Motivation, self-efficacy, and risk attitudes among entrepreneurs during transition to a market economy

Tadeusz Tyszka\textsuperscript{a,}\textsuperscript{*}, Jerzy Cieśl\textsuperscript{b}, Artur Domurat\textsuperscript{c}, Anna Macko\textsuperscript{a}

\textsuperscript{a} Faculty of Economic Psychology, Kozminski University, ul. Jagiellonka 59, 03-301 Warsaw, Poland
\textsuperscript{b} Faculty of Management, Kozminski University, ul. Jagiellonka 59, 03-301 Warsaw, Poland
\textsuperscript{c} Faculty of Psychology, University of Warsaw, ul. Stawki 5/7, 00-183 Warsaw, Poland

ABSTRACT

In this research were investigated the three most frequently studied characteristics of entrepreneurs – motivation, self-efficacy, and risk attitudes. We divided the sample of entrepreneurs into two subgroups: opportunity-driven vs. necessity-driven. In agreement with findings of research performed in countries with developed market economies, we found that the need for independence and the need for achievement were of higher importance to the entrepreneurs than to the non-entrepreneurs. However, this was only true of the opportunity-driven subgroup of entrepreneurs, while not of those categorized as necessity-driven. In contrast, the most important motive in the group of non-entrepreneurs and as well as the necessity-driven subgroup of entrepreneurs was job security. In accordance with Knight’s claim, we found that opportunity-driven (but not necessity-driven) entrepreneurs revealed higher levels of self-confidence than the group of employees. We did not find support for the claim that entrepreneurs are more risk-prone than wage earners. On the other hand, entrepreneurs (both opportunity- and necessity-driven) reported more everyday risky investment activities than wage earners did. We interpret this observation in terms of the necessity of entrepreneurs for risk-taking, rather than personal preference and liking.

\textsuperscript{*} Corresponding author. Tel.: +48 22 519 21 89.
E-mail address: ttyszka@wspiz.edu.pl (T. Tyszka).

© 2011 Elsevier Inc. All rights reserved.

1. Introduction

There is a long history of research on the personal characteristics (traits and motivation) of entrepreneurs (see, e.g., Brandstætter, 1997). The general finding is that although some traits and motives are related to both an individual’s decision to become an entrepreneur (e.g., Wärneryd, 1988), as well as to venture performance (Baum et al., 2001), these relationships are generally weak. The most probable reason for this seems to be that the entrepreneurs do not function in isolation from environmental factors.

The overall objective of the present study was to examine motivation, self-efficacy, and risk attitude – the three most frequently studied characteristics of entrepreneurs – in a specific environment. That environment being Poland in transition. When studying entrepreneurs and entrepreneurship in Poland and other Central-East European countries, one cannot avoid placing the whole analysis in the context of a systemic change – of a radical socio-economic and political transition from a Communist to a market economy. One reason for this is the relatively short time elapsed since the dismantling of the Communist bloc in Central and Eastern Europe. Such a period of approximately 20 years in most country has been proven too brief to allow a full-degree of market maturity, particularly in the shaping of the relevant environment of certain institutions. As Osborn and Slomczynski (2005) state, the historical developments that took place during the Communist era and during the transition (particularly in its initial years), have profoundly affected attitudes and perceptions as well as the pool of available entrepreneurial skills.

How did these historic roots affect the performance and operating patterns of Polish entrepreneurs once the systemic transition got underway in 1989? Most striking was the obsolete character of specific operating skills embedded in the context of a command economy. Even despite substantial experience in the field, the apparent lack of a proactive, customer-focused attitude among the “old entrepreneurs” made them unable to cope with the new reality and, all the more so, to compete with new entrepreneurial start-ups. According to estimates, less than 10% of the 1.7 million businesses currently active in Poland can trace their roots to the pre-1989 period. Those which were able to survive had to entirely re-engineer their businesses, as illustrated by the following statement of an old-style entrepreneur:

\[ \text{...} \]
In 1989 Poland changed to such an extent, that in order to continue my prosperous business I had to start de novo. The same business, in a different environment, became a new kind of activity (Osborn and Słomczynski, 2005, p. 88).

