Appearance of entrepreneurial values and strategic orientations in the basic values

Éva Málovics, Gergely Farkas, Beáta Vajda

Abstract
According to Schwartz, behaviour is oriented by values through motivations. In our opinion, these values in case of the entrepreneurial behaviour are expressed as entrepreneurial values and factors of strategic orientations in the specific literature. Entrepreneurial orientation includes the dimensions of risk taking, innovativeness and pro-activeness. Learning orientation summarizes the factors of common vision, a commitment to business and the ability to accept bottom-up initiatives in a well-defined approach. We study these orientations because our goal is to describe the value structure of an innovative entrepreneurial behaviour what is desirable in a science park. At first, we investigated the difference between the values of Hungarian citizens and Hungarian entrepreneurs. After that, we assessed whether there is a difference of values among entrepreneurs who have different levels of entrepreneurial or learning orientation. Our results suggest that Hungarian entrepreneurs differ from other citizens in several dimensions of fundamental values, and they also differ in having different strategic orientations.

Keywords: values, entrepreneurial orientation, innovativeness, learning orientation

JEL Classification: L26

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1. Introduction

Our study is inspired by the possibility of establishing a new science park around the ELI (Extreme Light Infrastructure) project in Szeged, Hungary. What role will such an advanced technology research centre play in the economics of the region? Are local entrepreneurs able to absorb the knowledge about it to build a new science park, or it will be only an “island” of academic studies?

In order to study the values and orientations of entrepreneurs in the region we created a new mix of measuring instruments based on literature. In our paper, we investigate the relationship between basic values and the innovative entrepreneurial behaviour. Why are some entrepreneurs innovative, why are some of them avoiding it? This question is common in entrepreneurial research. One of the important influencing factors is the value structure of the person. In the literature, there is no consensus on the definitions related to our study, so we have to choose them according to our goals.

Our research questions are the followings. How entrepreneurial values are represented in the basic value structure? What is the value structure of the entrepreneurs in the region? How entrepreneurial and learning orientation influence the value structure?

The answers were sought by using three different measures. By using the model of Schwartz (2011) on basic values, we studied ten values that characterize everyone, regardless of cultural background, to a certain degree. This is the most widely used value model of universal, personal values. Somewhat different versions of it serve as part of international measures like World Value Survey and European Social Survey.

Among strategic orientations, we studied entrepreneurial orientation by the method of Covin and Slevin (1989) on the one hand, and learning orientation (Sinkula, Baker, Noordewier 1997) on the other hand. Entrepreneurial orientation has become a central concept in this field (Rauch, Wiklund, Lumpkin, Frese 2009), that cannot be avoided. We complement this with learning orientation because according to Wang (2008) it is an important dimension along with entrepreneurial orientation. Strong learning orientation maximizes the effect of entrepreneurial orientation (Wang 2008). In our opinion, entrepreneurs do not make a rational choice among strategic orientations, but instead, they are representing their personal values so research of connection between values and orientations is also an important, but yet less known topic.

In this paper, the starting point is Schumpeter who emphasized psychological aspects when describing the innovative behaviour of entrepreneurs. After that, we summarize the most important findings on entrepreneurial and learning orientation before we describe the model of Schwartz on basic values. We overview the past Hungarian researches about the basic values in case of entrepreneurs before finally presenting our empirical research methods and results of our ongoing research seeking the answers to the questions raised above.
2. Schumpeter and the innovator entrepreneur

According to Schumpeter, innovation is a capitalist intention to change everything that now exist. Schumpeter (1980) developed an economic growth model that includes quantitative and qualitative variables as well. In this model, the main factor of the technical progress and of the discovery of resources is entrepreneurial behaviour. He claims that certain attitudes are required for a specific entrepreneurial behaviour and these attitudes characterize only a small proportion of populations. According to him, the entrepreneur has a specific personality that is also different from the rationality of the rest of the economic agents.

