



Human Capital of Female Entrepreneurs in Different Life Stages

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Abstract

This paper presents the findings of a quantitative study on the human capital of women entrepreneurs across three distinct life stages. Human capital was analyzed through five constructs, each comprising multiple variables. The results reveal statistically significant differences in previous entrepreneurial and managerial experience among women entrepreneurs at different stages of life. However, no significant differences were observed in educational level attained, pre-business entrepreneurial knowledge, or previous industry experience. The study underscores the need for tailored training programs for different groups, highlighting the critical role of knowledge acquisition in scaling businesses, particularly for women in the so-called pragmatic phase. Furthermore, the interplay between entrepreneurial motives, aspirations, and human capital warrants deeper investigation, particularly to explore variations across different cultural and national contexts.

Keywords

Women Entrepreneurs, Social Capital, Entrepreneurship, Professional Experience, Life Stages

I. Introduction

Researchers of woman entrepreneurship found that women entrepreneurs with higher levels of human capital are better able to identify new entrepreneurial opportunities, generate new ideas and demonstrate creativity in the areas of new products, services, production processes and locations, which has an impact on the growth potential of their businesses (Roomi, 2013; Manolova et al., 2007). Human capital is crucial in shaping the entrepreneurial pathways of women at different life stages. However, as Ahl (2006) points out, the traditional understanding of women's entrepreneurship often overlooks the influence of societal norms and gendered structures, which affect how women accumulate and apply human capital throughout their lives. Chandler and Lyon (2001)

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claim that research that captures developments over a longer timeline, specifically how an entrepreneurial career decision unfolds over an entire life, are still underdeveloped and feature relatively little in the field of women entrepreneurship.

Previous research that has compared different groups of women entrepreneurs has divided women entrepreneurs according to ethnicity (Robinson et al., 2007; Baycan Levent et al., 2003), working in traditional and non-traditional occupations (Anna et al., 2000), online business (Forson and Özbilgin, 2003), according to their psychological characteristics (Goffee and Scase, 2015), entrepreneurial orientation (Bruni et al., 2004; Mitra, 2002), motivation (Orhan and Scott, 2001). Research on women's entrepreneurship from a perspective of life stages has been done mostly in the context of comparisons between men and women (Ekinsmyth, 2011; Jayawarna et al., 2014; Davis and Shaver, 2012). Findings show that women who enter entrepreneurship at a younger age are more likely to be in traditional sector occupations while women's businesses later in life are more technology-dependent (Neergaard et al., 2006), motives, knowledge and social networks differ at different life stages (Jayawarna et al., 2014) and growth attitudes change across life stages (Davis and Shaver, 2012). In the recent study, Khattar and Agarwal (2023) were using a life story approach to study entrepreneurial identity of Indian women influenced by various episodes in different life stages-childhood, adolescence, marriage and motherhood. Chen and Li (2024) found out the negative connection between age and education level, which also negatively impacts entrepreneurial engagement. Hadad (2017) researched motivations of Lebanese woman entrepreneurs at different life stages defined by ages.

Following Ahl (2004) suggesting to stop comparing women with men and instead apply different lens into research of woman entrepreneurs, we took the life stage model developed by O'Neil and Bilimoria (2005) to compare different groups of female entrepreneurs. They claim that career orientation, pattern and beliefs manifest themselves differently in three life stages. The early career and idealistic achievement phase between the ages of 24 and 35, when women's aspirations are based on career satisfaction, achievement and success. In the mid-career phase between 36 and 45, women are driven by pragmatic resilience. Professionally and personally, women in this period are balancing multiple responsibilities and realising that their career development is also largely dependent on others (superiors, colleagues, husband, family, children, friends), and they are often confronted with negative career experiences during this period, which also lead to the decision to become an entrepreneur. In the advanced career phase between the ages of 46 and 60, the driving force for women is to contribute again to the community, the family or the organisation. Many of them, due to various external factors linked to the family, refocus on work and career, but with a different vision. Without losing themselves, they want to contribute and serve others, and their career is an opportunity to learn and to make a difference. Success for them means recognition, respect and a harmonious life.