1.1. Entrepreneurial motivation and self-efficacy

It is commonly assumed – not without empirical support – that individuals choose career roles matching their needs and values. There is a long history of theoretical and empirical efforts to identify the reasons driving individuals to become entrepreneurs. The main results have been rather consistent. Scheinberg and MacMillan (1988), who surveyed over 1400 business owners in 11 countries, identified 6 broad categories of reasons that entrepreneurs offered for creating a business: the need for approval, the perceived instrumentality of wealth, degree of communitarianism, the need for personal development, the need for independence, and the need for escape. Continuing this exploration, Birley and Westhead (1994), surveyed 405 British business owners. They identified seven factors that drove individuals to start up a business: the need for approval, the need for independence, the need for personal development, welfare considerations, the perceived instrumentality of welfare, tax reduction, and the example of role models. Interestingly enough, research by Smallbone and Welter (2001) showed that in transition economies (e.g., Moldova, Belarus, Ukraine) motives given for starting one’s own businesses were not considerably different from those reported in market economies. The need for independence, personal development (personal full-fillment) and personal wealth (to boost income) were also among the most frequently declared motives in countries of transition economy.

In summary, research into the motives directing individuals into an entrepreneurial life path (Gatewood et al., 1995; Carter et al., 2003) most frequently cites four motives: personal wealth (opportunities to earn more), the need for independence, the need for personal development, and the need for approval. Additionally, there are observations that entrepreneurs tend to put their families in second place behind the interests of the enterprise (Warner, 1983). Thus, compared to employees, entrepreneurs tend to accept longer work hours (Ede, 1973; Hamermesh, 1990; Chat, 1993). On the other hand, work security seems to be a factor of special interest to wage earners (Kolvareid, 1996).

Motivation is a significant factor in directing an individual into an entrepreneurial life path. Yet, in order to choose such a path, one must believe that it will allow the attainment of one’s goals. As van Praag (1999) points out, several economists (e.g., Schumpeter, Knight, etc.) dealing with entrepreneurship have recognized the role of uncertainty and self-confidence in entrepreneurship. For example, Knight (1921) emphasized that people differ with respect to self-confidence. He asserted that entrepreneurs must bear uncertainty, which permits no objective calculation of the probability of success. Thus he felt that self-confidence differentiates individuals, and in particular it distinguishes entrepreneurs from others.

Knight's concept of self-confidence is closely related to self-efficacy, defined by Bandura (1994) as task-specific self-confidence. Self-efficacy, according to Bandura, is based on past experience and attainment. Achieving success helps build a sense of self-efficacy, whereas failure, especially if it occurs before a sense of self-efficacy has been established, undermines it. Thus, according to Bandura, self-efficacy depends on personal experience. Another significant source of one's self-efficacy is vicarious experience – seeing others similar to oneself succeeding in something.

In the light of Knight’s thesis, Chen et al. (1998) asked entrepreneurs and managers to rate their confidence in dealing with various types of tasks involved in running a business. It turned out, that for some of these tasks entrepreneurs indeed had a higher sense of self-efficacy than did non-entrepreneurs. Similarly, Macko and Tyszka (2009) found that entrepreneurs showed a higher level of self-efficacy than non-entrepreneurs.

In summary, the following picture of an entrepreneur emerges. The choice of an entrepreneurial career is based above all on motives related to independence, self-realization/achievement, financial success, and perhaps social approval. These motives should differentiate entrepreneurs from wage earners, for whom motives related to job security and working time should be more important. Moreover, entrepreneurs should reveal a higher level of self-efficacy than wage earners.

1.2. How can radical systemic change in the economy affect the motivation and beliefs of people with regard to engaging in entrepreneurial activities?

