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IS INDIVIDUAL SOCIAL CAPITAL LINKED TO THE IMPLEMENTATION OF ENTREPRENEURIAL INTENTIONS?

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The present study reveals the role of individual social capital in the implementation of a person’s intention to start their own business and reveals how individual social capital contributes to this action. The basic premise of our study is that individual social capital facilitates people’s implementation intention to start their own business. The sample consists of a group of respondents (N=269) who intended to start their own business (intenders) and another group (non-intenders) who did not intend to (N=270). We combined the reasoned action approach (Fishbein & Aizen, 2010) with the individual social capital approach (Van Der Gaag & Snijders, 2004) to study intention and implementation. The study showed that the intenders had more resources provided by formal (organizations and associations) and informal networks and relationships. These resources had a direct and indirect impact (through the perceived behavioral control) on their intention to start their own business. We concluded, that individual social capital can facilitate the implementation of entrepreneurial intention. A year later, we performed panel research and carried out another study by re-interviewing respondents who had expressed their intention to start their own business in the next 2 years. It was found that respondents who opened a business only a year later had higher social capital than those who did not. To explain the psychological mechanism underling the relation between intention and implementation, we use the term “the buffering effect of social support”, which means that people who feel potential support are less susceptible to stressful situations and circumstances than people who do not feel potential support.

Key words: individual social capital, entrepreneurial intention, theory of planned behavior, the buffering effect of social support, perceived behavioral control.

JEL Classification: Z13.

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Introduction

Researchers in the social sciences are paying increasing attention to non-economic factors that facilitate economic progress (Harrison & Huntington, 2000; Altman, 2001). Social capital is one of the most important non-economic facilitators of progress (Helliwell & Putnam, 1995; Knack & Keefer, 1997; Putnam, 2001; Fukuyama, 2002; Woolcock, 1998; Westlund & Adam, 2010). Another key driver of economic development is entrepreneurial activity (Raposo et al., 2011; Sanyang & Huang, 2010). The correlation between the entrepreneurial activity of the population, small business, and the economic development of the state has been confirmed in a large number of studies (Wennekers et al., 2010; Naude, 2010; Acs et al., 2008). Both factors are associated with country-level social capital and entrepreneurial activity (Kwon & Arenius, 2010; Smallbone & Welter, 2001). Country-level social capital in the form of trust provide more favorable conditions for entrepreneurship, and the successful development of entrepreneurship increases the welfare of the nation as a whole (Kwon & Arenius, 2010). Nonetheless, we cannot say that macro-level social capital (trust, etc.) directly affects entrepreneurial behavior. Individual social capital directly and more heavily affects people's behavior (Van Der Gaag, 2005; Verhaeghe & Tampubolon, 2012). We agree with Portes (1998: 21) that “the greatest theoretical promise of social capital lies at the individual level – as exemplified by the analyses of Bourdieu and Coleman”. Individual social capital is “the collection of resources owned by the members of an individual's personal social network, which may become available to the individual as a result of the history of these relationships” (Van Der Gaag, 2005: 20).

There are a number of studies which demonstrate that individual social capital is associated with the success of a business (Read et al., 2009; Turner & Nguyen, 2005; Venkataraman, 1997; Smallbone & Welter, 2001). However, a very important aspect of the issue still remains unexplored: whether or not individual social capital facilitates the opening of a new business? From our point of view, individual social capital plays a dual role in starting a business. Individual social capital serves as a facilitator increasing perceived behavioral control, which in the Theory of Planned Behavior (TPB) (Fishein & Ajzen, 2010) is one of the factors (along with attitude and subjective norm) that influence behavioral intention.

Having social capital means that an individual will receive social support. Even in virtual groups, social capital enhances a sense of community and thereby mutual social support (Tsai et al., 2012). Therefore, individual social capital also plays the role of a moderator providing a buffer of social support, that is, it affects the relationship between the intention to start a business and the implementation thereof. The essence of the buffering effect of social support is that people just
knowing that they can rely on the support of others are characterized by more positive behaviors and well-being owing to reduced stress levels (Chay, 1993).

Fig. 1. The theoretical mechanism of the influence of individual social capital on the intention to open own business.

Fig. 1 shows the basic model of the study. The influence of individual social capital on the intention to start a business is of a psychological nature. People can actually use their social capital only partially, but the fact of its existence itself contributes to the intention of opening a business.

Further confirmation of the hypothesis that individual social capital has a positive influence on entrepreneurial behavior are data showing that people who have opened their own business have higher individual social capital. This assumption has also been tested in the course of the panel study.

**Theoretical background**

*Individual Social Capital*

It is useful to differentiate three levels of social capital analysis: macro-level (societal), meso-level (group) and micro-level (individual) (Paxton, 1999). Furthermore, any type of social capital is characteristic of some social actor (society, groups or individuals).

When we discuss different aspects of individual social capital, we mean the resources from a person’s relationships. The focus of our research is “individual social capital”.

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Resources, which can be received from friends

Resources, which can be received from family

The size of formal networks and number of contacts

Perceived Behavioral Control

Subjective Norm

Attitude toward the Behavior

Intention to start business

Implementation of intention to start business
Social capital at the individual level is generally defined as a set of social resources that enable an individual to reach goals more efficiently. Lin (2001: 29) defines individual social capital as “resources embedded in a social structure that are accessed and/or mobilized in purposive actions”. There are more a more precise definition which considers individual social capital as “the collection of resources owned by the members of an individual's personal social network, which may become available to the individual as a result of the history of these relationships” (Van Der Gaag, 2005: 20). Some researchers consider individual social capital only as characteristics of social networks, where the person belongs to social organizations (Yang, 2007) and the structure of social relations (Gaag, 2005). There is some research which uses both the structural parameters of social capital and the relational ones (Yang, 2007). Thus, Verhaeghe and Tampubolon operationalized individual social capital in both the traditions of social cohesion and network resources using measures of generalized trust, social participation and social network resources (Verhaeghe & Tampubolon, 2012). Researchers studying individual social capital used the following parameters:

a) Resources (legal assistance, financial assistance, etc.) that can be extracted from informal networks by the person (a) friends and (b) family members (Häuberer, 2011; Gaag, 2005; Verhaeghe & Tampubolon, 2012);

b) The size of formal networks (membership in organizations) (Yang, 2007; Beilmann & Realo, 2012; Häuberer, 2011).