The main characteristics of this innovator entrepreneur are initiation, authority and foresight. The author considers intuition, the ability to foresee what will happen even when it is not well founded, a significant factor of success. Contrary, he does not think that the role of inventions is central for innovations. The function of entrepreneurs is the realization of innovations, but it is not necessary for these to be actual inventions; it is more important to defeat the resistance of the environment and to focus on the opportunities that turn up. Entrepreneurs apparently just follow their own individual interests, often very rudely, are highly competitive (“conquest ambition”), success- and risk-seeking, and have high self-motivation (“joy of creation”), but are not at all hedonistic (Schumpeter 1980).

With these thoughts, Schumpeter has laid down the foundations of the psychology of innovative entrepreneurship, despite the fact that in his era, economics and psychology were two distinct disciplines with no common areas of research. Schumpeter's claims are often attacked at the point where he views business success as depending on a person having some special properties, although obviously there are other important factors, such as teamwork, supportive relationships, or the broader cultural environment too (Szerb, Kocsis and Kisantál 2008). Despite all the criticism, studies about innovative and creative entrepreneurship to date use Schumpeter's findings as a starting point, completing or developing them. An example of this is the definition today's strategic management literature uses for entrepreneurial orientation – this is also based on Schumpeter's thoughts and plays an important role in our research.

3. Entrepreneurial orientation

Entrepreneurial orientation is part of the corporate strategy, which can be analysed through organizational processes and behaviour (Covin and Slevin 1989). According to this, an entrepreneurship-oriented company is committed to innovation, takes risks and foregoes its competitors by proactive innovations (Miller 1983). The construct of entrepreneurial orientation is based on research related to the spirit of entrepreneurship and actually, it has grown out of that. The research on entrepreneurship has become a rapidly developing research area during the recent decades. Its topics include the search for opportunities, the process of discovery,
evaluation and the exploitation of possibilities (Shane and Venkatraman 2000). Entrepreneurial orientation is a multidimensional construct which attempts to capture entrepreneurial behaviours (Hofmann 2009). Assumptions of Miller (1983) were first operationalized in greater detail by Covin and Slevin (1989). According to them, all dimensions that characterize entrepreneurial organizations represent the following distinct behaviours:

1. innovativeness, which includes the tendency for creating new combinations,
2. risk taking, which is connected to making courageous decisions and taking uncertainties,
3. proactivity, which includes the search for opportunities and pioneer attitudes (Hofmann 2009).

These three dimensions are related to entrepreneurial values that control the organization’s relationship with its external environment. That is why this orientation is frequently investigated in the context of marketing orientation, which also is an outward strategy, but focuses on the use of the information flow between the organization and its environment with marketing tools. As we have already discussed in other publications (Málovics and Farkas 2013), the latter is more co-related with short-term growth both in an Austrian sample investigated by co-researchers and in Hungary. However, the relationship between entrepreneurial orientation and performance stands on a solid foundation, also confirmed by Rauch et al (2009), who, on the basis of their meta-analysis of more than fifty researches, found a positive correlation between entrepreneurial orientation and performance.

On the basis of our previous research, we can conclude that although it is worth modifying the method used in that and going back to the basics laid down by Covin and Slevin (1989), entrepreneurial orientation definitely has an important role in the entrepreneurial attitude or character, as it is fundamental in the appearance of entrepreneurial orientation in corporate strategy.

4. Learning orientation

Innovation and knowledge creation are concepts that have a strong relationship (Popadiuk and Choo 2006). Inside the organization, the process is supported mostly by organizational learning. Hurley and Hult (1998) developed a model in which they identified learning as one of the dimensions of innovativeness. They set out that organizations require a strong learning orientation in the recent intense competition. Calantone, Cavusgil and Zhao (2002) tested the above mentioned model using data from broad US industries and they confirmed the assumptions of the model.