To answer this question we followed the theoretical framework of Shapero and Sokol (1982), according to which the individual’s behavioral intention to start a business depends on two main factors: perceived feasibility and perceived desirability of starting a business. Shapero and Sokol (1982) defined “perceived desirability” as the personal attractiveness of starting a business, and “perceived feasibility” as the perceived capability to create a new venture. With regard to “perceived desirability,” Shapero and Sokol (1982) recognize two main factors playing a role in prompting an individual to consider entrepreneurship as a life-path option: “negative displacement” and a “between-things” factor. We believe that both of these factors were present during the period of systemic transformation in Poland. Together they resulted in a large number of new businesses being undertaken by individuals.

"Negative displacements" concern externally imposed circumstances, which deflect individuals from their previous paths, who thus have little or no choice but to start new businesses. This may be the case with refugees or with employees who have been fired, but also with managers who are bored with climbing up the corporate career ladder. Shapero and Sokol (1982) quote numerous instances of such cases. The radical systemic changes in Poland from 1989 onward affected hundreds of thousands of people, who lost their jobs in state-owned enterprises, farms and institutions – jobs that had brought less-than-satisfactory income, but were considered secure. Many such individuals had no other choice but to start a new business. We labelled them necessity-driven entrepreneurs. For this group, job security became a motive of prime importance. For people who lost jobs, opening a business of one's own was often the only chance to earn a living. They had no alternative if they wished to attain an acceptable standard of living. It was crucial for them to satisfy the needs that lie at the base of Maslow's hierarchy.

Empirical studies, particularly those concentrating on the initial period of 1989–1993, have emphasized the importance of the transition context for the decision to start one’s own business. Indeed, this was the typical view of Polish entrepreneurs interviewed by Osborn and Słomczynski (2005). They stressed the role of “Wind of history”, meaning the magnitude and the irreversibility of the social change taking place. Shapero and Sokol (1982) speak also of a “between-things” factor, which manifests itself in a situation when a certain period of life comes to a natural end (e.g., end of school, end of military service), thus necessitating a decision as to the next phase. We think that in Poland, apart from necessity-driven entrepreneurs, there were certainly others who decided to start their own businesses based upon other motives, such as the need for independence and/or self-reliance. In particular, middle-aged managers who had experienced working in the highly bureaucratic state-owned firms, where they had been unable to express their views nor put into action their initiatives, were motivated to start their own businesses. Finding themselves “between systems,” they could feel compelled to change their lives.
by an overwhelming sense of very substantial and irreversible change taking place around them. Thus, we decided to follow the distinction introduced by Reynolds et al. (2002) between opportunity and necessity entrepreneurship. They classified opportunity and necessity entrepreneurship according to the declared motivation to start and grow business. Entrepreneurs indicated whether they did it to “take advantage of a unique market opportunity” (opportunity-driven entrepreneurs) or because “it was the best option available” (necessity-driven entrepreneurs) (Reynolds et al., 2002). Other researchers differentiated between opportunity and necessity using slightly different criteria. For example, Block and Wagner (2010) classified opportunity and necessity entrepreneurs examining the circumstances under which the entrepreneur had left his/her previous job as a paid employee. A person was classified as an opportunity entrepreneur if she/he had voluntarily left her/his paid job to set up a business or became an entrepreneur after deliberately moving through several jobs to acquire all the competencies considered relevant to starting her/his own business. A person was classified as a necessity entrepreneur if she/he had left her/his previous job involuntarily.

Some researchers claim that treating entrepreneurs as driven entirely either by opportunity or by necessity motives is too simplistic. They point to the coexistence of both types of motivation in most entrepreneurs (Aidis et al., 2000; Smallbone and Welter, 2004). For example, Williams (2008) found that entrepreneurs in three different countries, one well-developed economy – the UK and two transition economies – Ukraine and Russia, the most often observed pattern of motivation involved opportunity and necessity factors (in different proportions). Yet, results of the study by Block and Wagner (2010) showed that the opportunity entrepreneurs pursue more profitable opportunities than necessity entrepreneurs. Thus, we decided to distinguish between these two categories of entrepreneur.

The above considerations led us to formulate the following hypothesis:

**H1.** Opportunity-driven entrepreneurs will be motivated more strongly than either employees or necessity-driven entrepreneurs by the need for independence and the need for achievement. On the other hand, employees and necessity-driven entrepreneurs will be motivated more strongly than opportunity-driven entrepreneurs by job security and having more time for themselves and their families.