**Links between of Individual Social Capital and Entrepreneurial Behavior**

Studies carried out on the meso- and micro-levels show that social capital is associated with different types of economic behavior, increasing people’s activity and productivity (Healy et al., 2001; Miller, 2001; Ssewamala et al., 2010). Since entrepreneurial behavior is a type of economic behavior, it is reasonable to expect that social capital will affect this behavior as well. More exactly, people who have considerable social resources (friends, relatives, membership in organizations) will be characterized by higher entrepreneurial activity. Therefore, individual social capital should be connected with entrepreneurial behavior, as this is an economic behavior type. This is true because many studies show the importance of individual social capital for business success. Individual social capital can be transformed into economic capital (Svendsen et al., 2010), and strong social capital creates successful entrepreneurs (Edgar, 2001). Stam et al. (2013) conducted a meta-analysis of the link between entrepreneurs’ personal networks and small firm performance. Their analyses of 61 independent samples indicated that the social capital–performance link was positive and significant (r=0.211). Social capital literature on entrepreneurship has highlighted that social capital can play a
role in reducing transaction costs associated with searching for information and monitoring possible barriers (Westlund & Bolton, 2003; Svendsena, 2010).

Accordingly, we can assume that people who are successful in business have higher individual social capital. For people who intend to open a business, social capital will be higher than for people who do not intend to do so. Moreover, an individual who has higher social capital demonstrates that they have cooperation skills, this being an important condition for opening a business and its management. This reasoning suggests the following hypothesis:

**Hypothesis 1.** People who intend to start a business have higher social capital than people who do not intend to start a business.

**Hypothesis 2.** People who started a business have higher individual social capital than people who did not.

In fact, the confirmation or non-confirmation of Hypotheses 2 will demonstrate whether or not we are right in our assumption that individual social capital contributes to the intention of opening a business. However, in confirmation of these hypotheses the following question naturally arises: why are people with higher social capital more successful both in starting their own business and in business itself? How does individual social capital influence the intention to start a business and the implementation thereof?

*Psychological mechanisms underlying the relationship of individual social capital and intentions to start a business*

From our point of view, the positive impact of social capital on an individual's intention to open a business is achieved primarily through the facilitation of the intention to start. This occurs because individual social capital enhances the perceived behavioral control, which affects the behavioral intention and, in turn, increases the likelihood of the implementation thereof. Before we examine this mechanism in more detail, it is necessary to consider briefly the study of entrepreneurial intentions within the framework of the TPB (Ajzen, 1991). In our study, there are two basic psychological constructs, which are an integral part of the planned behavior model proposed by Ajzen: “behavioral intention” and “perceived behavioral control.”

*Studies of Entrepreneurial Intentions Within the Framework of the Theory of Planned Behavior*

Behavioral intention is included in the model built within the framework of TPB (Ajzen, 1991, 2006; Fishbein and Ajzen, 2010), which forms the core of the reasoned action approach. This theory emphasizes the psychological factors underlying the intention to implement any kind of behavior.
By starting a business, a person clearly plans their behavior (Krueger, et. al., 1993; Linan and Chen, 2009). Intentions are indications of a person’s readiness to perform a specific behavior (Fishbein & Ajzen, 2010). According to TBP, the general attitude toward behavior, subjective norms and perceived behavioral control lead to the formation of behavioral intention (Ajzen, 2006; Fishbein & Ajzen, 2010).

Many researchers have successfully applied TPB in studies of intention to open a business (Gelderen et al., 2008; Krueger et al., 2000) and have confirmed the validity of this theory. Cross-cultural studies have demonstrated that each of the three elements of the TPB is significant, but their importance varies depending on cultural differences.

Robert Engle and his colleagues (2010) used TPB to study the intention to start a business on a sample of respondents from 12 countries. The goal of this research was to establish the predictive capability of TPB on the intention to open a business. They found that TPB explained from 9% (Egypt) to 42% (the USA and Spain) of intention variance to open a business in a sample of business students. The importance of different elements of the model varied in different countries. All three elements of the model (attitude, normative beliefs and perceived behavioral control) influenced the intention to open a business only in Russia and Finland (Engle et al., 2010). However, in our study, social norms had no effect (Schmidt et. al., 2013). Therefore, we consider the following variables:

a) The perception of how the person is able to start their own business is operationalized by their self-confidence, more exactly, through perceived behavioral control;

b) The intention (in our case intention to start a new business) is also part of TPB.

Intention is a sum of individual motivating factors that affects behavior and leads to the implementation of certain behaviors. There is a higher possibility that certain behaviors will be implemented with increasing intention.

Intention only determines the behavior that is going to be realized by the person’s free choice and without coercion (e.g., Yang-Wallentin et al., 2004). However, Gollwitzer (Gollwitzer, 1999; Gollwitzer & Sheeran, 2006) has argued that the step from intention to behavior has to be analyzed in detail. Gollwitzer and Brandstätter (1997) proposed a new concept called “implementation intention”. This refers to the concrete steps to reach a goal. This concept is closer to the evaluation of the person's behavior.