Organizational learning has two main approaches in the literature. One of them focuses on the processes of information distribution, appearing several times since Argyris and Schön (1978) discussed it as learning cycles of different numbers and content. The other type focuses on cultural characteristics of the organization such as shared vision or open thinking, as Senge (1990) uses it. All organizations have to learn in some way, collecting information of their environment as well as about themselves. However, this may not be appropriate to be utilized in such a way as to
be called a learning organization. According to Sinkula (1994), organizational learning can take place if individually acquired knowledge is made available to others in the organization. On the long term, organizations must learn at least as fast as their environment changes if they do not wish their market share to be reduced over time (Sinkula, Noordewier and Baker 1997). The ability to learn is crucial for the organization not only to develop the current paradigm, but also to allow for a paradigm shift (Baker and Sinkula 1999a). Such paradigm shifts can clearly be regarded as innovations to the organization. It is therefore not surprising that Baker and Sinkula (1999b) found that learning orientation has a greater effect on organizational performance and its innovative activities compared to marketing orientation which focuses on meeting consumers' needs, but not on innovative activities.

Learning principles described by Senge (1990) cannot easily be operationalized on the level of self-evaluation questionnaires. Researchers (Sinkula et al. 1997, Baker and Sinkula 1999a, 1999b) emphasize three dimensions that can be found in several descriptive approaches: commitment to learning, open thinking and shared visions. At organizations which are committed to learning, leaders support strives for learning. The organization continuously strives for obtaining new information, evaluates it and revises its own behaviour. This behaviour is in accordance with the two-circle model of learning (Argyris and Schöen 1978), as well as with the learning principle of Senge (1990). Where this commitment is absent, there is less learning (Baker and Sinkula 1999a). The second dimension deals with the mental principles that are shared by leaders and employees as well. These principles are created on the basis of experiences, but the changing environment degrades their value from time to time. Open thinking enhances re-learning along with forgetting old patterns and developing new abilities (Sinkula et al. 1997). This may also lead to innovation, but it is more important that open thinking is a proactive process, as it supposes that previously gained knowledge is not certain and continuous renewal is required. While the aforementioned defines the intensity of learning, shared vision defines its direction. Tobin (1993) defines this as visible leadership. Shared visions provide shared experiences and a direction for the members of the organization, improving motivation for learning. Shared visions direct learning processes in one direction making them more efficient this way (Baker and Sinkula 1999a).

In our opinion, although learning orientation is embedded in organizational culture, it originates from processes induced by leaders, or in our case by the entrepreneur. Without their support for learning orientation, it is difficult to imagine that innovations or proactive changes take place in the whole organization. Commitment for learning and open thinking is in parallel with the axis in Schwartz’s model of openness to change. Shared vision, on the other hand, is an extension of the self-fulfilling aspirations of the entrepreneur to the entire organization to work towards the realization of his ideas.

5. The basic value model of Schwartz

Schwartz defines values “as conceptions of the desirable that guide the way social actors (e.g. organizational leaders, policy-makers, individual persons) select actions,
evaluate people and events, and explain their actions and evaluations” (Schwartz 1999, p. 24.) Values are held by individuals as well as by collectives. “Where a collective is involved values become a component of culture together with other such components as symbols, rituals, artefacts, and heroes.” (Morris and Schindehutte 2005, p. 454.) The goal of Schwartz (1999) is to provide a universal insight, namely to provide an opportunity to measure values that are present all over the world. He describes the relationship between motivation and behaviour in its complexity, and highlights three areas as universal characteristics of values: biological needs, interaction needs serving interpersonal coordination, and societal expectations for the group thrive. Of this, he derives the following eight areas of motivation: enjoyment, safety, performance, independence, sociability, restrictive conformity, social power and maturity. The first four categories define the individual’s relationship with his value providing environment from the aspect of internal balance, while the second four categories define those of external balance. These are expressions of social adaptation that is the motive of self-control. According to the author, value as a goal does not control behaviour directly as a desired end state, but rather, related motivational areas have an effect in the process of being "ritualized" by a constant information retrieval from the environment, getting to the end-state in continuous interaction with the former structure. Schwartz (1999) summarizes the relationship among values as aiming at an external balance and behaviour: end-states and values do not affect the individual’s behaviour in a causal context; rather, it is always done according to actual environmental information and conditions. The variability of behaviour is consequent of this, which is why there is no direct relationship between actual behaviour and values as end-states. Thus, it is necessary to account for value relations in every human group. Organizational connections are value-oriented as well; they can often be characterized by nonrational choices. The transfer of values is different from the transfer of the results of rational cognition. It has no institutionalized form, but instead, there are hidden or more open channels, habits, roles, stereotypes that are mediating values, i.e. the transmission of values happens through culture.