We posit that the differences in life stages can be recognised also among female entrepreneurs and assume that there are significant differences in human capital among the three groups. Following the research in the field of human capital in entrepreneurship (Davidsson and Honig, 2003; DeTienne and Chandler, 2007; Kreiser et al., 2013; Grichnik et al., 2014; Unger et al., 2011), a framework for observing human and social capital among

female entrepreneurs has been created (Vadnjal et al., 2020). The framework for human capital includes the following dimensions: (i) previous entrepreneurial experience; (ii) the level of education attained as general human capital; and (iii) business knowledge acquired at school and specific training; (iv) industry experience; (v) previous managerial experience as a specific human capital. In this paper, we present the research of those differences among female entrepreneurs in Slovenia.

II. Literature Review and Hypotheses

Definitions of human capital evolved from Becker (1975) defining general human capital as knowledge and skills including formal education, age, previous experience, and specific human capital as knowledge and skills that are useful in a particular enterprise or sector, to later developments of that definition as human capital being the sum of all the knowledge, abilities and skills of individuals (Ployhart and Moliterno, 2011). Neergaard et al. (2006) define human capital as the sum of an individual's education and general and specific experience.

Amaral et al. (2011) connected human capital and entrepreneurship through findings that the degree of development and importance of a particular type of human capital determines the likelihood that employees will choose to become self-employed after a certain period of time in the company. Davidsson and Honig (2003) divide human capital into explicit knowledge, acquired through education, and tacit knowledge, which comprises prior experiences, be they entrepreneurial, managerial or experience gained in specific activities.

The ability to identify entrepreneurial opportunities, developing innovative ideas and obtaining resources for the growth is related to education, work experience and entrepreneurial experience (Davidsson and Honig, 2003; Lazear, 1994; Lam et al., 2007; Samuelson and Davidsson, 2009; Ucbasaran et al., 2010; Åstebro and Thompson, 2011; Obschonka et al., 2011; Stuetzer et al., 2012; Stuetzer et al., 2013), to age, and family income (Koellinger et al., 2013) and family business experience (Ljubotina and Vadnjal, 2023), market and operational knowledge (Shane, 2000; Dimov, 2003; Shepherd and DeTienne, 2005). The impact of traditionally measured human capital in the form of education and prior entrepreneurial experience is greater at the beginning of the entrepreneurial journey, but difficult to identify at later stages (Unger et al., 2011; Parker, 2011; Davidsson and Honig, 2003). While some researchers (Davidsson and Honig, 2003; De Clercq and Arenius, 2006; Delmar and Shane, 2006; Ployhart and Moliterno, 2011; Millan et al., 2014) argue that educational attainment influences an individual's persistence and decision to become an entrepreneur, while prior entrepreneurial experience and specific knowledge have a greater impact on the success of a venture, Ucbasaran et al. (2010) find specific human capital more profitable for an individual than general human capital. Stuetzer et al. (2012) showed that diverse experience has an impact on the actual start-up performance of first-time entrepreneurs. Measuring general educational attainment and prior experience is likely to be a good predictor of an entrepreneur's lifetime success, but entrepreneurial success is often measured in a specific context, so it is better to use goal-oriented human capital to

make such an assessment (Unger et al., 2011). Imitative firms are influenced by different types of human capital than innovative firms (Samuelsson and Davidsson, 2009).

Boden and Nucci (2000), Davidsson and Honig (2003), Lam et al. (2007) include the age of the entrepreneur when measuring human capital. Koellinger et al. (2013) point out that age, work experience and education influence attitudes towards entrepreneurship through their impact on individuals' perceptions.

Roomi (2013) considers age as a measure of human capital of women with the assumption that higher age means higher human capital. Entrepreneurs learn from experiences and from past successes for future goals, taking care to acquire new skills and competences, which is why Unger et al. (2009) see them as proactive creators of their own learning and progression. Persistence, passion and the ability to acquire new resources are factors that influence the ability to vision, communicate, set goals and to be effective and through them to grow as an entrepreneur (Baum and Locke, 2004). Cognitive abilities and self-regulatory abilities influence goal-directed proactive action, and these abilities decline with age (Avolio and Waldman, 1990; Kanfer and Ackerman, 2004).

