantaged compared to male entrepreneurs, both in quantitative and in qualitative terms. Female entrepreneurs have fewer years of work experience (Bird/Sapp 2004). Women have less work experience and more career interruptions compared to men, both in the paid-employment and in the self-employment sector. However, this gap is more pronounced in the self-employment sector (Lechmann/Schnabel 2012). Male entrepreneurs have more industry-related experience and for most of them their current business is a replication of their previous job (Carter/Williams 2003; Winn 2005; Walker/Webster 2006; Coleman/Robb 2009; Lechmann/Schnabel 2012). Similarly, relatively more female entrepreneurs start their business activities without previously working as managers (Greene/Brush/Hart/Saparito 2001; Coughlin/Thomas 2002; Thébaud 2010). Additionally, in most of the cases even when women have some management experience, it has been acquired at lower managerial positions (Loscocco et al. 1991; Nir 1999). Enterprises owned by women are younger (Coleman 2000; Danes/Stfford/Loy 2007; Bardasi et al. 2011), which means that female entrepreneurs have less current entrepreneurial experience. Finally, most of the studies also suggest that women have less prior entrepreneurial experience (Cliff 1998; Menezis et al. 2006; Huarng et al. 2012). Considering these results, the expectation is that Serbian female entrepreneurs have relatively worse positions regarding work experience, compared to their male counterparts. In the Serbian context this expectation is further supported by the fact that women generally have a worse position on the Serbian labour market, as they have higher unemployment rates and search for a job for more than a year more frequently than unemployed men (SORS 2015 a). At the same time, women in the Republic of Serbia have lower self-employment rates and they are less frequently involved in the managerial structures of companies (Stošić/

Stanković/Janković-Milić/Anđelković 2014; SORS 2015 a). As such, it is hypothesized that:

*Hypothesis 2 a: There is a gender gap regarding the existence and the length of the general work experience, in favour of male entrepreneurs.*

*Hypothesis 2 b: Female entrepreneurs start their businesses with less previous industry-related experience.*

*Hypothesis 2 c: Relatively fewer female entrepreneurs have worked as managers before starting their own businesses, especially in top management positions.*

*Hypothesis 2 d: There is a gender gap regarding the existence of previous, and the length of current entrepreneurial experience in favour of male entrepreneurs.*

Apart from the objective level of one's human capital, the self-assessed characteristics of one's human capital can be a significant determinant of entrepreneurial activity. Kickul, Gundry, Barbosa and Whitcanack (2009) even suggest that this self-perception of one's own abilities can be more important predictor of certain behaviour. Derived from the social learning theory, the concept of self-efficacy refers to the self perceived capability to accomplish a certain task in order to achieve a specific goal (Bandura 1994). Incorporating this construct into Bird's model of entrepreneurial intentionality, Boyd and Vozikis (1994) argue that self-efficacy is a key determinant of entrepreneurial intention and behaviour. Moreover, they suggest that self-efficacy moderates the relationship between entrepreneurial intentions and actual behaviour, meaning that entrepreneurial intentions will not automatically result in entrepreneurial behaviour (e.g. starting-up own venture). For that to happen, the potential entrepreneur has to have an adequate level of self-efficacy. As it is more likely that the activities of establishing and running one's own business will be performed by a person who is confident that he/she has the necessary abilities, self-efficacy becomes the key determinant of entrepreneurship (DeNoble/Jung/Ehrlich 1999; Drnovšek/Wincent/Cardon 2010). The specific aspect of self-efficacy that is analysed as an antecedent of the actual entrepreneurial behaviour is referred to as the entrepreneurial self-efficacy (McGee/Petersen/Mueller/Sequeira 2009). Entrepreneurial self-efficacy involves the self-assessed ability to successfully perform various tasks specific for the entrepreneurial process, such as: opportunity identification, marshalling of resources, new venture creation and managing one's own business (DeNoble et al. 1999; Kickul et al. 2009; McGee et al. 2009; Mueller/Dato-on 2013).

Entrepreneurial self-efficacy is usually studied in the context of its role in the start-up process, or during business growth (Drnovšek et al. 2010). Within these

main streams of research, there is also an interest in comparing the self-efficacy of different subgroups, such as: female and male entrepreneurs/students, entrepreneurs and managers, students of different programs etc. (for a review see: McGee et al. 2009). Entrepreneurial self-efficacy is seen as one of the factors that can shape the entrepreneurial intention and ultimately action of women (Wilson/Kikcul/Marlino 2007). Women have less optimistic perceptions of their self-efficacy, especially in the field of entrepreneurship that is traditionally considered to be a male-type activity (Wilson et al. 2007; Díaz-García/Jiménez-Moreno 2010; Thébaud 2010). In their study of gender-based differences in the level of the entrepreneurial self-efficacy, Wilson et al. (2007) find that women in different life stages (teen girls and MBA students) show similar patterns regarding their entrepreneurial self-efficacy. Specifically, both of the female groups have lower entrepreneurial self-efficacy than their male counterparts. In discussing these results, authors suggest that gender stereotypes and expectations may determine the self-efficacy at an early life stage, before any actual experience is gained. Due to the differences in their processes of socialization, women are not confident in their entrepreneurial abilities, even when they objectively are no different from men (Morris et al. 2006; Thébaud 2010; Verheul et al. 2012; Noguera/Alvarez/Urbano 2013). There are also gender stereotypes that associate entrepreneurial activity with masculine traits (Zhang et al. 2009; Thébaud 2010; Mueller/Dato-on 2013). When there is a belief that members of one gender are generally better in performing a certain task, the members of that gender are more likely to better assess their ability to perform the given task relative to the members of the other gender, regardless of the fact that the success in accomplishing the task may be the same for both genders (Thébaud 2010). Within this framework, the following is proposed:

*Hypothesis 3: Female entrepreneurs have lower entrepreneurial self-efficacy than male entrepreneurs.*

## **Methodology**

### *Sample and data gathering*

The survey units were owners of micro, small and medium sized enterprises (MSMEs) and entrepreneurs located in the urban areas of Serbian cities of Niš and Novi Sad. A random sample of 374 units was drawn from the Serbian Business Registers Agency's register of companies and entrepreneurs. The number of the random sample units was 5 percent of the number of the units in the sampling frame. Nevertheless, after initial checking, it was determined that there was a superset problem. Therefore, certain units were dropped from the initial sample: units that were deleted from the registry (in the meantime), those that

were in the process of bankruptcy or liquidation<sup>1</sup>, as well as those which were owned by public or other legal entities. After doing that, there were 327 units in the sample. The variables were measured on the basis of the respondents' answers to the closed-ended questions. The questionnaire that was used for data gathering was distributed either personally, or by e-mail. One hundred and one completed questionnaires were received in the period July-October 2014. Of these 101 subjects who responded, 67 were male (66 percent), while 34 were female (34 percent) entrepreneurs. The binomial test indicates that the proportion of female entrepreneurs in the sample is comparable with the one presented by Babović (2012) ( $p=0.172$ , *1-tailed*) and by the National Agency for Regional Development (2013) ( $p=0.464$ , *1-tailed*). Namely, according to Babović (2012:46), 71.1 percent of enterprises are owned by men, while women are owners of 28.9 percent of the business entities in the Republic of Serbia. A slightly higher percentage of women-owned business in the Republic of Serbia (32.8 percent) is reported by the NARD (National Agency for Regional Development) (2013:7). Also, eight out of ten (79.21 percent) entrepreneurs from the sample are engaged in the service-sector businesses which corresponds with the data at the national level ( $p=0.139$ , *1-tailed*). Namely, 74 percent of SMEs and entrepreneurs in the Republic of Serbia operate in the service sectors, while 26 percent of them are engaged in production related activities (MERS/NARD 2014:8).