If we wish to investigate the entrepreneurial character in the context of values, it is important to deal with the relationships between values and behaviour. Schwartz (2011) considers values as attainable goals that affect our behaviour as guiding principles through the following mechanisms:

- Values are beliefs that directly affect emotions.
- Values express desirable goals that keep the individual motivated.
- The significance of values is beyond specific individual situations.
- We judge things as good or bad on the basis of values.
- Values can be ranked based on their importance.
- Different values are interacting with each other, and govern our behaviour depending on how much they are relevant in a given situation.

The frequent question about the culture of the relationship between the individual and group level was answered by Schwartz (2011); according to him, these two measurement levels are completely different, that is why he developed two different
test devices for measuring individual and group level values. As in our research, our goal is the investigation of individual values of SME’s leaders of various levels that will provide information about the entrepreneurial character, we will describe this measurement level in detail.

Schwartz (2011) has set out ten basic values with associated motives, which are: autonomy, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism. According to the author, some values are compatible with each other, while others are in conflict. Placing the ten basic values in a circle (Figure 1) expresses the fact that the values that are in opposite positions are often in conflict with each other. Hedonism, for example, is not compatible with benevolence, but it is with achievement. Even Schwartz admits that these values are not measured precisely during the development of behaviour, but instead, they appear as a dynamically changing system of motivation.

The questionnaire developed by him to his value orientation model exists in several different forms and lengths, from among which we have chosen the shortest one which has also been used by the World Value Surveys in several countries.

It is also important to mention the research of McGrath, MacMillan and Scheinberg (1992), in which the authors have made some important statements regarding the formation of entrepreneurial values. In their research, they used the four-dimensional framework of Hofstede in order to compare value orientations of entrepreneurs and non-entrepreneurs in different countries. According to their results, entrepreneurs have a permanent, durable and distinctive value structure that is independent from country-specific cultural values.

**Figure 1** Value dimensions of Schwartz

![Value dimensions of Schwartz](image)

Source: Own construction on the basis of Schwartz (2011, p. 466.)
6. Values of entrepreneurs in Hungary

What are the values of Hungarian entrepreneurs? Sociological research on values has made significant efforts to answer that question. Authors of this field usually use data from different waves of the World Value Survey (WVS) and the European Social Survey (ESS) for analysis, and have come to several conclusions in analysing Hungarians' value choices.

Csite (2009) analyses Hungarian systems of value from the aspect of the business environment, based on the European value surveys. Entrepreneurship as a value stands at the last place in Europe, while Hungarians consider it a little more significant, however, the proportion of those who perceive “businesses as a foundation of the economy of a country” is lower. The author claims that the majority of respondents would prefer to work as an employee rather than being an entrepreneur. But those who chose the latter would do this because of independence and self-realization, and in hope of a better income. Key components of the self-image of Hungarian entrepreneurs are diligence, ambition and hard work. But she also points to the fact that the prestige of being an entrepreneur is not very high in Hungary, and the majority of people prefer peace and stability. Comparing the social status of entrepreneurs with leaders and public officials, it is the lowest. In summary, the recognition of values and attitudes that are important in the entrepreneurial image is low in Hungary, and this may be the explanation for why the prestige of entrepreneurs is low and why the majority of respondents would rather opt for the stability given by big organizations rather than founding their own business.