Our prediction is that different groups of women entrepreneurs require different approaches to investing in human capital. Highly educated women entrepreneurs are more likely to have good and satisfying jobs elsewhere (Gimeno et al., 1997), so it might be that they do not like to engage in entrepreneurial endeavours. Given the investment in human capital, it could be said that differences between women entrepreneurs at different ages are to be expected. We assume that there are also differences in human capital among women entrepreneurs at different life stages.

Also influenced by perceptions, as pointed out by Koellinger et al. (2013), women entrepreneurs choose to engage in entrepreneurial activity, either by innovative or imitative in orientation (Samuelsson and Davidsson, 2009).

Following the research conducted on human capital in entrepreneurship (Boden and Nucci, 2000; Davidsson and Honig, 2003; Dimov, 2007; DeTienne and Chandler, 2007; Samuelsson and Davidsson, 2009; Kreiser et al., 2013; Grichnik et al., 2014; Unger et al., 2011) we set up a framework for the study of human capital among women entrepreneurs that includes the following dimensions: (i) previous entrepreneurial experience; (ii) the level of education attained as *general human capital*; and (iii) business knowledge acquired at school and specific training; (iv) industry experience; (v) previous managerial experience as a *specific human capital*.

We propose the hypothesis H1: There are differences in levels of human capital among groups of women entrepreneurs at different life stages.

The main hypothesis H1 is tested with several partial hypotheses relating to the five dimensions of human capital. Based on the previous findings, we pose the first two hypotheses, which relate to the general human capital (Grichnik et al., 2014), a level education and

previous entrepreneurial experience (Davidsson and Honig, 2003; Dimov, 2007; DeTienne and Chandler, 2007; Kreiser et al., 2013; Grichnik et al., 2014).

H1a: There are differences in previous entrepreneurial experiences among female entrepreneurs at different life stages.

Hypothesis H1b refers to the education with which an individual invests in human capital that enables her to choose a job (Baker, 1997). In human capital theory, education is also used as a measure of entry into entrepreneurship (Bates, 1990), as it increases general awareness and helps to integrate and acquire other types of knowledge and experience, to adapt to new situations and to acquire tacit knowledge (Davidsson and Honig, 2003).

H1b: There are differences in level of education attained among female entrepreneurs at different life stages.

Hypotheses H1c, H1d and H1e refer to specific human capital. It was measured as business knowledge acquired in school and specific trainings (Grichnik et al., 2014; Kreiser et al., 2013; Bird et al., 2001), as prior experience in the industry in which they work (Kreiser et al., 2013; Bird et al., 2001; DeTienne and Chandler, 2007), and as prior managerial experience (Boden and Nucci, 2000; DeTienne and Chandler, 2007; Kreiser et al., 2013; Grichnik et al., 2014).

H1c: There are differences in business knowledge acquired at school and specific training among female entrepreneurs at different life stages.

Industry-specific knowledge is an important factor in identifying entrepreneurial opportunities (Gimeno et al., 1997). Three types of specific human capital (Shane, 2000) influence the ability to identify new market opportunities: prior knowledge of the market, prior knowledge of how to satisfy customers, and prior knowledge of customer problems (Shepherd and De Tienne, 2005). Female entrepreneurs answered a question about the similarity of customers, suppliers, competitors, and the products of their current firm to their prior experience.

H1d: There are differences in industry experience among women entrepreneurs at different life stages.

One of the most widely used constructs to measure the human capital of entrepreneurs is managerial experience (Unger et al., 2011), which is the subject of hypothesis H1e.

H1e: There are differences in previous managerial experiences among female entrepreneurs at different life stages.

III. Data, Sample and Methodology

To better capture women-owned businesses, we used the definition used in the US for the purpose of certifying women-owned businesses in order to win business with government institutions (WBENC 2018, 9). A women-owned business is at least 51% owned, controlled and managed by women. This definition defines a firm rather than an individual. In selecting firms in which women entrepreneurs can be identified, we chose two conditions: (i) if the company is founded by a woman and the woman is also director and, (ii) if the company is founded with a female share of 30% (same as above, but the threshold is lowered to 30%) and the director is female. The gender identification algorithm was developed in-house at Bisnode and applied to the database of the Business Register of Slovenia, where approximately 45,000 business entities that meet the selected criteria for a female-owned business were selected out of 140,000 registered companies and sole entrepreneurs. Analysis of the pilot questionnaire showed that the question sets were statistically reliable with Cronbach alpha above 0.90 for most constructs.