Based on TPB in the study of entrepreneurial intentions, for two reasons we deliberately take into consideration only perceived behavioral control. First, there are neither theoretical nor logical reasons to assume that individual social capital can influence the positive attitude to the idea of opening a business and second, in our studies (see Schmidt et al, 2013) we showed that in Russian conditions perceived norms do not affect entrepreneurial intention. These results confirm Ajzen’s
hypothesis to the effect that each of the three elements of the TPB is significant, but their significance varies subject to the cultural characteristics, behavior type and specific situation (Engle et al., 2010). Accordingly, to achieve the goal of our study, in the Russian context, this construct does not matter. However, the issues of assessing perceived norms and attitudes to the idea of starting a business have been included in the research tools. This was done in order to compare the proportion of explained deviation of the intention to start a business using the model by Ajzen (Ajzen, 2010) and our own model by using indicators of individual social capital.

**Individual Social Capital as a Facilitator of Entrepreneurial Behavior**

Several studies provide grounds for postulating hypotheses about the associations of individual social capital and entrepreneurial behavior. In this case, we consider the presence of business partners as a form of individual social capital. Very often friends, acquaintances and relatives become business partners. Turner and Nguyen (2005), supported this idea in their study of entrepreneurial behavior in a Vietnamese sample in Hanoi. The researchers were interested in the possibility of young entrepreneurs using networks of social capital for the benefit of their business. The results show that the most widely used relationships are family ties (which are the modification of a so-called “bonding” type of social capital). Surprisingly, professional contacts often remain unused (Turner & Nguyen, 2005).

Family members give social resources to a person, which help to develop their business, as well as provide social support (Anderson & Miller, 2003). Family may provide instrumental and affective support to the entrepreneur (Powell & Eddleston, 2013). Therefore, we may suppose that family ties provide a feeling of support to the potential entrepreneur, thus affecting the sense of control. A sense of control over a situation and one’s behavior is extremely important when starting a business. People feel protected because representatives of three social categories can support them: family, friends, and the members of the groups to which they belong. This promotes increasing feelings of personal self-efficacy, self-confidence, and willingness to take risks and responsibility. All these qualities contribute to the intention of an individual to open a business.

Therefore, individual social capital will primarily increase the perceived control over a situation, that is, the subjective feeling that a person can do this and the related positive attitude to the idea of opening a business. The person should feel that their social capital would support them, when necessary.

Based on the TPB, we can conclude that perceived behavioral control is an important factor, which influences individual social capital. We mean that individual social capital enhances perceived behavioral control, which in turn affects behavioral intention. Based on this logic, we hypothesize:
Hypothesis 3. The more resources that can be provided by family, the greater the perceived behavioral control when starting a business.

Businesspeople, with more experience than beginners, have wider informal social networks (Mosey & Wright, 2007). Informal relations are generally friendly relations. Friendships can make a business successful. Therefore, we can assume that this fact would also appear among beginners in business. Notably, those who have more informal relationships would increasingly turn their intentions into action. Read et al. (2009) have shown that the presence of business partners is very important to business success. The partners are most often just friends. This is another reason to believe that the individual social capital that can be obtained from friends, would promote the intention of starting a business. Our hypotheses can be postulated as follows:

Hypothesis 4. The more resources that can be provided by friends, the greater the perceived behavioral control when starting a business.

When lacking business resources, entrepreneurs can gain access to them thanks to memberships of various organizations and clubs (Bauernschuster, Falck & Heblich, 2010). Membership of clubs and organizations positively affects the intention to become an entrepreneur. It increases the readiness of a person to become an entrepreneur by 2.6% (Bauernschuster, Falck & Heblich, 2010). Accordingly, the individual social capital accrued from belonging to different organizations and clubs is very important for a future business person. Belonging to various organizations and clubs, as well as the frequency of visits to them can contribute to the successful implementation of the intention of starting a business. The reason for this is that a person can find both emotional and informational support in these organizations. Therefore, we hypothesize:

Hypothesis 5. The wider and denser the network of formal relationships of an individual (the number of organizations to which he or she belongs, and the frequency of contact with them), the greater the perceived behavioral control when starting a business.

The theoretical mechanism of relationships between individual social capital and the implementation of intentions to start a business

The influence of individual social capital on perceived behavioral control has not been studied yet. In the research, social capital is considered as an independent factor influencing the intention in combination with perceived behavioral control. In particular, Yanga and Farn (2009) using the TPB demonstrated that social capital together with internal behavioral control has a positive effect on tacit knowledge sharing intention (Yanga, Farn, 2009).

Social support is most often explained as a moderator (or buffer) between the actions or factors that cause stress and an individual’s behavior (Lee et al., 2004; Fried & Tie, 1993). It has long been
considered an important factor in influencing the experience of stress and strain at work (Cohen & Wills, 1985; Fried & Tie, 1993). Perceived social support from coworkers or family buffered the effects of work stress in managers with low hardiness or high emotional reactivity (Luszczynska & Cieslac, 2005).

Opening a new business for a person who has never done it before, is a stressful task. We assume that an individual's social capital gives the feeling of hypothetical social support. This sense of hypothetical social support leads a sense of security, which reduces the stress occurring in the process of opening a new business. As a result, people do not need to spend their time and energy on coping with this stress, and they can be engaged more effectively in entrepreneurial activity. Perceived social support is a cognitive phenomenon and it helps reduce stress levels including business activity issues (Chay, 1993). Confirmation of the buffer effect of social support with regard to entrepreneurial activity was found in the study by Chay (1993). Entrepreneurs’ social capital provides them access to resources and, most importantly, to emotional support (Venkataraman, 1997).