Later Luksander, Mike and Csite (2012) mapped the world of values of European, including Hungarian entrepreneurs. The analysis used 2008 data from the ESS, which was supplemented by a survey of businesses in 2011. According to them, the entrepreneur’s character is similar to that described by Schumpeter. The values of Hungarian entrepreneurs are essentially no different from those of European entrepreneurs. Autonomy and performance are important, they are looking for exciting challenges, but are more hedonistic compared to the average, attach low significance to providing equal opportunities and to the respect for differing opinions. The difference between the Hungarian sample and the European one is that Hungarians place security before universality in their importance list, and performance, hedonism and the respect for social norms are also given a higher place. However, Hungarians consider caring for traditions, gaining respect, following rules and becoming rich less important. According to the authors, these latter aspects partly reflect the specific values of the Hungarian population (Csite, Luksander and Mike 2012).

7. Methodology

Our research is part of a more complex survey aiming at preparing businesses that are to be relocated into the science park around the ELI in Szeged for a knowledge-intensive cooperation framework rich in innovation and research and development
activities. In the context of this, we conduct a broader study investigating the characteristics of entrepreneurs and their firms together. It is possible to compare characteristics, behaviour, growth and innovation performance of businesses, but here, due to space limitations, these cannot be elaborated in detail. Therefore, this study only aims to analyse the relationship between basic values and strategic orientations presented in Table 1. By this, we paired the basic values with important entrepreneurial values by the literature and with the dimensions of the examined strategic orientations.

Table 1 Schwartz’s values paired with entrepreneurial value examples by the literature and dimensions of entrepreneurial orientation

<table>
<thead>
<tr>
<th>Schwartz’s values</th>
<th>Entrepreneurial value examples by the literature</th>
<th>Entrepreneurial and learning orientation dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-direction</td>
<td>independence (Schumpeter)</td>
<td>innovativeness</td>
</tr>
<tr>
<td>power</td>
<td>power orientation (McClelland)</td>
<td></td>
</tr>
<tr>
<td>security</td>
<td>risk taking (Schumpeter)</td>
<td>risk taking</td>
</tr>
<tr>
<td>hedonism</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>benevolence</td>
<td>affiliation orientation (McClelland)</td>
<td>proactiveness,</td>
</tr>
<tr>
<td></td>
<td>networking (Neergaard)</td>
<td>shared vision,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>openness</td>
</tr>
<tr>
<td>achievement</td>
<td>achievement orientation (McClelland)</td>
<td>innovativeness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>commitment to learning</td>
</tr>
<tr>
<td>stimulation</td>
<td>risk taking (Schumpeter)</td>
<td>risk taking</td>
</tr>
<tr>
<td>conformity</td>
<td>rejection of traditional methods (Schumpeter)</td>
<td>-</td>
</tr>
<tr>
<td>universalism</td>
<td>knowledge sharing (Calantone, Cavusgil and Zhao)</td>
<td>proactiveness</td>
</tr>
<tr>
<td>tradition</td>
<td>rejection of traditional methods (Schumpeter)</td>
<td>openness</td>
</tr>
</tbody>
</table>


Based on the connections presented in Figure 2, we formulate four hypothesis as seen below:

H1: The value structure of entrepreneurs is different from that of the general population.

H2: The value structure of entrepreneurs with high entrepreneurial orientation is different from that of entrepreneurs with low entrepreneurial orientation.

H3: The value structure of entrepreneurs with high learning orientation is different from that of entrepreneurs with low learning orientation.

H4: The level of entrepreneurial orientation and the level of learning orientation are strongly correlated despite that apparently different factors form them.
In this paper, we only present the key demographic indicators and the results from measures connected to the three aforementioned concepts, and not our entire work. Schwartz’s 10-item scale measure of values is part of the World Value Surveys. Each item measures one value of this model, and respondents have to indicate on a six-point scale how much they think the hypothetical person characterized by the specific statement is similar to them. This formulation enhances a more comfortable declaration of the respondents’ real values instead of choosing what they think would be socially acceptable.