After a second review, the questionnaire was sent to 10,000 addresses. In a week time after the launch, 200 valid completed questionnaires had been received. The survey was closed two weeks later after another call when the questionnaire was fully completed by 340 women entrepreneurs (82 of the age up to 35 years, 108 in the age group 35 to 45, and 150 older than 45 years), with satisfactory response rate by three different life stages giving us a total response rate of 3.4%, which met the standards for online surveys of the lengths of 30 minutes (Callegaro et al., 2015).

In a first stage, we used a chi-square test and analysis of variance to test for differences in the identified dimensions of human capital between the three groups of women entrepreneurs. The first method is used to measure the association of categorical variables. The contingency table shows whether the proportions of respondents differ by age group. To facilitate interpretation, we have also used adjusted residuals, which tell us whether the proportion (number) in each cell deviates significantly from what is expected when H_0 holds or when the variables are uncorrelated.

Analysis of variance was applied in the case of numeric variables or variables measured by the five-point Likert scale. We tested whether the mean value of each variable was significantly different between age groups. A post hoc test was used to detect significant differences between each pair of age categories. If Levene's F-test confirmed equality of variances, we used Tukey's post hoc test, otherwise Tamhane's test, which does not assume equality of variances.

Each construct consists of a different number of variables. In order to finally test the hypotheses, we transformed them into composite variables, thus obtaining five composite variables, which became the subject of further analysis. To test the hypotheses, an analysis of variance was used to test for differences in the values of these nine composite variables according to age groups.

To test for differences in human capital, we developed five constructs: (i) prior entrepreneurial experience, (ii) educational attainment, (iii) business background, acquired through education, (iv) industry experience and, (v) managerial experience which are displayed in table 1.

Each of these constructs was tested with a different number of variables. The criteria for these variables are taken from previous surveys and their response scales are not uniform. The criteria have been widely used in previous studies for analyses and comparisons of performance, and in our study we analyse the differences among three different groups of women entrepreneurs. We use questions relating to the pre-entrepreneurial period to observe the influences on the decision to become an entrepreneur, but we also include questions relating to the present moment to observe women entrepreneurs in real-time.

The construct of prior entrepreneurial experience is tested with variables related to starting and managing one's own business and to the development of entrepreneurial competences during adolescence: (i) number of previously created enterprises, (ii) previous experience of closing or selling one's own business, (iii) previous employment in the family business, (iv) previous employment in a non-family small business, (v) significant roles in society or in the classroom during adolescence and, (vi) experience in sales during adolescence. According to authors who have used these criteria, it is this type of early experience that predisposes to the success of a subsequent entrepreneurial career (De Tienne and Chandler, 2007; Obschonka et al., 2011; Hayton, 2015). Prior entrepreneurial experience provides insights into the various activities involved in starting a business, including how to connect with customers and investors, how to raise and allocate resources, how to organise internal processes and structures, and how to attract and retain employees (Delmar and Shane, 2006).

The construct level of education attained was created from four variables relating to the level of education: level of education attained at the start of the company, level of education attained today, technical education today, business education today. The composite variable or educational attainment index was created by first transforming the scale for each of the variables to an interval between 1 and 5. The new variable was calculated as the average of these four variables.

The next construct is the business knowledge acquired by women entrepreneurs at school or in specific training courses. We constructed it from three sets of variables. The first set of variables relates to the frequency of participation in training and education in eight areas. The possible answers were given on a Likert scale from 1 to 5 (never, rarely, sometimes, often, very often). To compare the answers among the different age groups, we used analysis of variance and Tukey's post hoc test if the assumption of equality of variances held, which was tested using Levene's test. Otherwise, we performed the Tanhane post hoc test, which does not require the assumption of equality of variances. The next set of variables relates to the attendance of a seminar on setting up and running a business, where two answers were possible (yes, no). The last set of variables relates to pre-founding training in nine different areas, where two answers were possible (yes, no). The association of these variables with the age of the women entrepreneurs was tested with a chi-square test.