Regarding the perceived feasibility of creating a new venture, Shapero and Sokol (1982) consider “positive pull” from the milieu (family, peers, etc.) as a factor prompting an individual to consider entrepreneurship as a life-path option. In the early period of transformation in Poland, a potential entrepreneur might observe a growing number of entrepreneurial initiatives being undertaken by his relatives, friends and co-workers. This experience might allay the individual’s fear of business failure, increase his self-efficacy, and bolster his intent to start his own business. Indeed, Shapero’s model considers self-efficacy as a proxy for feasibility.

If Knight (1921) was correct in stating that self-confidence (self-efficacy) is the feature distinguishing entrepreneurs from others, then we may formulate a hypothesis that:

**H2a.** Opportunity-driven entrepreneurs, but not necessity-driven entrepreneurs, should show higher self-efficacy than employees.

Moreover, assuming that Bandura (1994) was right in that an experience of success helps build a sense of self-efficacy, we may surmise that in regions with higher numbers of enterprises, a higher level of self-efficacy should be observed. Therefore, we formulate a hypothesis that:

**H2b.** The higher the number of enterprises in a region, the higher the level of self-efficacy among its inhabitants.

### 1.3. Entrepreneurial risk-taking

Both economic theory and every-day observation suggest that risk-taking or risk-propensity is important aspects of running a business. Mill (1848/1984) described the entrepreneur as a risk-taker and captain of enterprise, and he emphasized risk-taking as a feature differentiating an entrepreneur from a manager. Similarly, risk is a business factor that is widely assumed in economic theory to be a source of entrepreneurial profit. As Wärneryd (1988, p. 407) put it, “... there seems to be general agreement that risk bearing is a necessary ... prerequisite for being called an entrepreneur.”

However, psychological studies are not yet conclusive on the matter of entrepreneurs being more risk-prone than other people. Results are mixed. The two most frequently used measures of risk-taking are the Kogan–Wallach Choice-Dilemma Questionnaire (CDQ, Kogan and Wallach, 1964) and the risk-taking scale that is included in the Jackson Personality Inventory (JPI, Jackson, 1976). Using the CDQ, Brockhaus (1980) obtained no significant difference between entrepreneurs and managers in risk-taking propensity. In similar studies, no difference between start-up entrepreneurs and managers was found by Brockhaus and Nord (1979); nor by Masters and Meier (1988). On the other hand, in studies in which the JPI was used, entrepreneurs generally turned out to be greater risk-takers, as compared to non-entrepreneurs (Begley, 1995; Garland et al., 1995; Stewart et al., 1999; see also the meta-analytic review in Stewart and Roth, 2001).

Thus the question of whether entrepreneurs are more risk-prone than other people still lacks a definitive answer. Moreover, there is evidence that risk-taking is not a well-defined concept. Firstly, an individual need not show the same risk-propensity across various domains, such as finance and health. Keyes (1985), who analyzed cases of individuals whose occupations are commonly regarded as requiring risk-taking (e.g., gamblers, wire-walkers, entrepreneurs), concluded that they did not manifest a generalized cross-situational propensity for risk-taking. In line with this, Jackson et al. (1972) studied risk attitudes and posited a priori that the concept of risk-taking comprises at least four dimensions: (i) monetary, (ii) physical, (iii) social and (iv) ethical. Using self-reported attitudes toward risk-taking and measures of hypothetical behavior in risky situations, the authors confirmed their proposed four-dimensional model of risk propensity. Factor analysis revealed a four-factor structure that corresponded to the four domains specified. Similar results were obtained by XXXX and XXXX (2004).

Secondly, various measures of risk attitude can be used. Perhaps the most straightforward is risk-taking behavior, i.e. observed behavior in naturally occurring risky situations. Another measure of risk preference is respondents’ declared behavior in hypothetical risky situations. Here a person declares what he or she would do in a given situation. This type of measure is referred to as attitude toward risk. Other kinds of measures are also possible; for example, Kogan and Wallach (1964) constructed a Choice-Dilemma Questionnaire which asked individuals to indicate acceptable probabilities for choosing a risky option instead of a safe one. Overall, research using various measures of risk preference (actual risk behavior, declared behavior in hypothetical risky situations, etc.) is inconclusive.