Measurements of entrepreneurial and learning orientation use semantic differentials. Both endpoints of these scales show opposite statements in connection with which respondents have to indicate their opinion on a seven-point scale. Therefore, they indicate their distance from two extreme opinions. The subscale of entrepreneurial orientation consists of three statements, while that of learning orientation consists of two. The former is a translation of the questionnaire of Covin and Slevin (1989), while the latter is a shortened and adapted version of the scale of Sinkula, Baker and Noordewier (1997).

Responses were collected in May 2014 in the form of an anonymous questionnaire. Data collection was based upon convenience sampling both online and on paper; respondents had the opportunity to choose which type was more convenient for them. Paper-based answers were immediately uploaded to the online interface in order to gain one joint database. Analysis was carried out by the use of MS Excel 15.0 and IBM SPSS 22.0 software.

8. Results

Our questionnaire was filled by 400 respondents of which we could use 340 after cleaning the data. Responses were ruled out because they gave partial responses, or the respondent was a manager, but not a private entrepreneur or an executive officer equivalent according to the legal form of the firm. Respondents were Hungarian entrepreneurs, 83% of whom were between ages 31 and 60, 13% of whom were younger, while 4% of whom were older than that. One third of them was women.

82% of businesses investigated had a maximum of two owners. 92% of the respondents were the founder or one of the founders of the business. Among the forms of businesses, the most frequent types were Ltd’s (54%) and individual proprietorships (32%); other legal categories only appeared in 14% of our sample. Regarding their size, 54% of the businesses were micro-sized, 35% of them were small, 10% of them were medium sized, while 1% of them were large companies. It is important to note that even those businesses in our sample which were not micro-sized by definition had a maximum of 10 employees in many cases, so they could have fallen into other size categories on the basis of their turnover or balance sheet data. 60% of the businesses were more than 10 years old, and 80% of them had their headquarters in the Southern Great Plain region in Hungary.

As each of the Schwartz-values had only one item in the questionnaire we used, we could not calculate means, but instead, medians and modes which are shown in Table
2. These results suggest that self-direction is the most important value for entrepreneurs, while power and stimulation have the lowest priorities. Spearman correlations are obviously not strong between the values, due to their method of formulation. The highest correlation coefficient is between power and achievement \((r=0.467)\). This reinforces our presumption that there is correlation between success and richness in the Hungarian values.

| Table 2 Medians and modes of the values of Schwartz in the sample |
|----------------------|------------------|------------------|
| Values               | Median | Mode |
| 1. self-direction    | 2      | 1    |
| 2. power             | 4      | 3    |
| 3. security          | 2      | 2    |
| 4. hedonism          | 2      | 2    |
| 5. benevolence       | 2      | 2    |
|                      |        |      |
| 6. achievement       | 2      | 2    |
| 7. stimulation       | 4      | 5    |
| 8. conformity        | 2      | 2    |
| 9. universalism      | 2      | 2    |
| 10. tradition        | 3      | 3    |

Source: Own construction

Figures 2 to 5 show the group means of Schwartz’s values despite that we are aware of the fact that this is questionable from a mathematical point of view. However, in social sciences, mean values are more expressive for the reader regarding the differences between groups. In the figures, statistically significant differences are also indicated. To measure significant differences we used the nonparametric Kolmogorov-Smirnov Z test. During interpretation, it is important to know that according to the Schwartz value scores, lower scores indicate values that are close to the respondent.

Data seen in Figure 2 supports H1. The value structure of entrepreneurs is different from that of the general population. The order of the values is different and there are significant differences in the case of 6 value dimensions. In the general population sample, security is the most important value, while in the entrepreneur sample, self-direction is at the first place. This value is only at the fourth place in the general population sample, and the difference between the two values is significant (Kolmogorov-Smirnov Z-test, \(p<0.01\)). Also, in the entrepreneurial sample, achievement is more important and is significantly different from the evaluation of this value by the general population sample.