The fourth construct refers to the industry experience that the women entrepreneurs gained before setting up their current business. It is tested with four sets of questions: (i) years of industry experience, (ii) number of years of experience with similar products/services in relation to business ownership, (iii) similarity of customers, suppliers, competitors and products of the current firm and, (iv) previous experience, similarity in technical-functional experience.

We used chi-square statistics to test for differences between different age groups of women entrepreneurs in their years of experience in the industry before starting their own business and in the number of years of employment in businesses with different owners with similar products.

On a five-point Likert scale (1 – no similarity, 5 – very similar), women entrepreneurs rate the similarity of their current company's customers, suppliers, competitors and services/products to their previous experience. They also rate the similarity between the technical/functional tasks in their current company and their previous experience. To compare the responses between women entrepreneurs in different age groups, we used analysis of variance and Tukey's post hoc test, if the assumption of equality of variances held, which was tested using Levene's test. Otherwise, we performed the Tamhane post hoc test, which does not require the assumption of equality of variances.

The last construct of human capital, previous managerial experiences, was tested with five sets of variables relating to prior managerial experience: (i) number of regular jobs prior to the establishment of the current firm, (ii) the diversity of managerial experience prior to the establishment of the current firm, (iii) international business experience and, (iv) international sales experience.

Differences in responses to the question on international experience were tested using a chi-square test. Differences between the answers of women entrepreneurs at different ages to the other questions were tested by analysis of variance and Tukey or Tamhane post hoc test. The diversity of work experience was tested by asking about the number of regular jobs and the number of companies in which the female entrepreneurs were employed before setting up their current company.

IV. Results

In a first step of our analysis, we compare each variable separately using a chi-square test or analysis of variance, and only in the next step we unify and combine the variables into five constructs (indexes) of human capital as presented in table 1.

Table 1: Constructs (indexes) of the individual human capital

		N	Mean Value	STD	Leven's F	p	F	p	Post hoc
Previous entrepreneurial experience (H1a)	Up to 35 years	82	2,02	0,67	0,635	0,531	3,328	0,037	Up to 35 y – more than 45 y
	36 to 45 years	108	1,93	0,61					
	More than 45 years	150	1,80	0,65					
	Total	340	1,89	0,64					

		N	Mean Value	STD	Leven's F	p	F	p	Post hoc
Level of education attained (H1b)	Up to 35 years	82	3,01	0,89	1,03	0,358	0,758	0,469	
	36 to 45 years	108	2,91	0,88					
	More than 45 years	150	3,04	0,81					
	Total	340	2,99	0,85					
Business knowledge acquired at school and specific training (H1c)	Up to 35 years	82	2,15	0,87	3,059	0,048	1,001	0,369	
	36 to 45 years	108	2,02	0,74					
	More than 45 years	150	2,15	0,81					
	Total	340	2,11	0,80					
Experience in the industry in which they operate (H1d)	Up to 35 years	82	2,20	1,01	0,452	0,637	2,542	0,080	
	36 to 45 years	108	2,51	1,06					
	More than 45 years	150	2,28	1,03					
	Total	340	2,33	1,04					
Previous managerial experience (H1e)	Up to 35 years	82	1,37	0,33	16,774	0,000	21,723	0,000	All groups
	36 to 45 years	108	1,63	0,46					
	More than 45 years	150	1,82	0,60					
	Total	340	1,65	0,53					

Source: Own research data

A significant difference in the number of businesses founded ($p = 0.485$, $df = 2$; $\chi^2 = 1.449$), in the experience of closing or selling a business ($p = 0.673$, $df = 2$; $\chi^2 = 0.792$), in the experience of being employed in a family business ($p = 0.673$, $df = 2$; $\chi^2 = 0.792$). ($p = 0.148$; $df = 2$; $\chi^2 = 3.822$), in the important role in the classroom or community during adolescence ($p = 0.369$; $df = 2$; $\chi^2 = 1.996$) among different groups cannot be confirmed. There are significant differences in the experience of previous employment in other small businesses among women entrepreneurs in different life stages ($p = 0.000$; $df = 6$; $\chi^2 = 44.665$) and in the experience of selling things already in secondary school ($p = 0.000$, $df = 4$; $\chi^2 = 20.822$). The value of the composite variable “previous entrepreneurial experience” is 2.02 for the youngest age group, 1.93 for the 36–45 age group and 1.8 for the over45 age group Analysis of variance ($p = 0.037$; $F = 3.328$) and post hoc test show a significant difference between the youngest and the oldest female entrepreneurs. Hypothesis H1a was supported.