Hence, we assume that the increase in perceived behavioral control and the facilitation of the intention of opening a business is due to the fact that an individual's social capital provides a sense of support. The individual feels that their social capital can always give them information, emotional, and possibly material support. This makes it easier for them to cope with the stress of opening a new business, and they can also accept a greater share of risk. Thereby they are more successful in their endeavors.

**Method**

**Sampling procedures**

We conducted the panel study, which consisted of two waves of the survey.

**First wave**

We carried out the survey in the third quarter 2012. We applied a multistage (3-stage) area sample. The effective total sample size was 2,061 respondents. We interviewed 1,024 respondents in the Central Federal District including Moscow, and 1,034 respondents in the North Caucasian Federal District. Specifically, we selected from this sample those respondents who were planning to start a new business in the next 2 years. For this purpose, we asked the following question: “Are you thinking about starting your own business within the next two years?” The response options were “Yes,” “Maybe/Not sure” and “No”. We selected two groups of respondents for further analysis.
The first group included the respondents who answered this question with either “Yes,” or “Maybe/Not sure”. Thus, respondents who intended to start their own business and who were part of the representative sample of the two regions of Russia formed our first group (intenders).

The total number of respondents who were planning to start a new business in the next 2 years was 269. Only those who belonged to this subsample answered the questions concerning the TPB. The respondents of the first group also answered the questions evaluating their individual social capital. The other part of the representative sample consisted of those who indicated no intention to start a business in the next 2 years. These respondents answered only the questions assessing their individual social capital. The number of people who did not plan to start a new business within the next 2 years was 1,792. Then we selected a second group of 270 respondents (non-intenders) from this part of the sample, which was the closest to the first group according to their socio-demographic characteristics. That is, “non-intenders”, who were not equivalent in their socio-demographic characteristics to the group of subsample “intenders”, were excluded from sample. In the selection process, we sought to achieve maximum compliance of socio-demographic characteristics between groups of "intenders" and "non-intenders". The distribution of respondents according to gender, age, and education in both subsamples is represented in Table 1. As Table 1 reveals, there were practically no differences between the two groups with respect to gender, age, and education. The same is true for the distribution of the main occupation of the respondents in Table 1.

Table 1. Distribution of Respondents According to Gender, Age and Education in both subsamples of “intenders” (n=269) and “non-intenders” (n=270)

<table>
<thead>
<tr>
<th>Demographics</th>
<th>First Group (intenders)</th>
<th>Second Group (non-intenders)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female (%)</td>
<td>42.4</td>
<td>44.4</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Mean</td>
<td>32.2</td>
<td>32.3</td>
</tr>
<tr>
<td>standard deviation</td>
<td>10.2</td>
<td>10.3</td>
</tr>
<tr>
<td>Range</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>Education (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic secondary education</td>
<td>1.5</td>
<td>1.9</td>
</tr>
<tr>
<td>Full secondary education</td>
<td>13.5</td>
<td>15.2</td>
</tr>
<tr>
<td>Vocational with incomplete general education</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Vocational with complete general education</td>
<td>4.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Specialized secondary education</td>
<td>27.7</td>
<td>27.2</td>
</tr>
<tr>
<td>Incomplete higher education (up to 3rd course of the university)</td>
<td>10.9</td>
<td>11.2</td>
</tr>
<tr>
<td>Higher education (bachelor’s degree)</td>
<td>4.1</td>
<td>4.5</td>
</tr>
<tr>
<td>Higher education (specialist diploma)</td>
<td>34.1</td>
<td>33.9</td>
</tr>
<tr>
<td>Higher education (master’s degree)</td>
<td>0.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Academic degree stage I – PhD (candidate’s degree)</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Academic degree stage II – PhD (doctor’s degree)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
We made this selection to form a control group of respondents. The comparison of these two groups, which were similar in socio-demographic characteristics and differed only by the intention to start their own business, allowed us to test the hypothesis of a stronger individual social capital in the group of potential entrepreneurs.

The distribution of the current occupation of the respondents in the two groups was as follows (see Table 2). The European Social Survey (ESS) utilized this question and it was used in its original form.

Table 2. Current and Main Occupations of Respondents (%)

<table>
<thead>
<tr>
<th>What is your main occupation? Choose only one answer</th>
<th>Intenders</th>
<th>Non-intenders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee</td>
<td>57.7</td>
<td>54.4</td>
</tr>
<tr>
<td>Self-employed / entrepreneur / working for family business</td>
<td>12.0</td>
<td>8.7</td>
</tr>
<tr>
<td>In education (not paid for by employer)</td>
<td>8.2</td>
<td>11</td>
</tr>
<tr>
<td>Doing housework, looking after children or other persons</td>
<td>10.1</td>
<td>8.7</td>
</tr>
<tr>
<td>In community or military service</td>
<td>0.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Retired</td>
<td>1.5</td>
<td>2.3</td>
</tr>
<tr>
<td>Unemployed</td>
<td>10.1</td>
<td>14.1</td>
</tr>
</tbody>
</table>

**Second wave**

At second stage, one year later, we re-interviewed, by telephone, respondents in the first group (“intenders”). The purpose of the second survey was to find out whether or not the respondents had started their own business. We asked those respondents who had been unable to do so, why they had failed. We managed to re-interview 163 respondents of the first group in total. Of these 38 respondents had actually started a business during that year.

**Measures**

Our research tools originally contained about twice as many questions than those set forth below. In the process of data processing by confirmatory factor analysis, we selected the points which were most in agreement to include in the relevant factors with statistically significant regression weights. Below we describe and present only those items that were selected for further analysis and modeling.