Macko and Tyszka (2009), in their research on entrepreneurial risk-taking, found that in well-defined (laboratory) risky situations entrepreneurs were not more risk-prone than non-entrepreneurs. However, in naturalistic-business risky situations they found more risky choices among entrepreneurs than among non-entrepreneurs. They concluded this study with the assertion:

Perhaps, like most humans, entrepreneurs try to avoid risks. Risky ventures which they undertake outside the laboratory are perhaps the result of a special motivation and/or a special perception of the risk involved in those ventures.
In line with this idea, we speculate that risk-proneness is not a specific characteristic of entrepreneurs. On the contrary, willy-nilly, entrepreneurs have to deal with risky situations (they simply face them), so they cannot avoid undertaking risky activities in business (e.g., investing, taking out credit, etc.). As a result, even if they prefer avoiding risky situations, they show more risky business-related activities than those who have decided to remain plain wage earners. Thus, we formulate the hypothesis:

**H3. Independent of the motivation for creating one's own new business, those who have chosen an entrepreneurial career should show more risky business-related activities than those who have decided to remain wage earners.**

### 2. Method

#### 2.1. Sample

A sample of 117 entrepreneurs and 120 non-entrepreneurs, all from eastern Poland's Podlasie region, was used. All participants were male in the age 30–60, almost equally distributed among the three levels of education: below secondary, secondary education and above secondary education, with a slight preponderance of below secondary in the employee group. As to their income, all participants were asked to indicate their income on a scale with verbal instead of numerical labels, as respondents in Poland are very unwilling to answer questions concerning their income. Half of them declared average income, ca. 1/4 below the average, and a 1/4 above the average; again with a slight preponderance of “below average” in the employee group and “above average” in entrepreneurial groups. The interpretation of “the average income” was left up to the respondent.

The entrepreneurial groups were composed of the representatives of different kind of small businesses, with a preponderance of the service sector (construction, hoteliers, craftsmen, shop-owners, etc.). The non-entrepreneurial group was similar with respect to the demographic characteristics of the entrepreneurial group, with the sole difference being the type of employment. All came from three communities differing in level of entrepreneurship (measured as the number of registered firms per capita in the community). The participants were a convenience sample.

#### 2.2. Materials

**2.2.1. Classification into 2 groups of entrepreneurs**

In order to identify opportunity-driven vs. necessity-driven entrepreneurs, the sample of entrepreneurs was asked two questions concerning their attachment to self-employment:

- How willing would you be to give up your business and start working for somebody else if the income in the two places was comparable?
- How willing would you be to close down your business if you were guaranteed another source of income?

Subjects answered the above questions using a five-point scale with “decisively no” corresponding to 1 and “decisively yes” corresponding to 5.

**2.2.2. Motivation at work**

The study considered several questions related to entrepreneurship. One of these was motivation at work. Six motives were chosen for comparison: the need for independence, financial betterment, achievement, job security, social recognition, and more time for oneself and one's family (a preference for shorter work hours). These motives were chosen on the basis of their frequent occurrence in entrepreneurship-related literature. The motives were organized as pairs, each motive being paired with all others, yielding a total of 15 pairs. The subject was asked to indicate which motive in a given pair was more important to them at work.

#### 2.2.3. Self-efficacy

Schwarzer's and Jerusalem's 10-item Generalized Self-Efficacy Scale (Schwarzer and Jerusalem, 1995) was used as a measure of self-efficacy. Some typical items are: Thanks to my resourcefulness, I know how to handle unforeseen situations, and When I am confronted with a problem, I can usually find several solutions. Using a four-point scale, the subject indicates how true these statements are of him.