There are no significant differences in level of education attained at the start of the business between women entrepreneurs at different life stages ($p = 0.137$; $df = 6$; $\chi^2 = 9.721$). There are no statistically significant differences between female entrepreneurs in terms of the level of technical-scientific education attained. The differences in a business degree acquired among female entrepreneurs in different life stages can be confirmed ($p = 0.002$; $df = 2$; $\chi^2 = 12.678$). The value of the composite variable “level of education attained” is 3.01 for the youngest age group, 2.91 for the 36–45 age group and 3.04 for the over-45 age group, which is higher than the average of 2.99. The significant difference in level of education attained among women entrepreneurs at different stages of life ($p = 0.469$, $F = 0.758$) and H1b cannot be supported.

The value of the composite variable “business knowledge acquired at school and specific training” for all female entrepreneurs is 2.11. The variable for the youngest and oldest group of female entrepreneurs is the same at 2.15, while the average total variable for female entrepreneurs aged 35–45 is slightly lower at 2.02. The average total variable of business knowledge acquired at school and specific training is low for all female entrepreneurs, and the analysis of variance and post hoc test cannot confirm that there are significant differences among the three groups ($F = 1.001$; $p = 0.369$). Statistically significant exist for participation in a seminar on starting a business before starting a business. The analysis of variance also shows statistically significant differences in the frequency of attending seminars on specific topics and on occupational safety. There are no statistically significant differences between women entrepreneurs of different ages in the frequency of training in other areas and in the attendance of specific training before setting up a business. Hypothesis H1c cannot be fully supported.

Women entrepreneurs at different life stages have different numbers of previous years of experience in the industry they operate today ($p = 0.000$; $df = 8$; $\chi^2 = 55.628$). More than half of the women respondents (57%, 186) had experience in another business with similar services that was not their own or owned by their relatives before setting up their current business. Most women entrepreneurs (86.9%, 253) have no previous experience in a similar business owned by family members. However, there is a significant difference among female entrepreneurs in their experience of working in their own business with similar services before the existing business ($p = 0.036$; $df = 2$; $\chi^2 = 13.498$) and in the similarity of the products or services of the current company with the previous experience ($p = 0.011$; $F = 4.541$). The post hoc test shows that there is a significant difference between the responses of female entrepreneurs between 36 and 45 years, who indicate the highest similarity between the current and the previous products, with a score of 2.88, and the older female entrepreneurs (over 45), who indicate the similarity of the services, with a score of 2.28. There is also a significant difference in the answers to the question on the similarity of competition ($p = 0.042$; $F = 3.206$), which is rated 2.59 by women entrepreneurs in the middle group and 2.1 by older women entrepreneurs. The results suggest that women entrepreneurs aged between 36 and 45 are most likely to focus on imitative businesses. There are no significant differences in the answers on the similarity of customers and suppliers and in the ratings on the similarity of specific skills requirements in previous jobs and in the current firm. When all the variables were combined, the analysis of variance and the post hoc test do not show significant differences of the construct “experience in the industry in which they operate” ($p = 0.080$; $F = 2.542$). There is a significant difference in the number of regular jobs before the establishment of the company ($p = 0.000$; $df = 10$; $\chi^2 = 62.271$), in the number of enterprises in which they were previously regularly employed ($p = 0.000$; $F = 28.104$), and in the experience of supervision of others ($p = 0.000$; $F = 16.161$), where the experience score increases with the age of the women entrepreneurs, in experience of running their own business before setting up their current one ($p = 0.006$; $F = 5.206$), where female entrepreneurs aged 35–45 have statistically significantly more experience (score 1.36) than older female entrepreneurs (score 1.13). A statistically significant difference between the