**Entrepreneurial behavior evaluation using the TPB**

We defined entrepreneurial behavior as follows: “Entrepreneurial behavior is starting a business instead of being employed in private or government organizations.” As this questionnaire was part of a multi-topic study with a limited response time, we only used the direct measures of the TPB (Fishbein & Ajzen, 2010: 449-451). The operationalization was done according to Ajzen (2006)
and adapted to our research question, which was the explanation of entrepreneurial intention and behavior.

We measured behavior intention by two items: “How likely is it that you will start a business within the next two years?” (Very unlikely: -3-2-1 0 1 2 3 Very likely); “I expect to start a new business within the next two years” (Strongly disagree: -3-2-1 0 1 2 3 Strongly agree).

Here, and in the following, we did not add up questions into scales or sum scores but, instead, used them as reflective indicators in the testing of our structural equation models (SEM).

We measured behavioral attitude by two statements: “The idea of starting a business within the next two years is for me...” (Very inappropriate: -3-2-1 0 1 2 3 Very appropriate); “The idea of starting a business within the next two years is for me...” (Very bad: -3-2-1 0 1 2 3 Very good).

We measured subjective norms by two items: “Most people who are important to me think I should start my own business within the next two years” (Strongly disagree: -3-2-1 0 1 2 3 Strongly agree); “Many people I know would like to start their own business in the next two years” (Strongly disagree: -3-2-1 0 1 2 3 Strongly agree).

We measured perceived behavioral control by two items, the second one was reverse coded: “For me to start a business within the next two years is...” (Very difficult: -3-2-1 0 1 2 3 Very easy); “To start a business within the next two years is beyond my control” (Strongly disagree: -3-2-1 0 1 2 3 Strongly agree).

We measured implementation intention (Gollwitzer, 1999) using three items: “Have you thought about an idea that could serve as a basis for starting your own company?” (1- No, I don’t have any idea yet; 2- I don’t have a certain idea, only general thoughts; 3- I have some ideas, but they are not clear yet; 4- I have an idea, but it still requires elaboration; 5- Yes, I have the certain well thought-out idea); “Are you currently developing a product/service?” (No, I am not 1 2 3 4 5 I have been actively doing it/already done it); “Are you currently saving money to start a business?” (No, I am not 1 2 3 4 5 I have been actively doing it/already done it).

**Individual social capital**

**Resources available from informal networks (friends and family):** receiving help and advice on bureaucratic issues to legal and financial assistance (Häuberer, 2011; Gaag, 2005; Verhaeghe & Tampubolon, 2012). We modified the wording where necessary to fit the Russian context, similar Häuberer (2011) in the Czech context. This method shows how many family members and how many friends the respondent has who are willing “advise them on legal or bureaucratic issues”, “family help them to find a job”, “have the possibility to hire employees”, and “can offer them advice on financial questions”.

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The size of formal networks: membership in organizations and associations (Yang, 2007; Beilmann & Realo, 2012; Häuberer, 2011). We measured the formal network of organizational membership by asking the respondents about their membership in political parties, trade unions, professional associations, charity organizations, social organizations, sport or interest organizations, civic associations, and non-governmental organizations (cf. Häuberer, 2011).

There were also questions in the questionnaire to evaluate the socio-demographic characteristics of respondents (age, gender, education level), as well as the area of work of respondents’ parents did when they were growing up.

Analysis

We tested the hypotheses using the following procedures. First, we evaluated the significance of differences in the answers of the respondents in groups of intenders and non-intenders to the questions relating to the evaluation of individual social capital. To evaluation the significance of differences we used a two-tailed Kolmogorov-Smirnov’s test. We suppose that if Hypothesis 1 was correct and the availability of individual social capital was one of the factors contributing to the formation and implementation of an individual’s intention to open a business, the indicators of individual social capital in the group of intenders would be higher.

Second, using structural equation modeling (Jöreskog, 1993), we tested our hypotheses about the impact of each of the individual components of social capital on perceived behavioral control and the relationship between entrepreneurial intention and implementation of this behavior.

Thirdly, we tested the significance of differences in individual social capital between the two groups of respondents, those who opened their business a year after and those who did not.

Results and Discussion

Differences in individual social capital between intenders and non-intenders

To test Hypothesis 1, we evaluated the statistical significance of differences in the strength of various components of individual social capital in the groups of “intenders” and “non-intenders”. The statistical significance of the differences between the two groups in indicators of individual social capital is shown in Table 3. We calculated the median values, which are considered centers of the groups. We estimated the significance of differences using the Z-Kolmogorov-Smirnov test.

Table 3. Differences in individual social capital among respondents from intenders and non-intenders (Median values)
<table>
<thead>
<tr>
<th>Codes</th>
<th>Individual social capital question</th>
<th>Median (intenders/ non-intenders)</th>
<th>Z-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>fm1</td>
<td>How many members of your family can advise you on legal or bureaucratic issues?</td>
<td>1.0 / 0.9</td>
<td>1.069</td>
</tr>
<tr>
<td>fm2</td>
<td>How many members of your family help you to find a job?</td>
<td>1.0 / 0.8</td>
<td>1.424</td>
</tr>
<tr>
<td>fm3</td>
<td>How many members of your family have the possibility to hire employees?</td>
<td>0.4 / 0.3</td>
<td>0.999</td>
</tr>
<tr>
<td>fm4</td>
<td>How many members of your family can offer you advice on financial questions?</td>
<td>0.8 / 0.6</td>
<td>1.313</td>
</tr>
<tr>
<td>fr1</td>
<td>How many friends can advise you on legal or bureaucratic issues?</td>
<td>1.6 / 1.0</td>
<td>1.888**</td>
</tr>
<tr>
<td>fr2</td>
<td>How many friends can help you to find a job?</td>
<td>1.6 / 0.8</td>
<td>1.918***</td>
</tr>
<tr>
<td>fr3</td>
<td>How many friends have the possibility to hire employees?</td>
<td>0.8 / 0.5</td>
<td>1.778**</td>
</tr>
<tr>
<td>fr4</td>
<td>How many friends can offer you advice on financial questions?</td>
<td>1.2 / 0.7</td>
<td>1.989***</td>
</tr>
<tr>
<td>ass1</td>
<td>How often do you participate in the activities of political parties, trade unions, or professional associations?</td>
<td>1.2 / 1.1</td>
<td>1.090</td>
</tr>
<tr>
<td>ass2</td>
<td>How often do you participate in the activities of sport or interest organizations?</td>
<td>1.6 / 1.3</td>
<td>2.157***</td>
</tr>
<tr>
<td>ass3</td>
<td>How often do you participate in the activities of civic associations, nongovernment organizations (NGOs)?</td>
<td>1.2 / 1.1</td>
<td>1.487*</td>
</tr>
</tbody>
</table>