#### 2.2.4. Risk attitudes

**2.2.4.1. Self-reported risky financial behaviors.** The questionnaire was composed of 20 items representing risky economic behaviors with financial consequences: investments (e.g., buying shares on the stock market), consumer behaviors (e.g., shopping on the internet), gambling (e.g., gambling in a casino or in lotteries for small stakes) and illegal activities (e.g., unjustified use of tax deductions, the offering of bribes). Participants estimated their behavior frequencies on a five-point scale (1: never; 2: very seldom; 3: occasionally; 4: often; 5: always).

**2.2.4.2. Quiz vs. sure payment.** In order to have at least one direct observation of actual risky behavior, the last question in the questionnaire involved the respondent choosing the preferred form of payment. Participants could choose a payment of 20 PLN (zloty; about $6 at the time of the study) or participation in a quiz with 5 questions on popular social and economic matters. Respondents were informed that these questions were on average answered correctly by half of the subjects. Respondents would be paid 10 PLN for each correct answer and could thus win between 0 and 50 PLN for participating in the quiz.

### 3. Results

First, we divided the sample of entrepreneurs into two subgroups based upon their answers to two questions concerning the attachment to self-employment. The internal consistency in answering these two questions was moderate (Cronbach's alpha = 0.626). We dichotomized the sample into two groups according to the average score from the answers to the two questions. Those who scored up to the median (Me = 3.5) were classified as opportunity-driven entrepreneurs (N = 64), the rest (N = 53) were classified as necessity-driven entrepreneurs.

**3.1. Motivation at work**

Fig. 1 shows the relative importance of the six motives in the two entrepreneur subgroups and in the group of employees. It clearly shows that for the employee group two motives top the hierarchy: job security and more time for self and family. The same two motives dominate in the subgroup of necessity-driven entrepreneurs. By contrast, in the subgroup of opportunity-driven entrepreneurs most prominent is the need for independence.

To test Hypothesis 1, one-way ANOVAs for importance of the four motives in the three employment groups were conducted. The test revealed significant differences between the three groups with regard to the need for independence (F(2,234) = 12.874, p < 0.001), the need for achievement (F(2,234) = 3.398, p < 0.05), and job security (F(2,234) = 13.635, p < 0.001). As predicted by our Hypothesis 1, opportunity-driven entrepreneurs attributed higher importance either employees or necessity-driven entrepreneurs to the need for independence (τ(182) = 4.966, p < 0.001 and τ(115) = 1.643, p = 0.10, respectively) and for achievement (τ(182) = 2.348, p < 0.05
Motivation, self-efficacy, and risk attitudes among entrepreneurs during transition to a market economy

and \( t(115) = 2.157, p < 0.05 \), respectively). On the other hand, opportunity-driven entrepreneurs attributed lower importance than either employees or necessity-driven entrepreneurs to job security (\( t(102.8) = 4.866, p < 0.001 \) and \( t(115) = 2.448, p < 0.05 \), respectively). The three groups did not differ in rating the importance of earning more money, the need for social approval, nor in having more time for self and family.

3.2. Self-efficacy

Fig. 2 shows the average self-efficacy scores for the three groups of subjects tested: opportunity-driven entrepreneurs, necessity-driven entrepreneurs, and employees. Opportunity-driven entrepreneurs showed higher self-efficacy levels than both necessity-driven entrepreneurs and employees. A 3 (groups) \( \times \) 3 (regions) ANOVA test on self-efficacy scores yielded, in agreement with Hypothesis 2a, a group effect (\( F(2,228) = 4.753, p < 0.01 \)). Moreover, a \( t \)-test revealed significant differences between opportunity-driven entrepreneurs and employees (\( t(182) = 2.898, p < 0.01 \), as well as between opportunity-driven and necessity-driven entrepreneurs (\( t(115) = 2.816, p < 0.01 \), while none between necessity-driven entrepreneurs and employees.

Our two-way ANOVA also yielded a statistical trend on regional effect (\( F(2,228) = 2.951, p = 0.054 \)). As shown in Fig. 3, not only did entrepreneurs as a group show a higher self-efficacy level than employees, but also self-efficacy level differed by region. Higher self-efficacy levels were observed among inhabitants of regions with more numerous enterprises (Augustów being the region with the highest number of enterprises, and Tykocin that with the lowest). This supports our Hypothesis 2b, that a higher level of entrepreneurship in a region leads to increased self-efficacy.