### Variables

The research subjects are entrepreneurs defined as individuals that own MSMEs, as well as those that are registered as entrepreneurs according to the Serbian Law on Companies (NARS 2011: arts. 2, 83). This understanding of research subjects is determined by certain legal norms in the Republic of Serbia which define the legal framework for the classification and registration of business entities. Namely, the Business Registers Agency's register which is used to generate the sample represents the only official registry of business subjects in the Republic of Serbia. The law specifies that this registry takes separate records of companies and entrepreneurs, whereby, in accordance with the law, companies are considered to be legal entities while entrepreneurs are defined as natural persons (NARS 2011: arts. 2, 83)<sup>2</sup>. It is evident that the chosen approach for the selection of the research subjects defines entrepreneurs in a broader sense com-

- 1 The reason why these entities were excluded from the sample was the fact that the sample was generated for the purpose of wider research that included the business performances of the entrepreneurs. The research was conducted as a part of the author's doctoral dissertation entitled "The Growth and Development of the Small and Medium-Sized Enterprises Owned by Female Entrepreneurs."
- 2 Art. 2: "*A company is a legal entity engaged in a business activity for the purpose of profit generation.*"

pared to their understanding by the Law on Companies. Understanding of entrepreneurs as different from the legal definition is not unusual either for empirical studies or for the reporting of the national institutions. Thus, for example, the Report on Condition, Needs and Problems of the Entrepreneurs in the Republic of Serbia for the year 2012 deals with the both: companies (SMEs) and entrepreneurs, although only the entrepreneurs are mentioned in the title of the document (NARD 2012). This wider understanding of the subjects of the entrepreneurial activity is consistent with other regulatory and statistical solutions in the Republic of Serbia. Thus, according to the Law on Accounting, entrepreneurs are considered to be micro enterprises (NARS 2013: art. 6), while the Statistical Office of the Republic of Serbia accepts the French model of statistical treatment of entrepreneurs in its publications on this subject (SORS 2013). This model presupposes that the conditions and ways of doing business of the entrepreneurs are comparable to those relevant for micro businesses. Moreover, in some aspects of the analysis presented by the Report on Small and Medium Enterprises and Entrepreneurship for the year 2012, the entrepreneurs are combined with the group of micro enterprises (MERS/MRDLSG/NARD 2013:16). This broader understanding of entrepreneurs also differs from those arguing that there are differences between ownership and entrepreneurship. For example, Carland, Hoy, Boulton and Carland (1984) point out that entrepreneurship also exists outside small businesses, and that not every small business owner is necessary an entrepreneur. These authors state that entrepreneurship and ownership of small businesses are not the same, although these concepts overlap to some extent. Entrepreneurial companies can be different sizes, and what makes them entrepreneurial are their innovations and orientation towards growth. Similar is the understanding of Morris (1998) that entrepreneurial behaviour and the ownership and management of small businesses do not always overlap. On the contrary, according to this author, the only entrepreneurial activity for most small business owners is the act of starting their own businesses. On the other hand, according to Carton, Hofer and Meeks (1998:5), the entrepreneurial process can be considered as a process of analyzing the environment, identifying business opportunities, assessing the possibilities of their exploitation, mobilizing resources, creating and managing the organization for the exploitation of the perceived business opportunities. The entrepreneur is, consequently, the subject of this entrepreneurial process. In other words, *"the entrepreneur can be considered as a person who owns a certain form of organized business activity through which he/she exploits the identified business opportunities or creates new opportunities assuming thus a certain level of risk for decision-making under uncertainty"* (Predić/Stošić 2012:237). Also, the owners of

Art. 83: *"An entrepreneur shall be a natural person with full capacity who carries on a business activity for the purpose of profit generation and is registered as such accordance with the law on registration."*

(small) businesses are included in the GEM entrepreneurial statistics (see for example in: Singer/Amoros/Moska 2015:24), while a significant number of programs to support entrepreneurship are defined as such to include the owners of small and medium-sized enterprises, irrespective of the nature of their business practices (whether they are innovative, risk taking or proactive).

Education of entrepreneurs is usually studied on the basis of the educational level that they have completed (Parker 2009; Storey 2010; Aterido/Driemeier 2011) and/or the field of their education (Greene et al. 2001; Menezis et al. 2006). In order to measure the education of the respondents, they were asked to indicate the last level of education that they had completed: without primary education; primary education; high school; college; bachelor; master; PhD. The International standard classification of education was used to define different fields of education: Services; General programmes; Education; Social sciences, business and law; Agriculture and veterinary; Humanities and arts; Science; Health and welfare; Engineering, manufacturing and construction (UNESCO IS 2012).

Work experience of the entrepreneurs can be analysed as a multidimensional variable. It can be noted that various aspects of entrepreneurs' work experience are analysed by different studies. For example, Storey (2010:127) gives evidence from different studies examining the entrepreneurs' management, prior ownership and sector experience. Similarly, Carter et al. (2003) state that these three types of experience are particularly important for entrepreneurs, while Cliff (1998) uses these aspects of experience as indicators of the resources needed for entrepreneurial business growth. The length of the general work experience as determinant of entrepreneurial intentions is used in a study of Gupta, Turban, Wasti and Sikdar (2009), while Lechmann and Schnabel (2012) indicate the years of working experience as a determinant of the self-employment earnings. Additionally, Lechmann and Schnabel (2012) find that the length of the current job ownership is an indicator of specific work experience and crucial human capital variable that determines the entrepreneurs' earnings. Bearing in mind the complexity of the respondents' work experience, several components of this variable were assessed. The respondents were asked whether they had had any general work experience prior to establishing their own businesses, and if they had any: the length of that experience and the extent to which it was acquired in the industry of their current business (completely in the same industry, partly in the same industry, completely in a different industry). Additionally, they were asked whether they had any prior management experience, the management level at which they gained it (operational, middle, top) and whether they had any prior entrepreneurial (ownership) experience. Finally, respondents indicated the length of their current entrepreneurial experience.

Starting from measures used in empirical studies (for example in: Hisirch/Brush 1984; Chen/Greene/Crick 1998; Walker/Webster 2006; Díaz-Garcia/Jiménez-

Moreno 2010), entrepreneurial self-efficacy was assessed in the areas of marketing, finance, innovation, operational management (production, inventory), information-communication technologies and e-business, human resources management and activities in the field of general management (activities of planning, organizing, controlling). Entrepreneurial self-efficacy was assessed on the five-point Likert scale designed to rank the self-perceived level of competences in different business areas (1 – insufficiently; 2 – sufficiently; 3 – good; 4 – very good; 5 – excellent). The composite measure of entrepreneurial self-efficacy was calculated as a mean of the individual items. In order to determine the level of scale's internal consistency, the *Cronbach's alpha* was calculated (critical value: *Cronbach's alpha*  $\geq 0.60$ ). As each item contributed to the scale in the same manner, there was no need for reverse coding. The scale used to measure entrepreneurial self-efficacy had a high level of internal consistency (*Cronbach's alpha* = 0.852).

### *Statistical methods*

The *Chi-square test* for association was run to determine whether two categorical variables were associated. When the null hypothesis of no association was rejected ( $p < 0.05$ ), *Cramer's V* value was reported as a measure of the magnitude of association.