Achievement is also an important difference which confirms that the effects of entrepreneurial values discussed in the literature can be observed in the structure of basic values. Interestingly, the power and the stimulation dimension occupy the last two positions in both samples, however, there is significant difference in between samples in both cases. While power is an important feature of the Schumpeterian innovator entrepreneur, modern innovation literature emphasizes the innovation process’ network building nature (Hronszy 2002, Paavola, Lipponen and Hakkarainen 2004), which means that benevolence and universality has become more important. In our entrepreneurial sample these values are in the top three, and the
evaluation of benevolence significantly differs from that of the general population sample, while universalism is equally important for everyone. Security, conformity and tradition on the other hand are values that are less important for entrepreneurs than for the general population – this also clearly shows a value structure close to entrepreneurs.

Figure 2 The comparison of the Schwartz’s value scales of WVS Hungary 2009 and our sample of Hungarian entrepreneurs

*statistically significant difference between the two samples (p<0.05)

Source: Own construction

Orientations were not divided into subscales during our analysis. In both cases, the possible minimum value of the scales was 1, while the possible maximum value was 7. Measured values were close to these, but did not always reach them. Descriptive statistics (Table 3) shows that standard deviations are similar, but the mean of learning orientation is higher. Both has normal distribution.

Table 3 Descriptive statistics of entrepreneurial and learning orientations

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial orientation</td>
<td>1.11</td>
<td>6.44</td>
<td>3.62</td>
<td>1.12</td>
</tr>
<tr>
<td>Learning orientation</td>
<td>1.83</td>
<td>7.00</td>
<td>5.39</td>
<td>1.06</td>
</tr>
</tbody>
</table>

Source: Own construction
For further analysis, we binned our sample along both orientations into four groups with cutting points based on mean and standard deviations. In the followings, we shall only use the groups what are in one standard deviation distance from mean. Members of the lower and the upper extremes are described by low and high entrepreneurial (EO) and learning (LO) orientation and every group counts more than fifty cases. First, we will discuss differences of the High EO group from the WVS sample. After that, we compare these two groups in case of both orientation.

The differences between the entrepreneurial and the general population sample are more glaring when we only consider entrepreneurs with high EO. The important difference in the case when we compare only high EO entrepreneurs to the whole sample that they aren’t different from the population in the power dimension, but in the security one, they do (Figure 3).

**Figure 3** The comparison of the Schwartz’s value scales of WVS Hungary 2009 and subsample of entrepreneurs with High EO in Hungary.

<table>
<thead>
<tr>
<th>Value Dimension</th>
<th>WWS Hungarian citizens 2009, N=1007</th>
<th>Subsample of High EO entrepreneurs 2014, N=51</th>
</tr>
</thead>
<tbody>
<tr>
<td>security*</td>
<td>1.95</td>
<td>2.67</td>
</tr>
<tr>
<td>universalism</td>
<td>2.02</td>
<td>2.51</td>
</tr>
<tr>
<td>conformity</td>
<td>1.76</td>
<td>2.88</td>
</tr>
<tr>
<td>tradition*</td>
<td>2.57</td>
<td>3.27</td>
</tr>
<tr>
<td>benevolence*</td>
<td>2.00</td>
<td>2.57</td>
</tr>
<tr>
<td>self-direction*</td>
<td>1.63</td>
<td>2.57</td>
</tr>
<tr>
<td>hedonism</td>
<td>2.76</td>
<td>2.71</td>
</tr>
<tr>
<td>achievement*</td>
<td>2.31</td>
<td>3.12</td>
</tr>
<tr>
<td>power</td>
<td>3.59</td>
<td>3.88</td>
</tr>
<tr>
<td>stimulation*</td>
<td>3.08</td>
<td>4.21</td>
</tr>
</tbody>
</table>

*statistically significant difference between the two samples (p<0.05)