**Note:** Median values are group midpoints
*p<0.05; **p<0.01; ***p<0.001.

Table 3 shows that the respondents of the first group have significantly higher medians for all questions evaluating resources that have been attained from friends. Such a pattern is not discernible when evaluating similar resources attained from relatives.

Intenders are also more likely to take part in the activities of sport or interest organizations and in the activities of civic associations, and nongovernmental organizations. However, we did not find significant differences between intenders and non-intenders in the participation in political parties, trade unions, or professional associations.

Thus, we can conclude that the Hypothesis 1 is partly confirmed. Respondents who intend to open a business have higher rates of individual social capital, but this social capital is not related to extra-family relationships. Therefore, we can say, that **Hypothesis 1** was supported.

In addition, we present the means and standard deviations and range for the items that measured planned behavior according to TPB in the Table 4. This table shows only the responses of “intenders”.
Table 4. Descriptive Values of the TPB items (Intenders; N=269)

<table>
<thead>
<tr>
<th>Codes</th>
<th>Item Wording</th>
<th>Mean</th>
<th>St. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTENTION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in1</td>
<td>How likely is it that you will start a business within the next 2 years? 0.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Strongly disagree: -3-2-1 0 1 2 3 Strongly agree)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in2</td>
<td>I expect to start a new business within the next 2 years. (Strongly disagree: -3-2-1 0 1 2 3 Strongly agree) 1.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMPLEMENTATION INTENTION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im1</td>
<td>Have you thought about an idea that could serve as a basis for starting your own company? (5-point scale) 3.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im2</td>
<td>Are you currently developing a product/service? (5-point scale) 2.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im3</td>
<td>Are you currently saving money for your intention to start a business? (5-point scale) 3.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERCEIVED BEHAVIOR CONTROL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pbc1</td>
<td>For me to start a business within the next 2 years is… (Very difficult: -3-2-1 0 1 2 3 Very easy). 0.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pbc2</td>
<td>To start a business within the next 2 years is beyond my control. (Strongly disagree: -3-2-1 0 1 2 3 Strongly agree) 1.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATTITUDE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>att1</td>
<td>The idea of starting a business is… (Good-3-2-1 0 1 2 3 Bad for me). 2.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>att2</td>
<td>The idea of starting a business is… (Appropriate -3 -2 -3 0 1 2 3 Inappropriate for me). 2.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUBJECTIVE NORMS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sn1</td>
<td>Most people who are important to me think I should start my own business within the next 2 years. (Strongly disagree: -3-2-1 0 1 2 3 Strongly agree) 1.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sn2</td>
<td>Many people I know would like to start their own business in the next 2 years (Strongly disagree: -3-2-1 0 1 2 3 Strongly agree). 1.09</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Differences in the individual social capital between intenders and non-intenders

Hypothesis 2 was that people who carried out the intention of opening their own business had higher individual social capital than that of people who did not carry out this intention. To test this hypothesis, we used data from the second wave of the study. During the second wave of the study, we re-interviewed by telephone survey respondents in the first group (“intenders”). The purpose of the second survey was to find out whether or not the respondents had started their own business. We re-interviewed 163 respondents of the first group in total. Of these 38 respondents (that is 23%) actually started a business in the following year. If our assumption about the facilitative effects of social capital on an individual’s intention to open own business is correct, then the individual social capital of the respondents who opened their own business should be higher than that of the respondents who did not. To test this hypothesis, we compared the individual social capital by means of Mann-Whitney’s U-criteria in the two groups (Table 5).
Table. 5. Medians and ISC components, which influence on implementation intention to start a new business and the significance of their differences between the two groups (Median values are group midpoints)

<table>
<thead>
<tr>
<th>Codes</th>
<th>Individual social capital questions</th>
<th>Median started / not started</th>
<th>Mann-Whitney U-criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>fr1</td>
<td>How many friends can advise you on legal or bureaucratic issues?</td>
<td>2.17 / 1.42</td>
<td>1770.5**</td>
</tr>
<tr>
<td>fr2</td>
<td>How many friends can help you to find a job?</td>
<td>2.30 / 1.74</td>
<td>1863.0*</td>
</tr>
<tr>
<td>fr3</td>
<td>How many friends have the possibility to hire employees?</td>
<td>1.38 / 0.77</td>
<td>1734.0*</td>
</tr>
<tr>
<td>fr4</td>
<td>How many friends can offer you advice on financial questions?</td>
<td>1.83 / 1.14</td>
<td>1640.0**</td>
</tr>
</tbody>
</table>

Social Resources available from friends (number of friends who can give this kind of help)

The size of formal networks and number of contacts with organizations inside network

Scale: 1 - I’ve never participated in these activities; 2 - I’ve done it before, but have not participated in the past month; 3 - Only once in the past month; 4 - 2-3 times in the past month; 5 - 4 or more times in the past month

| org1  | How often do you participate in the activities of political parties, trade unions, or professional associations? | 1.28 / 1.15                | 2090.5*                 |
| org2  | How often do you participate in the activities of sport or interest organizations? | 1.68 / 1.46                | 2083.5*                 |
| org3  | How often do you participate in the activities of civic associations, nongovernment organizations (NGOs)?       | 1.29 / 1.12                | 2019.5**                |

Note: Median values are group midpoints
*p<0.05; **p<0.01; ***p<0.001.