The difference between the means of the two gender groups on a continuous dependent variable was tested by using the independent-samples *t-test*. The assumption about the existence of significant outliers was checked by the inspection of a boxplot. The *Shapiro-Wilk* test was run for assessing the normality of distribution of the analysed variables ( $p > 0.05$ ). As there was a difference in the sample size of the two groups, *Levene's* test of equality of variance was conducted. When data failed the assumptions about the outliers and/or normality, the *Mann-Whitney U* test was run. When the distributions of scores for both groups of the variables had the same shape (as assessed by visual inspection of the population pyramid), the *Mann-Whitney U* test was used to test the differences in the medians of the groups. Otherwise, the test of differences in the distributions of the groups is reported. The *p-values* are presented for 2-tailed tests, unless otherwise noted.

## Results

### Education

The majority of entrepreneurs have a bachelor's degree (Table 1). Observed by gender, high school is the last completed level of education for most of the female entrepreneurs, while most male entrepreneurs have a bachelor's degree. Nevertheless, there was no statistically significant association between gender and the educational level of entrepreneurs ( $\chi^2=1.647$ ,  $p=0.800$ ) (Table 2<sup>3</sup>).

**Table 1 Educational Level \* Gender Crosstabulation**

		Gender		Total	
		Female	Male		
Education- al Level	High School	Count	12	21	33
		% within High School	36.64	63.6	100.0
		% within Gender	35.3	31.3	32.7
		% of Total	11.9	20.8	32.7
	College – Vocational	Count	5	14	19
		% within College – Vocational	26.3	73.7	100.0
		% within Gender	14.7	20.9	18.8
		% of Total	5.0	13.9	18.8
	Bachelor	Count	11	25	36
		% within Bachelor	30.6	69.4	100.0
		% within Gender	32.4	37.3	35.6
		% of Total	10.9	24.8	35.6
Master	Count	5	6	11	
	% within Master	45.5	54.5	100.0	
	% within Gender	14.7	9.0	10.9	
	% of Total	5.0	5.9	10.9	
PhD	Count	1	1	2	
	% within PhD	50.0	50.0	100.0	
	% within Gender	2.9	1.5	2.0	
	% of Total	1.0	1.0	2.0	
Total	Count	34	67	101	
	% within Educational Level	33.7	66.3	100.0	
	% within Gender	100.0	100.0	100.0	
	% of Total	33.7	66.3	100.0	

3 Summarized results of the *Chi-square* test for all variables are presented in Table 2.

**Table 2 Chi-square Test**

		Value	df	Asymp. Sig. (2-sided)	Cramer's V	No. of valid cases
Educational level	<i>Pearson Chi-Square</i>	1.647	4	.800	-	101
Educational field	<i>Pearson Chi-Square</i>	18.039	8	.021	.423	101
Previous work experience – yes/no	<i>Pearson Chi-Square</i>	.268	1	.605		
	<i>Fisher's Exact Test</i>	Exact Sig (2-sided)		Exact Sig. (1-sided)	-	101
		.595		.397		
Previous industry related experience	<i>Pearson Chi-Square</i>	1.256	2	.534	-	83
Previous management experience – yes/no	<i>Pearson Chi-Square</i>	6.546	1	.011		
	<i>Fisher's Exact Test</i>	Exact Sig (2-sided)		Exact Sig. (1-sided)	.255	101
		.014		.008		
Previous management experience – level	<i>Pearson Chi-Square</i>	5.694	3	.128	-	35
Previous entrepreneurial experience – yes/no	<i>Pearson Chi-Square</i>	8.162	1	.004		
	<i>Fisher's Exact Test</i>	Exact Sig (2-sided)		Exact Sig. (1-sided)	.286	100
		.005		.003		

Relatively more female entrepreneurs have gained their education in the field of Services, Humanities and arts and especially in the field of Social sciences, business and law as well as in the field of Health and welfare (Table 3). On the other hand, male entrepreneurs are relatively more educated in the field of Agriculture and veterinary, and especially in the field of Engineering, manufacturing and construction. As the *Chi-square test* indicates, there is a statistically significant association between gender and the educational field of entrepreneurs ( $\chi^2=18.039$ , *Cramer's V*=0.423,  $p=0.021$ ) (Table 2).

**Table 3 Educational Field \* Gender Crosstabulation**

Educational Field	General Programmes	Count	Gender		Total
			Female	Male	
General Programmes	Count	3	7	10	
	% within General Programs	30.0	70.0	100.0	
	% within Gender	8.8	10.4	9.9	
	% of Total	3.0	6.9	9.9	
Services	Count	4	7	11	
	% within Services	36.4	63.6	100.0	
	% within Gender	11.8	10.4	10.9	
	% of Total	4.0	6.9	10.9	
Education	Count	2	6	8	
	% within Education	25.0	75.0	100.0	
	% within Gender	5.9	9.0	7.9	
	% of Total	2.0	5.9	7.9	
Humanities and Arts	Count	2	1	3	
	% within Humanities and Arts	66.7	33.3	100.0	
	% within Gender	5.9	1.5	3.0	
	% of Total	2.0	1.0	3.0	
Social sciences, Business and Law	Count	10	12	22	
	% within Social sciences, Business and Law	45.5	54.5	100.0	
	% within Gender	29.4	17.9	21.8	
	% of Total	9.9	11.9	21.8	
Science	Count	6	9	15	
	% within Science	40.0	60.0	100.0	
	% within Gender	17.6	13.4	14.9	
	% of Total	5.9	8.9	14.9	
Engineering, Manufacturing and Construction	Count	2	21	23	
	% within Engineering, Manufacturing and Const.	8.7	91.3	100.0	
	% within Gender	5.9	31.3	22.8	
	% of Total	2.0	20.8	22.8	
Agriculture and Veterinary	Count	0	3	3	
	% within Agriculture and Veterinary	0.0	100.0	100.0	
	% within Gender	0.0	4.5	3.0	
	% of Total	0.0	3.0	3.0	
Health and Welfare	Count	5	1	6	
	% within Health and Welfare	83.3	16.7	100.0	
	% within Gender	14.7	1.5	5.9	
	% of Total	5.0	1.0	5.9	
Total	Count	34	67	101	
	% within Gender	100.0	100.0	100.0	
	% of Total	33.7	66.3	100.0	

The results about the level and the field of education of female and male entrepreneurs support the first hypothesis.

## Experience

Both the female and male entrepreneurs started their own businesses after a period of working in the paid-employment sector (Table 4). As for the association between gender and the existence of pre-entrepreneurial work experience, no statistical significance was found (Table 2).

**Table 4 Previous Work Experience \* Gender Crosstabulation**

		Gender		Total	
		Female	Male		
Previous Work Experience	Yes	Count	27	56	83
		% within Previous Work Experience – Yes	32.5	67.5	100.0
		% within Gender	79.4	83.6	82.2
		% of Total	26.7	55.4	82.2
	No	Count	7	11	18
		% within Previous Work Experience – No	38.9	61.1	100.0
		% within Gender	20.6	16.4	17.8
		% of Total	6.9	10.9	17.8
Total	Count	34	67	101	
	% within Previous Work Experience	33.7	66.3	100.0	
	% within Gender	100.0	100.0	100.0	
	% of Total	33.7	66.3	100.0	

As the previous work experience data was not normally distributed ( $p < 0.05$ ), the *Mann-Whitney U* test was run to determine whether there were gender based differences in the length of pre-entrepreneurial work experience. The distributions of data for female and male entrepreneurs were similar. The median length of the previous work experience was not statistically significant different between female ( $Mdn=9.50$ ) and male ( $Mdn=10.00$ ) entrepreneurs ( $U=1,153.00$ ,  $z=0.101$ ,  $p=0.919$ ). Therefore, the first part of the second hypothesis was not confirmed.