Source: Own construction

In the case of entrepreneurs with different levels of EO, we have found significant differences in four dimensions (Figure 4) supporting H2; the value structure of entrepreneurs with high entrepreneurial orientation is different from that of entrepreneurs with low entrepreneurial orientation. The lower value of stimulation (p<0.001) and the higher value of security (p=0.002) suggest that entrepreneurs with high EO take significantly more risks. Self-direction (p<0.001) is in a relationship with
innovativeness that is also more characteristic of those having a high EO. Based on the values of benevolence (p=0.015), we may claim that respondents with high EO care more with their social networks as literature says (e.g. Hronszky 2002). These results seem to be trivial if we consider that more innovative, proactive and risk-taking entrepreneurs are more self-directed and security is less important to them. However, if we take the lack of differences as well as the importance of the self-transcendent values into consideration, we may see that despite lay perceptions of entrepreneurs, they do not hold the values of some capitalist exploiters. Universalism (that includes the protection of environment and tolerance) is at the second place in the order of values based on their importance in both cases. Benevolence, referring to helping a group close to the individual, is a significantly more important value for high EO entrepreneurs. Power, in turn, which includes striving to be rich, is among the last ones. The order of the values is similar in the case of those that have low EO as well, aside from the salient differences in self-direction and security, which derives from the definition of EO.

*statistically significant difference between the two samples (p<0.05)

**Figure 4** The comparison of the value scales of high EO and low EO entrepreneurs

In the case of leaning orientation (LO), it is also true that the order of values is similar (Figure 5). In this case, the difference is significant in the first three places of the list (p<0.05). This is supporting H3: the value structure of entrepreneurs with high learning orientation is different from that of entrepreneurs with low learning orientation. Self-direction is closely related to learning, the difference here was expected. In the case of
benevolence, the difference may be explained by the fact that one of the subscales of LO, namely openness, is about supporting bottom-up initiatives and taking group interests into consideration. Universalism is very important in the case of a high LO. This may be explained by the fact that environmental protection and sustainability are concepts that entrepreneurs need to interiorize, and during their application, many new things have to be learnt. Those who are capable of doing this are more open to new ideas.

Figure 5 The comparison of the value scales of high LO and low LO entrepreneurs

At last, we examined the correlation between EO and LO. As H4 says: the level of entrepreneurial orientation and the level of learning orientation are strongly correlated despite that apparently different factors form them. We have found a moderate correlation \((r=0.312)\) between them which is significant on the \(p<0.001\) level. Even though they are correlated, we have seen (Figure 4 and 5) that the effects of them on value dimensions are somewhat different. We think that this correlation is remarkable and does worth further research.

9. Conclusions

In this paper, we examined whether entrepreneurs are different from the general population regarding their values, and motivations. We also explored whether entrepreneurs with high EO differ from those with a low EO, and the same in the case
of LO. For our research, we have used the measure developed by Schwartz (2011) as values included in it are in connection with individuals’ motivations and aspirations. Our contribution to the field is that we have showed that different basic values are important for entrepreneurs and for entrepreneurs with different orientations, or even though they have similar order, the difference is significant between the levels of them. An important result is that universalism and benevolence are values close to entrepreneurs, indicating that these actors of the economy realize the importance of cooperation and perhaps sustainability.

The difference in important values in the case of LO is also noteworthy. Where learning orientation is high, they can especially be characterised by universalism. In the case of future entrepreneurs of a science park, like ELI that we mentioned in our Introduction, we must consider that in order to accept a positive attitude towards responsible innovation, we should propagate the importance of factors of learning orientation. So, the probability of realising such innovations may be increased by orienting entrepreneurs towards realising the importance of open thinking and shared responsibility.

Analysis presented in this paper will have to be broadened at several points in the future. Augmented by existing data, these results might be supplemented by information about characteristics of economics and industries perceived by entrepreneurs, as well as about relationships between the measured values, orientations and economic performance. Our research is not representative; convenience sampling might have had a significant effect on the distribution of demographic factors. However, we suppose that the emergence of the discussed values and orientations is characteristic of the given culture. We see these results as an important step to understand the values driving the behaviour of entrepreneurs.

10. References


WV5_Data_Hungary_2009_spss_v_2014_04_28.zip