youngest female entrepreneurs and the other two groups in terms of previous experience in administrative work ($p = 0.000$; $F = 9.913$) has been shown. The score of the youngest female entrepreneurs is 1.75, which is below the average for all female entrepreneurs, with a score of 2.24, which means that all female entrepreneurs have on average between five and ten years of previous experience in administrative work. There is a difference in the total sum of the different types of managerial tasks ($p = 0.006$; $F = 4.228$), for the youngest female entrepreneurs with a score of 1.34, which is below the overall average of 1.68, and female entrepreneurs between 35 and 45 with an overall score of 1.69 and for over 45 years of age with an overall score of 1.87. The majority (82.8%) of women entrepreneurs never worked abroad before setting up their current business, 81.7% had no experience of selling abroad before setting up their business. Just over 22% of female entrepreneurs aged 45 and over had experience of selling abroad before setting up their current business, while 21% of younger female entrepreneurs had worked abroad before setting up their current business.

The average total variable of previous managerial experience is 1.37 for the youngest age group, 1.63 for the 36–45 age group and 1.82 for the oldest age group. The average total variable for female entrepreneurs at all ages is 1.65. Based on the analysis of variance and the post hoc test ($p = 0.000$; $F = 21.723$), we can conclude that there are statistically significant differences in the level of managerial experience between women entrepreneurs at different ages.

Table 2: Composite variable for total human capital

		Number	Mean	Stand. Dev.	Leve-n's F	p	F	p	Post hoc
H1	Up to 35 yrs	82	2,15	0,40					
Human Capital	36–45 yrs	108	2,20	0,42	0,766	0,466	0,653	0,521	
	more than 45 yrs	150	2,22	0,47					
	Total	340	2,20	0,44					

Source: Own research data

By combining the composite variables of the five human capital constructs, we obtained a common composite variable or human capital index, which represents the arithmetic mean of The five constructs for each group of women entrepreneurs.

The human capital index for all women entrepreneurs is 2.20. The human capital index increases with the age of the women entrepreneurs, from 2.15 for the youngest group to 2.20 for the middle group and 2.22 for the oldest group. Based on the analysis of variance and the post hoc test, we cannot confirm significant differences between the total indexes of the three groups ($F = 0.653$; $p = 0.521$) and we cannot fully accept the hypothesis H1 on this basis.

V. Discussion and Suggestions for Further Research

In this study, human capital was measured by the following five constructs: previous entrepreneurial experience, level of education attained, business knowledge acquired in school or training, previous industry experience, previous managerial experience. Differences between women entrepreneurs were tested by asking a different number of questions on each construct.

Previous entrepreneurial experience in one's own firm has already provided an individual with some knowledge about entrepreneurship, which implies a higher degree of entrepreneurial skills acquisition than just employment in a small firm, and this experience is also defined as an asset in the human capital balance sheet (Martin et al., 2013). Among six variables that we tested for this construct, the statistically significant differences show in experience of selling things in adolescence and in previous employment in another small enterprise not owned by family members.

The higher value of the construct previous entrepreneurial experience for the youngest women may indicate that they are more deliberate in embarking on their own path. For further research we suggest comparing the differences in their motives for starting a business correlated with human capital. The share of Slovenian women who had entrepreneurial experience only by being active in their current company (71.1%) is consistent with a study in Finland (Kautonen, 2008), where the rate is 63%. Slovenian woman entrepreneurs are not yet to be recognized as serial entrepreneurs, but we expect a change with the younger generation of women entering the entrepreneurial world. In the UK, 34% of entrepreneurs surveyed had experienced a business closure, while in Slovenia only 12.1% of surveyed women had such an experience. Since the experience of closure has an impact on entrepreneurs' optimism (Ucbasaran et al., 2010), we need to distinguish between positive and negative experiences of the closure as well as motives for entrepreneurship. Are women entrepreneurs who have closed their business for economic reasons less optimistic than others? The respondents in our study who had experience with closing a business did it because they had achieved what they wanted to achieve with it. We believe that we can call those few women serial entrepreneurs driven by the desire to create and innovate.