In most cases, previous work experience was gained partly in the industry of current business activity, for both female and male entrepreneurs (Table 5). Relatively more female entrepreneurs have begun their own business activities without previous experience in the same industry. Nevertheless, the test results do not confirm the hypothesis H2 b as they show that there was no statistically important association between gender and the similarity of the industry of previous work experience of entrepreneurs (Table 2).

**Table 5 Previous Work Experience's Industry \* Gender Crosstabulation**

			Gender		Total
			Female	Male	
Previous Industry Related Experience *	Completely in the Same Industry	Count	6	18	24
		% within Completely in the Same Industry	25.0	75.0	100.0
		% within Gender	22.2	31.6	28.9
		% of Total	7.1	21.4	28.9
	Partly in the Same Industry	Count	11	23	34
		% within Partly in the Same Industry	31.4	67.7	100.0
		% within Gender	40.7	40.4	41.0
		% of Total	13.1	27.8	41.0
	Completely in a Different Industry	Count	10	15	25
		% within Completely in a Different Industry	40.0	60.0	100.0
		% within Gender	37.0	26.3	30.1
		% of Total	11.9	17.9	30.1
Total	Count	27	56	83	
	% within Previous Industry Related Experience	32.5	67.5	100.0	
	% within Gender	100.0	100.0	100.0	
	% of Total	32.5	67.5	100.0	

\*Calculated only for those participants that had previous work experience (83)

Both female and male entrepreneurs mostly had no previous management experience (Table 6). However, the relative number of female entrepreneurs without any management experience prior to establishing their own business is significantly higher compared to male entrepreneurs without this experience (Table 2). As it was expected, there was a significant association between gender and the existence of previous management experience of entrepreneurs ( $\chi^2=6.546$ , *Cramer's V*=0.255, *p*=0.011).

**Table 6 Previous Management Experience \* Gender Crosstabulation**

			Gender		Total
			Female	Male	
Previous Management Experience	Yes	Count	6	29	35
		% within Previous Management Experience – Yes	17.1	82.9	100.0
		% within Gender	17.6	43.3	34.7
		% of Total	5.9	28.7	34.7
	No	Count	28	38	66
		% within Previous Management Experience – No	42.4	57.6	100.0
		% within Gender	82.4	56.7	65.3
		% of Total	27.7	37.6	65.3
	Total	Count	34	67	101
		% within Previous Management Experience	33.7	66.3	100.0
% within Gender		100.0	100.0	100.0	
% of Total		33.7	66.3	100.0	

Those respondents who had certain previous management experience were asked about the management level at which that experience was obtained. Multiple response data-set was created for examining the distribution of the management levels frequencies. Eight out of ten female entrepreneurs have gained their management experience working at the operational management level (Table 7). None of the female entrepreneurs had worked as a top manager. The distribution of the management levels for the male respondents is more balanced. However, there was no evidence of the association between gender and the management level of previous management engagement of entrepreneurs (Table 2). So, the hypothesis H2 c was confirmed only regarding the existence of previous management experience, but not regarding the management level at which it was gained.

**Table 7 Level of Previous Management Experience \* Gender Crosstabulation**

		Gender		Total	
		Female	Male		
Management Level*	Top	Count (responses)	0	8	8
		% within Top	0	88.9	
		% within Gender	0	27.6	
		% of Total	0	22.9	
	Middle	Count (responses)	2	11	13
		% within Middle	15.4	84.6	
		% within Gender	33.3	37.9	
		% of Total	5.7	31.4	
	Operational	Count (responses)	5	12	17
		% within Operational	29.4	75.0	
		% within Gender	83.3	41.4	
		% of Total	14.3	34.3	
Total		Count (respondents)	6	29	35
		% of Total	17.1	82.9	100.0

\* Calculated only for those with previous management experience (35)

Note: Total and % calculated for number of respondents

The final aspect of the experience that was analysed was the ownership experience. The test results show that there is no significant difference in the median length of current business ownership between female ( $Mdn=10.00$ ) and male ( $Mdn=11.00$ ) entrepreneurs ( $U=1,258.00$ ,  $z=1.120$ ,  $p=0.263$ ). Although the current business is the first one that both female and male entrepreneurs own (Table 8), there is a statistically significant association between gender and the existence of previous entrepreneurial experience ( $\chi^2=8.162$ ,  $Cramer's V=0.286$ ,  $p=0.004$ ) (Table 2). To put it differently, significantly fewer female entrepreneurs had certain entrepreneurial experience before starting their current businesses. As in the previous case, the hypothesis H2 d was partly supported.

**Table 8 Previous Entrepreneurial Experience \* Gender Crosstabulation**

		Gender		Total	
		Female	Male		
Previous Entrepreneurial Experience	No	Count	32	49	81
		% within Previous Entrepreneurial Experience – No	39.5	60.5	100.0
		% within Gender	97.0	73.1	81.0
		% of Total	32.0	49.0	81.0
	Yes	Count	1	18	19
		% within Previous Entrepreneurial Experience – Yes	5.3	94.7	100.0
		% within Gender	3.0	26.9	19.0
		% of Total	1.0	18.0	19.0
Total	Count	33	67	100	
	% within Previous Entrepreneurial Experience	33.0	67.0	100.0	
	% within Gender	100.0	100.0	100.0	
	% of Total	33.0	67.0	100.0	

### *Entrepreneurial self-efficacy*

There were no outliers in the entrepreneurial self-efficacy mean score data, as assessed by the inspection of boxplot, and the entrepreneurial self-efficacy score for both groups was normally distributed (females:  $p=0.228$ ; males:  $p=0.182$ ). Moreover, there was homogeneity of variances, as determined by the *Levene's* test ( $p=0.543$ ). The difference between the mean composite score of females' ( $3.42\pm 0.75$ ) and males' ( $3.56\pm 0.79$ ) entrepreneurial self-efficacy was not statistically significant ( $M=-0.14$ ,  $95\% CI [-0.46, 0.19]$ ,  $t(99)=-0.825$ ,  $p=0.411$ ). These results do not confirm the third hypothesis. However, if analyzed separately, there were significant differences in the scores for entrepreneurial self-efficacy in the field of general management ( $U=1,385.00$ ,  $z=133.591$ ,  $p_{1-sided}=0.033$ ), and in the field of marketing ( $U=1,026.00$ ,  $z=131.675$ ,  $p_{1-sided}=0.031$ ). In both cases the differences were in favour of men (mean ranks: general management: males=54.67, females=43.76; marketing: males=54.23, females=43.26). There were no significant differences in any other dimension of the entrepreneurial self-efficacy (finance:  $U=1,026.00$ ,  $p=0.465$ ; innovation:  $U=1,262.50$ ,  $p=0.286$ ; operational management:  $U=1,095.00$ ,  $p=0.939$ ; human resources:  $U=1,152.00$ ,  $p=0.923$ ; information-communication technology and e-business:  $U=1,146.00$ ,  $p=0.757$ ).

### **Discussion and practical implications of the results**

Exploring the gender aspects of the entrepreneurship can help direct measures designed to support entrepreneurial activity. If female entrepreneurs have different (worse) starting points and operate under different conditions, than a gender-

sensitive approach to support the entrepreneurial activities seems justified. This kind of approach is integrated within the strategic documents of the Republic of Serbia which are defined to support the overall entrepreneurial activity and to achieve gender equality (see more in: Serbian Government 2009; Serbian Government 2015 b). It is recognized that support programs should be designed in accordance with the specific needs of this target group (Serbian Government 2009; Serbian Government 2015 a). Thus, for example, in relation to human capital improvement, it is planned to conduct a separate and comprehensive analysis of the educational and training needs of female entrepreneurs in the Republic of Serbia (Serbian Government 2015 a:68). The results of the research presented in this paper can be seen as a contribution to that analysis.