**Fig. 1.** The relative importance of the six motives at work in two entrepreneur subgroups and in the group of employees.

**Fig. 2.** The average self-efficacy scores, in three Polish geographical municipalities, for the three groups of subjects tested: opportunity-driven entrepreneurs, necessity-driven entrepreneurs, and employees.

**Fig. 3.** The average of scores of risky investment activities (based upon a 5-item scale) among the three groups of subjects tested.
stage entrepreneurial-activity rates and the level of economic development. High rates of early stage entrepreneurial activity in low-income countries reflect the prevalence of necessity-driven entrepreneurship due to a dearth of employment opportunities. With the establishment of an industrial base, the level of entrepreneurial activity declines as more people are able to find employment. It begins to grow again in highly developed countries, reflecting increased interest in opportunity-driven entrepreneurship. What is the impact of this process on entrepreneurial motivation?

Our results show that motivational profiles of necessity-driven and opportunity-driven entrepreneurs differ substantially. The motivational profile of the necessity-driven entrepreneurs is rather close to that of wage earners. In both these groups, the motives of job security and of having more time for oneself and for family were shown to be of highest importance. On the other hand, in the group of opportunity-driven entrepreneurs the needs for independence and for achievement proved to be more important motives while job security less important than in the other two groups. This profile is in accordance with findings from countries with developed market economies (Scheinberg and MacMillan, 1988; Birley and Westhead, 1994). Thus, we may conclude that even in such a specific environment as a society adapting to a market economy, there exist individuals who begin their entrepreneurial activity, motivated by the need for independence and for achievement. Regardless of the environment, these two motives seem to play a decisive role in some individuals becoming entrepreneurs. Indeed, as portrayed by Osborn and Słomczynski (2005), such a group has survived in Poland, in spite of the Soviet-style economy with its harsh constraints on the availability of industrial supplies, with its fiscal legislation unfavorable to private businesses, etc.

4.2. Self-efficacy

In accordance with expectations, entrepreneurs as a group showed a higher level of self-efficacy than non-entrepreneurs. It is even more notable that compared to employees, the level of self-efficacy is higher only in the subgroup of opportunity-driven entrepreneurs, but not the necessity-driven ones, whose choice of an entrepreneurial career was presumably caused by externally imposed circumstances. This is in line with Knight’s assertion that self-confidence is a trait that distinguishes entrepreneurs from other people. Our results are also in agreement with several other research studies. Some show that self-efficacy differentiates business founders from non-founders (e.g., Chen et al., 1998). Others show that more self-confident founders achieved greater growth of new ventures (Baum and Locke, 2004).

Our results support the hypothesis that a higher level of entrepreneurship in a geographical region leads to increased self-efficacy. Such results seem to be in accord with Bandura’s (1994) assertions concerning how the belief in one’s efficacy could be developed. The most effective way is through an experience of mastery. Experiencing successes raises one’s sense of self-efficacy, while experiencing failures lowers it. However, a sense of self-efficacy may also be experienced vicariously. Seeing someone succeed at something increases one’s belief in efficacy, and the opposite happens upon seeing someone fail. The effectiveness of this process depends on the degree of similarity between the observer and the observed model. The observer’s self-efficacy will very likely increase if he observes the success of a peer who is perceived as having similar ability. Such a source of increased self-efficacy offers a very plausible explanation of our result. In regions with higher levels of entrepreneurship, belief in self-efficacy most likely increases through the observation of many persons with generated in this manner is likely to be strengthened later by successes experienced in running one’s own business. It could be further
strengthened by seeing fatigue and other stress reactions as a nor-
mal part of the professional routine, rather than treating them as an indication of entrepreneurial inability. Finally, self-efficacy can be additionally strengthened through social encouragement and persuasion. (This is, according to Bandura, yet another factor affecting a person’s beliefs about self-efficacy.) Our result suggests that programs aimed at stimulating entrepreneurship should not only provide training in the necessary technical skills for running a business, but also provide examples of successful entrepreneurial activity in one’s social environment.