We immediately excluded from this analysis recourses which could be received from family. The reason for this is that no differences were found for this parameter between the groups of “intenders” and “non-intenders”. Hence, it entails that this option is not essential to start a business and probably does not serve as a facilitator of this intention either.

The analysis results listed in Table 5 demonstrate that **Hypothesis 2** is verified. Indeed, all indicators of individual social capital were significantly higher in the group of respondents who effectuated their intention in the following year. Thus, we have shown that in people who intend to start their own business individual social capital is significantly higher than in people who had no intention. In addition, individual social capital in people who actually opened a business is significantly higher than in people who have not yet done so. Consequently, we can conclude that an individual's social capital is associated with the implementation of the intention to open a business and that this capital can be a facilitator of that intention. How is this facilitation implemented? In Section 5.3 we empirically examine the psychological mechanism by which individual social capital contributes to the intention of opening a business.
How does individual social capital influence the intention to open a business?

Next, we tested Hypotheses 3, 4, 5. To test these hypotheses we used data modeling using structural equations. Initially, we had to check whether Ajzen’s model was reproduced in the Russian sample. Therefore, at the first stage of analysis we specified Model 1 based on the TPB and its direct measures (Ajzen, 1991; Fishbein & Ajzen, 2010), supplemented by the concept of implementation intention (Gollwitzer 1999). Implementation intention is specified in Model 1 as a dependent construct which is only directly influenced by the intention to start a new business. The reasoning for this is that intention is a more general tendency which influences the more concrete implementation intention (Gollwitzer 1999; Gollwitzer & Sheeran 2006). The intention itself is determined by three constructs: attitude toward the behavior, social norms, and perceived behavioral control as postulated by the theory and confirmed in all meta-analyses (Fishbein & Ajzen 2010). We postulate that there is total mediation of the effects of attitude, norms, and PBC on implementation intention via intention as argued above. For the estimation, we used the maximum likelihood estimation procedure available in the program AMOS version 21 (Arbuckle, 2010). The measures of global fit are satisfactory (CFI = .961, RMSEA = 0.06, Chi square/df = 2.031). Percentage of explained deviation of the intention to start a business in Model 1 was $R^2 = 0.64$.

At the next stage of the analysis, we added to the model parameters of individual social capital affecting the perceived behavioral control model 2 (Fig. 2).
Fig. 2. The structural model of the influence of individual social capital on the intention of opening a business (Only standardized regression weights are presented.)

This model has a good fit: $\chi^2/df = 1.39$; CFI = 0.957; RMSEA = 0.041; PCLOSE = 0.892. The percentage of explained the variance of the intention to start a business in the Model 2 was now $R^2 = 0.73$. The addition of social capital to the model of the individual indicators increases the explained percentage of the deviation of the intention to open a business.

As regards the validity of the hypotheses, we can argue that hypotheses 4 and 5 have been verified, while Hypothesis 3 has not been confirmed. This is another confirmation that family resources do not serve as a facilitator of intention to open a business. As can be seen in Figure 2, resources attained from friends, and the size of formal networks, have a positive and statistically significant effect on perceived behavioral control, as we expected. The size of formal networks demonstrates a stronger influence. The influence of family resources on perceived behavioral control is also positive but not significant. Individual social capital explains 14% of the deviation of perceived behavioral control. Consequently, we can say that perceived behavioral control performs the function of mediation between individual social capital and the degree of intention to start a business.
Additionally, the model revealed the direct influence of attitude on the implementation of intention to start a business. This effect appears to be highly significant and positive.

Summing up the results of our study we can conclude, that 4 out of 5 of our hypothesis are confirmed.

In conclusion, there are three four main findings of the present study of the relationships between individual social capital and the intention to start up a business.

1. Individual social capital is a factor that contributes to overall business activity. Three types of results indicate this. First, the respondents who intend to start their own business have higher individual social capital than the equivalent group of respondents who did not have such an intention. Second, the indicators of individual social capital influence the intention to start a business and its implementation. Third, among the respondents who intended to open a new business, those who had higher social capital are more likely to have done so a year later.

2. Among the indicators of individual social capital, primarily those resources that might be available thanks to friends and an individual’s informal network (membership in various organizations and clubs) are of value in starting a business. No significant contribution of resources available from family members to the implementation of intention to start own business was detected.

3. Individual social capital has an effect on perceived behavioral control and this increase enhances the activity to effectuate the intention of opening a business. Thus, individual social capital appears to be a facilitator of the intention to open a business.

Discussion

Our findings reveal that the family and its social capital do not have a significant impact on perceived behavioral control, which influence an individual's intention to start a business. Nevertheless, this does not mean that the opposite is true – that in families of entrepreneurs, the percentage of children who would like to start their own business is the same as in the families of people of other professions. However, this does not refute our hypothesis in general: When using a representative sample of a region or a country as a whole, for entrepreneurs, the impact of family relationships on their decision to open their own business is not significant.