Although certain differences were recorded, female and male entrepreneurs in the Republic of Serbia have similar levels of education. This data is comparable with that referring to the Serbian general population indicating that there is almost an equal representation of females and males among pupils attending primary and secondary levels of education, while within the student population there are slightly more female students that are enrolled (55 percent) or graduated (58 percent) (SORS 2015 b). Likewise, a similar level of education was found among employed women and men in Serbia (Stošić et al. 2014). On the other hand, significant differences were found regarding entrepreneurs' fields of education, with social sciences, business and law being the dominant fields of education of female entrepreneurs while most male entrepreneurs gained their education in the field of engineering, manufacturing and construction. A similar pattern among the Serbian general population can be observed; specifically, at the secondary educational level men are more frequently enrolled in the fields of electrical engineering, machinery and metallurgy, transport, forestry and wood processing, while there are more female graduated students in the fields of education, health and welfare, social sciences, humanities and art (SORS 2014). The gender aspect of the educational profile of Serbian entrepreneurs is comparable with one reported by Menezis et al. (2006), Farlie and Robb (2009), Leoni and Falk (2010), Aterido and Hallward-Driemeier (2011), and it is similar to the educational characteristics of the general Serbian population.

The confirmation of the second part of the first hypothesis proves the existence of horizontal gender segregation in education. The absence of women from the technical fields of education can restrict them from starting-up their businesses in the fast-growing high-tech industry, thus creating occupational segregation in the self-employment sector. This gender based segregation in the field of education can be corrected by an adequate educational policy which, for example, could define gender quotas for admission to programs that are not usually selected by women, or by granting scholarships for female students in those fields. The gender segregation in education induces gender occupational segregation. The absence of female entrepreneurs from technology-intensive activities, and

problems that they are faced with when they do operate in these industries, are recognized by Serbian authorities which indicate that there should be a specialized form of support and mentoring for female entrepreneurs in technology-intensive industries (Serbian Government 2015 a:68). Of course, significant parts of the problem are gender stereotypes that direct women towards humanities and social sciences (Kolin/Čičkarić 2010). The existence of these stereotypes significantly limits the latitude of women's representation in the educational area. Tackling this issue must be a part of a wider social action.

Prior entrepreneurial and management experience were the only aspects of the experience for which a gender gap was identified. Most of both the female and male entrepreneurs in Serbia have no previous entrepreneurial experience. This is in line with Lecmann and Schnabel (2012) who argue that the largest number of the self-employed gathered their experience in the paid-employment sector. Nevertheless, as in the study of Bird and Sapp (2004), results show that female entrepreneurs have less prior entrepreneurial experience compared to their male counterparts. Similar to the evidence found by Boden and Nucci (2000), Verheul and Thurik (2001), Fairlie and Robb (2009), female entrepreneurs in the Republic of Serbia are less likely to start their businesses with certain previous management experience. Rare prior management experience of female entrepreneurs in Serbia is a reflection of the fact that the number of men in Serbia who are managers, administrative officials and legislators is twice the number of women in these positions; despite the fact that there is a greater number of highly qualified women (SORS 2015 a). Investigating the gender structure of the management hierarchy in businesses located in the South-East Serbia, Stošić et al. (2014) found that management structures in Serbian companies are male-dominated, especially the top-management positions. These results can be an indication of the glass ceiling phenomenon that limits professional promotion of women regardless of their competencies and accomplishments (Powel/Butterfield 1994; McQuarrie 2005). Lack of management experience can influence the future orientation of female entrepreneurs toward growth of their businesses. Specifically, it is suggested that the opportunity costs of self-employment (seen as missed earnings in the paid-employment) are higher for managers, since they have higher earnings in the paid-employment sector (Storey 2010:129, 130). Therefore, the minimum level of the earnings in self-employment, after which managers will be willing to choose this employment option, will be at a higher level. Achievement of higher earnings in the self-employment generally requires growth of the business, so it can be expected that entrepreneurs with previous managerial experience are more likely to be oriented towards business growth (Lerner/Almor 2002; Storey 2010:129, 130). Observed by the type of management experience, it seems fair to assume that these opportunity costs of the self-employment will be the highest for top managers, producing higher performance thresholds for their potential businesses. Therefore, lack of top management ex-

perience of female entrepreneurs can additionally impact their growth orientation. Moreover, the fact that female entrepreneurs have less previous top management experience can result in the lack of strategic planning activities in their businesses. Exploring this issue in the context of different managerial positions, Nir (1999) finds that there is no difference in the psychological perception of time between men and women at the same level of the managerial hierarchy. Accordingly, the position in the management structure specifies the planning time frame of female and male managers. In that sense, it is possible that the fact that most of women have management experience at lower managerial positions determines their short-term planning orientation which remains their characteristic after they leave their previous organization and start their own business.

Gender quotas for structuring management teams is one of the ways to solve the problem of underrepresentation of one gender, especially when this problem is a reflection of gender discrimination. At the same time, this problem can partly be caused by poor management self-efficacy of women. Therefore, a certain form of public promotion of female managers (particularly successful ones) could increase the perception of congruency between feminine qualities, knowledge, skills and the requirements of management positions. As for the women who are already in the self-employment sector and lack the management experience and knowledge that it implies, the recommendation would be to define adequate training programs which would include elements of theoretical and practical knowledge in the field of strategic and operational general management and management of specific business areas.

As for the other components of experience, although the expected directions were found (all in favour of male entrepreneurs), there was no statistical significance in each of the analyzed aspects. Therefore, there is a partial confirmation of the second hypothesis.

Contrary to expectations, female and male entrepreneurs expressed similar levels of general entrepreneurial self-efficacy. However, when different fields of entrepreneurial self-efficacy were analysed separately, results showed that female entrepreneurs are less confident in their competencies in the field of general management and marketing. Higher entrepreneurial self-efficacy of men may be related to the fact that male entrepreneurs are more likely to have educational backgrounds that involve general and functional management courses (Klapper/Parker 2010; Huarng et al. 2012). Certainly, the fact that female entrepreneurs have lower self-confidence in the field of general management can be seen in the light of the fact that they usually do not have previous management experience. It is argued that entrepreneurial self-efficacy is an important predictor of entrepreneurial intentions (Boyd/Vozikis 1994; Izquierdo/Bulens 2008; Drnovšek et al. 2010). If women have lower entrepreneurial self-efficacy (Wilson et al. 2007; Díaz-García/Jiménez-Moreno 2010; Thébaud 2010), it can be

expected that they will be less interested in becoming entrepreneurs, which can partly explain why entrepreneurship is a male dominated activity. Further, women express significantly higher self-efficacy for occupations that are traditionally female-dominated, while their self-efficacy for traditionally male-dominated occupations is significantly lower (Hackett/Betz 1995). Apart from being important for entrepreneurial intention and starting-up own venture, entrepreneurial self-efficacy can influence the outcome of this activity. Higher entrepreneurial self-efficacy leads to greater persistence which is necessary for dealing with various challenges during the start-up process and managing ones' own business (Cardon/Kirk 2015). In that way entrepreneurial self-efficacy can determine the success rates and performances of entrepreneurs. Individuals with higher self-efficacy will set themselves more challenging goals, will invest more effort in goal achievement and will remain persistent despite the obstacles he/she is faced with (Boyd/Vozikis 1994; DeNoble et al. 1999; McGee et al. 2009). As the entrepreneurial self-efficacy domain is business start-up and growth (Drnovšek et al. 2010), the lower entrepreneurial self-efficacy of women can explain not only why it is less probable that they will become entrepreneurs, but also why they are less successful when they do so.