The higher share of university graduates among younger women entrepreneurs and the lowest share among older women entrepreneurs at the time of business start-up could be due to job losses during the economic transition for older women. Bigger numbers of younger and more educated women entering entrepreneurship, should be examined in further research and find out about their motives.

Research shows that business knowledge is important for a quick breakthrough in entrepreneurship and allows identifying opportunities to exploit different alternative sources for a successful business without increasing costs (Grichnik et al., 2014). The rather low index of business training before starting a business and also the low index of ongoing training in business areas, especially in business strategy and management, may be an indication of one of the weaknesses of women's entrepreneurship in our country.

All entrepreneurs had some previous experience in the industry which implies a certain familiarity with the industry and a better adaptation to external changes and pressures when running a new venture (Grichnik et al., 2014). We did not find any significant differences among the three groups.

Technical-functional previous experience, combined with business and technical education, represent the best synergies for successful entrepreneurial ventures (Colombo and Grilli, 2005) and on the results we can predict that women entrepreneurs in the pragmatic life stage (36 to 45 yrs) will be the most successful in their business endeavours.

Managerial experience can cover a wide range of activities, but it has an impact on successful entrepreneurial performance as it contributes to knowledge of the industry, industry rules, development of management skills, influencing customers, mobilising different resources (Grichnik et al., 2014). Out of five variables that were tested, there are statistically significant differences between women entrepreneurs at different ages in the diversity of experience prior to setting up a business, in the number of years of managerial experience, in experience in administrative work, in managing their own business and in supervising others. There are no statistically significant of work experience abroad and international sales experience. As being employed in multiple firms means acquiring a wider variety of experiences, which has a positive impact on entry into entrepreneurship (Chen and Thompson, 2016) and on entrepreneurial performance (Lazear, 1994), on the other hand, higher number of previous jobs may also imply an individual's inflexibility to work in a conventional environment, which is one of the entrepreneurial traits (Mitchellmore and Rowley, 2013), we assume that younger female entrepreneurs with lower index were pushed into entrepreneurship and are less likely to succeed than older ones with a higher diversity of previous jobs. This is our predictions and we call for further research on this topic.

VI. Conclusion

By identifying the human capital characteristics of women entrepreneurs at different life stages, and by not confirming some of the hypotheses, implying that some of the selected human capital factors are not different for women entrepreneurs in each group according to their stage of life, we need to think about modification of our original model. Women entrepreneurs at different life stages differ in their previous entrepreneurial and managerial experience, with the index of previous entrepreneurial experience decreasing with age and the index of managerial experience increasing with age. This implies that younger female entrepreneurs have acquired more diverse entrepreneurial experience before entering entrepreneurship, while older female entrepreneurs have acquired more managerial experience.

In view of the results that also discriminant analysis, we carried at the end of the research, proved, we suggest the following. As the life expectancy is increasing, and also in Europe and transitional economies the years that women work is extending, the life stages researched should be at least four. The pragmatic phase can be extended to the age of 50 instead of 45. There are younger women starting entrepreneurial careers before the age of 25 and older women are becoming a group worth to be researched. We suggest that the model is also tested by women's entrepreneurship researchers in other countries. It would

also be worthwhile to include the issue of motives and aspirations in the model and to test their connection with the human capital of women entrepreneurs at different life stages. The study shows low levels of human capital especially in terms of education. Here we see the challenge for researchers and policy makers in the field of entrepreneurship promotion to find ways for educated female professionals to become entrepreneurs.

As for the governmental measures, we propose the following. For women entrepreneurs in the idealistic achievement phase more financial education and training, as well as an encouragement for growth, are needed. Proposed measures for women entrepreneurs in the pragmatic phase are more incentives for growth of women owned businesses, and training in modern forms of management, strategies, marketing. Also support and incentives for the transition to the professionalisation phase, training in growth financing are needed. The research also shows that it is time to set up specific funds to promote the growth of women's businesses. We believe that there will be more women entrepreneurs in the reinvention phase in the future. For this group, more incentives for self-employment for older women are needed, and more networking opportunities and training in soft skills and digital marketing. As this group wants to give back to society, we also suggest more incentives for social entrepreneurship for this group.

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