Yet historically, business was considered to be a family matter. The family mostly supported entrepreneurial endeavors. At the same time, businesses of that kind are always limited to the family. It seems that, among the factors that ensure the competitiveness of business in the contemporary world, competences are now moving to the forefront, rather than confidential relations that can be
found in the family. However, finding the necessary competences in the family is almost impossible. That is why businesses based on family support are less competitive compared to businesses organized by friends who have come together due to common interests and competencies. It is quite possible that this fact encourages people to focus on other social resources rather than on their family resources when starting their own business.

The number of formal groups in which the respondent was included and the density of contacts with them also have a positive impact on their attitude, perceived behavioral control, and implementation intention. These results support the idea regarding the important role of organizations and associations in the development of regions as expressed in Putnam (1993). Alexis de Tocqueville (2004) wrote in his book “Democracy in America” (first published in 1835) that the rapid development of the United States of America was largely due to the appearance in society of different unions and associations in which people supported each other and influenced policy, the economy and the level of democracy of the country.

There are different points of view on formal relationship networks as part of social capital and success in business. Wide formal networks can be used effectively for business, for instance, to find or obtain the necessary information or to overcome bureaucratic barriers (Smallbone & Welter, 2001). However, social capital in the form of social relationships always requires investment in itself, and time is a valuable resource for an entrepreneur. Accordingly, regarding a social relationship, “on the one hand, it indeed provides actors with scarce resources and business related knowledge. On the other hand, establishing and maintaining it require considerable investment, resulting in ‘sunk cost’ for entrepreneurs” (Yongqiang et. al, 2013).

In our study, it was shown that membership in organizations was had a significant effect on starting a business. We attribute this to the fact that the formal relationships (membership in organizations) do not require such significant time-consuming resources as informal (friendship, family) relationships. Besides that, with membership in organizations, the network of social contacts is dramatically expanded, which could potentially provide them with significant social resources.

The above notwithstanding, in our study we have not measured objectively the amount of aid and the resources that a respondent receives from friends or group memberships. We evaluated the effect of the very fact of membership in organizations, and respondents' subjective assessments of resources that friends and relatives can give them for implementing the intention to open a business. As a result, we found a rather interesting fact: the perception as such that a respondent has social support, that is social capital, increases the activity of the intention to start a business. It means that on a psychological level individual social capital appears to be a significant facilitator of this
intention. Starting a business is always a challenge for an individual and social support is an important resource for overcoming this challenge.

The productivity of social support when finding a way out of difficult situations in life has been shown by Lin and et al. (1985). Using the social resources theory, they operationalized social support in terms of the strength of social ties and the homophily of characteristics between the self and the helper. They found that individuals showed an increased level of depressive symptoms if they experienced a significant and undesirable event, but that the effect was reduced when help came from strong (rather than weak) ties (Lin et al., 1985: 247). Hence, social support can play an important role in critical moments of life (Lin et al., 1985), and the opening of business, no doubt, is an important event in an individual’s life.

In our research, support and its availability are related to perceived behavioral control. We can assume that in this case we are dealing with a specific mechanism. To explain this mechanism, we use the term “the buffering effect of social support,” borrowed from social psychology (Cohen & Wills, 1985; Fried & Tie, 1993). The above does not necessarily mean that entrepreneurs will use their own social resources. The perception that they are available is enough (Cohen & Hoberman, 1983). Within experimental studies of the buffer effect of social support it was demonstrated that people who had been told that they could ask for help from the experimenter, even if they did not take advantage of this opportunity, coped with a task (mental stress task) better than those who did not have that opportunity (Sarason & Sarason, 1986). The psychological role of individual social capital is that it offers a person a sense of social support, which leads to their feeling capable of implementing their intention. The potential entrepreneur starts to feel that the situation is under control. As a result, they become more successful in real life because of the subjective sense of social support from friends and formal social groups. In this case, it is not necessary that the friends or interest groups actually help potential entrepreneurs. The perceived behavioral control is likely to increase the willingness to take risks, this willingness is also necessary for the implementation of the intention to open a business.

Individual social capital in people intending to start a business is, in general, higher than in people who do not intend to start a business. In addition, it is higher in people who have realized this intention compared to people who have not. Certainly, individual social capital is not the cause of starting a business, but it can help those people who intend to do so. The introduction of social capital indicators to the model constructed in compliance with TPB (Ajzen, 1991; Fishbein & Ajzen, 2010) and supplemented with the “implementation intention” construct (Gollwitzer, 1999; Gollwitzer & Brandstätter, 1997; Gollwitzer & Sheeran, 2006), can improve the fit of this model. The proportion of explained deviation of “implementation intention” also increases. All of the above
allows us to say that an individual's social capital has a facilitative effect on the intention to open a business.

**Limitations and Recommendations**

An important limitation, from the author’s point of view, is an underlying cultural assumption. In this case, the study involved only residents of Russia. Due to the influence of culture and historical factors, different results might be obtained when studying samples of representatives of other cultures. Therefore, it is necessary to recheck the results in other cultures before the findings and their implications can be extended to other cultures.

Politicians can use the results of this study for designing policy interventions. First, the results demonstrate that considerable support in the implementation intention of opening own business is due to memberships of various formal groups and associations. Therefore, if the authorities of a region or state wants to increase the number of small businesses, encourage a variety of clubs, organizations, and associations in the region as an integral part of their policy to increase the share of private business. A network of formal relationships will provide both psychological and instrumental support to potential entrepreneurs.

In the process of consulting entrepreneurs, we recommend paying more attention to their social contacts. Future entrepreneurs should arrange their contacts according to importance and, primarily, maintain the most important relationships; focusing time and energy on the most important social contacts allows them to optimize the time they can invest in their entrepreneurial endeavors, and the benefits of their social capital.

**Literature**


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