Proper entrepreneurial education and training can build confidence in one's ability to become an entrepreneur and to carry out these activities with a positive outcome (DeNoble et al. 1999; Kickul et al. 2009; McGee et al. 2009). By doing so, the entrepreneurial intentions and the number of those who would become entrepreneurs can be increased. Wilson et al. (2007) find that gender moderates the relationship between the entrepreneurial education and entrepreneurial self-efficacy, in a way that there is a stronger positive impact of entrepreneurial education and training on female students' entrepreneurial self-efficacy. Therefore, the authors conclude that well-designed entrepreneurial curricula can be particularly important for improving the entrepreneurial self-efficacy of women.

The specific educational needs of female entrepreneurs in Serbia are recognized by Serbian policy makers, as it is suggested that focus on female entrepreneurs as a target group is needed in the field of financial management and in designing various training programs for understanding and implementing different financing tools (Serbian Government 2015 a:31). More generally, it is predicted that the mandatory gender quotas (a minimum of 30 percent) for female entrepreneurs' participation should be applied within the existing and future government programs that support entrepreneurial activity in the Republic of Serbia (Serbian Government 2015 a:67, 68).

## Conclusions

The research presented in the paper was undertaken in order to identify gender gaps in the human capital of Serbian female and male entrepreneurs. More

specifically, the study set out to explore the gender differences in the educational background (level and field of education), various aspects of work experience (the existence and the length of prior work experience in general, work experience in the industry, management and entrepreneurial experience) and the entrepreneurial self-efficacy of Serbian entrepreneurs. As research on this subject is rare in the context of the Republic of Serbia, the aim was to find out whether the Serbian results on this issue are fitted into the main-stream framework. As Serbian policy makers regard female entrepreneurship as one of the specific areas that should be supported, the complementary goal of the study was to examine whether there are gender differences that can be used as the basis for an argument for a gender-sensitive approach in defining future support measures.

The main findings of the study suggest that female and male entrepreneurs in the Republic of Serbia have similar levels of education, but that there is gender based segregation regarding their fields of their education. Almost one third of female entrepreneurs are educated in the field of social sciences, business and law, while three out of ten male entrepreneurs have gained their degrees in the field of engineering, manufacturing and construction. Regarding their experience, results show that male entrepreneurs are more likely to have prior entrepreneurial (ownership) experience. Moreover, female entrepreneurs, like women in general, are lacking prior management experience. Compared to their male counterparts, relatively fewer female entrepreneurs had certain management experience before starting their own business. Finally, Serbian female entrepreneurs have lower entrepreneurial self-efficacy in the domain of general management and marketing. As for the other components of human capital that were analysed, no significant gender based differences were found regarding prior general work, industry related experience, the length of the current entrepreneurial experience and general entrepreneurial self-efficacy.

A gender gap in human capital of Serbian entrepreneurs was identified in some aspects, and the patterns are consistent with findings reported for other national contexts. Although female and male entrepreneurs have similar levels of education, they differ in the field of education and the existence of previous entrepreneurial and management experience, and female entrepreneurs have lower entrepreneurial self-efficacy in the domain of general management and marketing. This gender gap may be associated with the intensity and the performance of entrepreneurial activity of women and men in the Republic of Serbia. While these relations were not the subject of this research, they may be valid research questions for a subsequent study. As this is one of the few empirical studies of the gender aspect of the entrepreneurial activity in the Republic of Serbia, its main contribution is to place the Serbian context within the mainstream framework. Moreover, the results suggest a number of practical implications. The results provide empirical support for a gender-sensitive approach to entrepreneurship. This is particularly important within the context of the Republic of Serbia

where the importance of women's entrepreneurship and the need to define a specific approach for supporting this aspect of entrepreneurial activity are just beginning to be recognized. The implicit message refers to the fact that support measures should not encourage the status-quo. There is a need for systematic and structural changes that should encourage female entrepreneurs' dynamics toward more lucrative and prospective occupations and industries.

## References

- Aterido, R./Hallward-Driemeier, M. (2011): Whose Business is it anyway? Closing the Gender Gap in Entrepreneurship in Sub-Saharan Africa, in: *Small Business Economics*, 37, 4, 443-464.
- Babović, M. (2012): Polazna studija o preduzetništvu žena u Srbiji [Female Entrepreneurship in Serbia – A Pilot Study]. Beograd: Program Ujedinjenih nacija za razvoj.
- Bandura, A. (1994): Self-efficacy, in: Ramachaudran, V. S. (ed.): *Encyclopedia of Human Behavior* Vol. 4, New York: Academic Press, 71-81.
- Bardasi, E./Sabarwal, S./Terrell, K. (2011): How do Female Entrepreneurs Perform? Evidence from Three Developing Regions, in: *Small Business Economics*, 37, 4, 417-441.
- Becker, G. (1993): *Human Capital – A Theoretical and Empirical Analysis with Special Reference to Education*. Chicago: The University of Chicago Press.
- Bird, S./Sapp, S. (2004): Understanding the Gender Gap in Small Business Success: Urban and Rural Comparisons, in: *Gender and Society*, 18, 1, 5-28.
- Blagojević-Hjuson, M. (2012): Žene i muškarci u Srbiji: Šta nam govore brojevi? [Women and Men in Serbia: What do numbers tell us?]. Beograd: Program Ujedinjenih nacija za razvoj.
- Boden, R. J./Nucci, A.R. (2000): On the Survival Prospects of Men's and Women's New Business Ventures, in: *Journal of Business Venturing*, 15, 4, 347-362.
- Bowen, D./Hisrich, R. (1986): The Female Entrepreneur: A Career Development Perspective, in: *The Academy of Management Review*, 11, 2, 393-407.
- Boyd, N./Vozikis, G. (1994): The Influence of Self-Efficacy on the Development of Entrepreneurial Intentions and Action, in: *Entrepreneurship Theory and Practice*, 18, 4, 63-77.
- Brush, C. (1992): Research on Women Business Owners: Past Trends, a New Perspective and Future Directions, in: *Entrepreneurship Theory and Practice*, 16, 4, 5-30.
- Cardon, M./Kirk, C. (2015): Entrepreneurial Passion as Mediator of the Self-Efficacy to Persistence Relationship, in: *Entrepreneurship Theory and Practice*, 39, 5, 1027-1050.
- Carland, J./Hoy, F./Boulton, W./Carland, J. A. (1984): Differentiating Entrepreneurs from Small business Owners: A Conceptualization, in: *Academy of Management Review*, 9, 2, 354-359.
- Carter, N./Brush, C./Greene, P./Gatewood, E./Hart, M. (2003): Women Entrepreneurs who Break Through to Equity Financing: The Influence of Human, Social and Financial Capital, in: *Venture Capital*, 5, 1, 1-28.
- Carter, N./Williams, M. (2003): Comparing Social Feminism and Liberal Feminism: The Case of New Firm Growth, in: Butler, J. (ed.): *New Perspectives on Women Entrepreneurs*, Greenwich: Information Age Publishing, 25-50.

- Carton, R./Hofer, C./Meeks, M. (1998): The entrepreneur and entrepreneurship: Operational Definitions of their role in society. Paper presented at: International Council for Small Business Conference, Singapore. Available at: <http://www.sbaer.uca.edu/research/icsb/1998/32.pdf> (3.2.2014)
- Chen, C./Greene, P./Crick, A. (1998): Does Entrepreneurial Self-efficacy Distinguish Entrepreneurs from Managers, in: *Journal of Business Venturing*, 13, 4, 295-316.
- Cliff, J. (1998): Does One Size Fit All? Exploring the Relationship between Attitudes towards Growth, Gender, and Business Size, in: *Journal of Business Venturing*, 13, 6, 523-542.
- Coleman, S. (2000): Access to Capital and Terms of Credit: A Comparison of Men- and Women-Owned Small Businesses, in: *Journal of Small Business Management*, 38, 3, 37-52.
- Coleman, S./Robb, A. (2009): A Comparison of New Firm Financing by Gender: Evidence from the Kauffman Firm Survey Data, in: *Small Business Economics*, 33, 4, 397-411.
- Coughlin, J./Thomas, A. (2002): *The Rise of Women Entrepreneurs: People, Processes, and Global Trends*. Westport: Quorum Books.
- Danes, S./Stafford, K./Loy, J. (2007): Family Business Performance: The effects of Gender and Management, in: *Journal of Business Research*, 60, 10, 1058-1069.
- DeNoble, A./Jung, D./Ehrlich, S. (1999): Entrepreneurial self-efficacy: The development of a measure and its relationship to entrepreneurial action. Paper presented at the Babson-Kauffman Entrepreneurship Research Conference. Available at: [http://fusionmx.babson.edu/entrep/fer/papers99/II\\_C/IC.html](http://fusionmx.babson.edu/entrep/fer/papers99/II_C/IC.html) (8.1.2016)
- Díaz-García, M./Jiménez-Moreno, J. (2010): Entrepreneurial Intention: the Role of Gender, in: *International Entrepreneurship and Management Journal*, 6, 3, 261-283.
- Drnovšek, M./Wincent, J./Cardon, M. (2010): Entrepreneurial self-efficacy and business start-up: developing a multi-dimensional definition, in: *International Journal of Entrepreneurial Behaviour & Research*, 16, 4, 329-348.
- EC (European Commission) (2010): *Strategy for equality between women and men 2010-2015*. Brussels: European Commission.
- Fairlie, R./Robb, A. (2009): Gender Differences in Business Performance: Evidence from Characteristics of Business Owners Survey, in: *Small Business Economics*, 33, 4, 375-395.
- Greene, P./Brush, C./Hart, M./Saparito, P. (2001): Patterns of Venture Capital Funding: is Gender a Factor?, in: *Venture Capital*, 3, 1, 63-83.
- Gupta, V./Turban, D./Wasti, A./Sikdar, A. (2009): The Role of Gender Stereotypes in Perceptions of Entrepreneurs and Intentions to Become an Entrepreneur, in: *Entrepreneurship Theory and Practice*, 33, 2, 397-417.
- Hackett, G./Betz, N. (1995): *Self-Efficacy and Career Choice and Development*, in Maddux, J. (ed.): *Self-Efficacy, Adaptation, and Adjustment – Theory, Research, and Application*, New York: Springer Science, 249-280.
- Hisrich, R./Brush, C. (1984): The Women Entrepreneur: Management Skills and Business Problems, in: *Journal of Small Business Management*, 22, 1, 30-37.
- Huang, K-H./Mas-Tur, A./Hui-Kuang Yu, T. (2012): Factors Affecting the Success of Women Entrepreneurs, in: *International Entrepreneurship Management*, 8, 4, 487-497.

- Izquierdo, E./Bulens, M. (2008): Competing models of entrepreneurial intentions: the influence of entrepreneurial self-efficacy and attitudes. Presented at Internationalizing Entrepreneurship Education and Training, IntEnt2008 Conference, 17-20 July 2008, Oxford, Ohio, USA.
- Kalleberg, A./Leicht, K. (1991): Gender and Organizational Performance: Determinants of Small Business Survival and Success, in: *The Academy of Management Journal*, 34, 1, 136-161.
- Kamberidou, I. (2013): Women Entrepreneurs: 'We Cannot Have Change unless We Have Men in the Room', in: *Journal of Innovation and Entrepreneurship*, 2, 6, 1-17.
- Kickul, J./ Gundry, L./ Barbosa, S./Whitcanack, L. (2009): Intuition Versus Analysis? Testing Differential Models of Cognitive Style on Entrepreneurial Self-Efficacy and the New Venture Creation Process, in: *Entrepreneurship Theory and Practice*, 33, 2, 439-453.
- Klapper, L./Parker, S. (2010): Gender and the Business Environment for New Firm Creation, in: *World Bank Research Observer*, 26, 2, 237-257.
- Kolin., M./Čičkarić, Lj. (2010). Rodne nejednakosti u zapošljavanju, upravljanju i odlučivanju. [Gender Inequalities in Employment, Governance and Decision-Making], in: *Stanovništvo*, 48, 1, 103-124.
- Lechmann, D./Schnabel, C. (2012): Why is there a Gender Earnings Gap in Self-employment? A Decomposition Analysis with German Data, in: *IZA Journal of European Labor Studies*, 1, 6, 1-25.
- Lee, H./Marvel, M. (2014): Revisiting the Entrepreneur Gender-Performance Relationship: A Firm Perspective, in: *Small Business Economics*, 42, 4, 769-786.
- Lee, Y./Jasper, C./Fitzgerald, M. (2010): Gender Differences in Perceived Business Success and Profit Growth among Family Business Managers, in: *Journal of Family and Economic Issues*, 31, 4, 458-474.
- Leoni, T./Falk, M. (2010): Gender and Field of Study as Determinants of Self-employment, in: *Small Business Economics*, 34, 2, 167-185.
- Lerner, M/ Almor, T. (2002): Relationships among Strategic Capabilities and the Performance of Women-Owned Small Ventures, in: *Journal of Small Business Management*, 40, 2, 109-125.
- Loscocco, K./Robinson, J. (1991): Barriers to Women's Small-Business Success in the United States, in: *Gender and Society*, 5, 4, 511-532.
- Loscocco, K./Robinson, J./Hall, R./Allen, J. (1991): Gender and Small Business Success: An Inquiry into Women's Relative Disadvantage, in: *Social Forces*, 70, 1, 65-85.
- Manolova, T./Carter, N./Manev, I./Gyoshev, B. (2007): The Differential Effect of Men and Women Entrepreneur' Human Capital and Networking on Growth Expectancies in Bulgaria, in: *Entrepreneurship Theory and Practice*, 3, 3, 407-426.
- McGee, J./Petersen, M./Mueller, S./Sequeira, J. (2009): Entrepreneurial Self-Efficacy: Refining the Measure, in: *Entrepreneurship Theory and Practice*, 33, 4, 965-988.
- McQuarrie, F. (2005): Glass Ceiling, in: Cartwright, S. (ed.): *The Blackwell Encyclopedia of Management – Volume V: Human Resource Management*, Malden: Blackwell Publishing Ltd., 146-147.

- Menezis, T./Diochon, M./Gasse, Y. /Elgie, S. (2006): A Longitudinal Study of the Characteristics, Business Creation Process and Outcome Differences of Canadian Female vs. Male Nascent Entrepreneur, in: *Entrepreneurship Management*, 2, 4, 441-453.
- MERS/MRDLSG/NARD (Ministry of Economy/Ministry of Regional Development and Local Self-Government/National Agency for Regional Development) (2013): Report on Small and Medium Enterprises and Entrepreneurship for the year of 2012. Belgrade.
- MERS/NARD (Ministry of Economy//National Agency for Regional Development) (2014): Report on Small and Medium Enterprises and Entrepreneurship for the year of 2013. Belgrade.
- Minniti, M./Nardone, C. (2007): Being in Someone Else's Shoes: the Role of Gender in Nascent Entrepreneurship, in: *Small Business Economics*, 28, 2-3, 223-238.
- Morris, M. (1998): *Entrepreneurial Intensity: Sustainable Advantages for Individuals, Organizations and Societies*. Westport: Greenwood Publishing Group.
- Morris, M./Miyasaki, N./Watters, C./Coombes, S. (2006): The Dilemma of Growth: Understanding Venture Size Choices of Women Entrepreneurs, in: *Journal of Small Business Management*, 44, 2, 221-244.
- Mueller, S./Dato-on, M. (2013): A Cross Cultural Study of Gender-Role Orientation and Entrepreneurial Self-efficacy, in: *International Entrepreneurship and Management Journal*, 9, 1, 1-20.
- NARD (National Agency for Regional Development) (2012): Stanje, potrebe i problemi preduzetnika u Srbiji u 2012. godini [Conditions, Needs and Problems of Entrepreneurs in 2012]. Belgrade.
- NARD (National Agency for Regional Development) (2013): Stanje, potrebe i problemi preduzetnika u Srbiji u 2013. godini [Conditions, Needs and Problems of Entrepreneurs in 2013]. Belgrade.
- NARS (National Assembly of the Republic of Serbia) (2011): Law on Companies, in: *Official Gazette of the Republic of Serbia*, Nos. 36/2011 and 99/2011.
- NARS (National Assembly of the Republic of Serbia) (2013): Law on Accounting, in: *Official Gazette of the Republic of Serbia*, No. 62/2013.
- Nir, A. (1999): Time Perspectives of Strategic Planning Processes and Plans as a Function of Gender and Echelon Socialization, in: *Sex Roles*, 41, 9/10, 737-752.
- Noguera, M./Alvarez, C./Urbano, D. (2013): Socio-cultural Factors and Female Entrepreneurship, in: *International Entrepreneurship and Management*, 9, 2, 183-197.
- Parker, S. (2009): *The Economics of Entrepreneurship*. Cambridge: Cambridge University Press.
- Pavlović-Babić, D./Bauca, D. (2013): Podrži me, inspiriši me – PISA 2012 u Srbiji: prvi rezultati. [Support me, Inspire me – PISA 2012 in Serbia: First Results]. Beograd: Institut za psihologiju Filozofskog fakulteta u Beogradu – Centar za primenjenu psihologiju.
- Powel, G./Butterfield, A. (1994): Investigating the 'Glass Ceiling' Phenomenon: an Empirical Study of Actual Promotions to top Management, in: *Academy of Management Journal*, 37, 1, 68-86.

- Predić, B./Stošić, D. (2012): Nezaposlenost, samozapošljavanje i preduzetništvo – *push i pull* perspektiva odnosa [Unemployment, Self-employment and Entrepreneurship – Push and Pull Perspective of the Relationship], in: Petrović, E. (ed.): *Nauka i svetska ekonomska kriza* [Science and the Economic Crisis], Niš: Faculty of Economics, 235-246.
- Rietz, A./Henrekson, M. (2000): Testing the Female Underperforming Hypothesis, in: *Small Business Economics*, 14, 1, 1-10.
- Robichaud, Y./Zinger, T./LeBrasseur, R. (2007): Gender Differences within Early Stage and Established Small Enterprises: An Exploratory Study, in: *International Entrepreneurship and Management Journal*, 3, 3, 323-343.
- Serbian Government (2009): Nacionalna strategija za poboljšanje položaja žena i unapređivanje rodne ravnopravnosti za period 2009-2015. [National Strategy for Improving the Position of Women and Promoting Gender Equality for the period 2009-2015], in: *Official Gazette of the Republic of Serbia*, 15/2009.
- Serbian Government (2015 a): Akcioni plan za sprovođenje Strategije za podršku razvoja malih i srednjih preduzeća, preduzetništva i konkurentnosti za 2015. godinu sa projekcijom za 2016. godinu [Action Plan for the Implementation of the Strategy for Support to the Development of Small and Medium Enterprises, Entrepreneurship and Competitiveness for 2015 with Projections for 2016]. Available at: <http://www.privreda.gov.rs/wp-content/uploads/2015/06/Akcioni-plan-mala-i-srednja-preduzeca.pdf> (14.12.2015)
- Serbian Government (2015 b): Strategija za podršku razvoja malih i srednjih preduzeća, preduzetništva i konkurentnosti za period od 2015. do 2020. godine [Strategy for Support to the Development of Small and Medium Enterprises, Entrepreneurship and Competitiveness], in: *Official Official Gazette of the Republic of Serbia*, Nos. 55/05, 71/05 – correction, 101/07, 65/08/ 16/11, 68/12 – US, 72-12, 7/14 – US and 44/14.
- Singer, S./Amoros, J. E./Moska, D. (2015): *Global Entrepreneurship Monitor: 2014 Global Report*. London: Global Entrepreneurship Research Association.
- SORS (Statistical Office of the Republic of Serbia) (2013): *Preduzetnici u Republici Srbiji, 2012* [Entrepreneurs in the Republic of Serbia, 2012]. Belgrade.
- SORS (Statistical Office of the Republic of Serbia) (2014): *Women and Men in the Republic of Serbia, 2014*. Belgrade.
- SORS (Statistical Office of the Republic of Serbia) (2015 a): *Labour Force Survey, 2014*. Belgrade.
- SORS (Statistical Office of the Republic of Serbia) (2015 b): *Statistical Yearbook of the Republic of Serbia, 2015*. Belgrade.
- Storey, D. J. (2010): *Understanding the Small Business Sector*. Hampshire: Cengage Learning EMEA.
- Stošić, D./Stanković, J./Janković-Milić, V./Anđelković, M. (2014) Glass Ceiling Phenomenon in Transition Economies – The Case of South Eastern Serbia, in: *Facta Universitatis, Series: Economics and Organization*, 11, 4, 309-317.
- Strier, R./Abdeen, Z. (2009): Women's Experiences of Micro-Enterprise: Contexts and Meanings, in: *Sex Roles*, 61, 7, 566-579.
- Thébaud, S. (2010): Gender and Entrepreneurship as a Career Choice: Do Self-assessments of Ability Matter?, in: *Social Psychology Quarterly*, 73, 3, 288-304.
- UNESCO IS (Institute for Statistics) (2012): *International Standard Classification of Education – ISCED 2011*. Montreal.

- Verheul, I./Thurik, R. (2001): Start-Up Capital: Does Gender Matter?, in: *Small Business Economics*, 16, 4, 329-345.
- Verheul, I./Thurik, R./Grilo, I./van der Zwan, P. (2012): Explaining Preferences and Actual Involvement in Self-employment: Gender and the Entrepreneurial Personality, in: *Journal of Economic Psychology*, 33, 2, 325-341.
- Vossenbergh, S. (2013): Women Entrepreneurship Promotion in Developing Countries: What explains the gender gap in entrepreneurship and how to close it?, in: *Maastricht School of Management: Working Paper No. 2013/08*, 1-29.
- Walker, E./Webster, B. (2006): Management Competencies of Women Business Owners, in: *Entrepreneurship Management*, 2, 4, 495-508.
- Wilson, F./Kickul, J./Marlino, D. (2007): Gender, Entrepreneurial Self-Efficacy, and Entrepreneurial Career Intentions: Implications for Entrepreneurship Education, in: *Entrepreneurship Theory and Practice*, 31, 3, 387-406.
- Winn, J. (2005): Women Entrepreneurs: Can We Remove the Barriers, in: *International Entrepreneurship and Management Journal*, 1, 3, 381-397.
- Zhang, Z./Zyphur, M./Narayanan, J./Arvey, R./Chaturvedi, S./Avolio, B./Lichenstein, P./Larsson G., (2009): The genetic Basis of Entrepreneurship: Effects of Gender and Personality, in: *Organizational Behavior and Human Decision Processes*, 110, 2, 93-107.



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