4.3. Risk-taking

As was the case in many earlier studies, we found no support for the claim that entrepreneurs are generally more risk-prone than wage earners. In particular, entrepreneurs did not choose the quiz option over a smaller yet sure payoff more often than employees. On the other hand, we did find that entrepreneurs reported more everyday risky investment activities than wage earners. How to interpret this finding?

We tend to conclude that, in terms of risk attitudes, entrepreneurs are no different than other people. Perhaps, like the majority of humans, and in line with the prospect theory of Kahneman and Tversky (1979), entrepreneurs prefer to avoid risks. The commonplace assumption that entrepreneurs are risk-takers may stem from the fact that for an external observer, unfamiliar with the field of business, the entrepreneur’s actions – e.g., putting money into a business that could fail – might appear extremely risky. Such an impression could simply result from a lack of knowl-
edge and competence in the business field. Likewise, an external observer commonly perceives the job of a wirewalker as extremely risky, though wirewalkers may not consider it so, as shown in a statement of a wirewalker quoted by Keyes (1985, p. 10):

“You can’t be both a risk taker and a wire walker. I take abso-
lutely no risks?”.

However, there are situations when entrepreneurs do have to take risks. These are business-specific risky situations such as investing and taking out credit. As asserted by Macko and Tyszka (2009), in such situations entrepreneurs may use simple rules of thumb, accepted in their milieu. These rules have to permit risk-taking in certain specified circumstances, as other-
wise no business could be run. For example, one cannot run a business if he avoids investing money into a business that may fail. Thus, in risky business situations, entrepreneurs would more frequently, as compared to employees, choose risky options. How-
ever, it should not be attributed to high-risk-proneness among entrepre
neurs. We rather think that risky ventures undertaken by entrepreneurs are unavoidable (though undesirable) consequences of the entrepreneurial life path, regardless of the motivation behind choosing such a way: a life necessity or the need for independence, etc. This explanation is in line with two of our findings. First, we found no difference between entrepreneurs and wage earners in everyday risky activities, but did find one in the reported frequency of risky investment activities. Second, we found a significant dif-
fERENCE in the reported frequency of risky investment activities not only between the opportunity-driven entrepreneurs and wage earners, but also between the necessity-driven entrepreneurs and wage earners.

In summary, we believe that our understanding of risk-
proneness as not being a characteristic specific to entrepreneurs, but that the fact of being an entrepreneur brings along with it increased risky activities in business, could explain the differing results obtained in various studies concerning entrepreneurs’ risk attitudes. Generally, when the Kogan–Wallach Choice-Dilemma Questionnaire has been used in research, no difference was found between entrepreneurs and non-entrepreneurs. The probable reason for this is that in Kogan and Wallach’s questionnaire, individuals are asked to indicate acceptable probabilities for taking part in abstract lotteries. Thus this task is unrelated to a business environment. On the other hand, in research where the Jackson Personality Inventory has been used, entrepreneurs have shown a higher level of risk-taking than non-entrepreneurs. This inventory, in contrast to the Choice-Dilemma Questionnaire, is composed of items that directly pertain to business decision-making (e.g., “If the possible reward was very high, I would not hesitate putting my money into a new business that could fail: or, I probably would not take a chance of borrowing money in a new business deal even if it might be profitable.”). In tasks like these, entrepreneurs can show a higher level of risk-taking simply by following rules of thumb accepted in their milieu.

References


Brockhaus, R.H., 1980. Risk taking propensity of entrepreneurs. Academy of Manage-
ment Journal 23 (3), 590–592.

Brockhaus, R.H., Nord, W.R., 1979. An exploration of factors affecting the entrepre-
neurial decisions: personal characteristics vs. environmental con-

Brockhaus, R.H., Nord, W.R., 1979. An exploration of factors affecting the entrepre-
neurial decisions: personal characteristics vs. environmental con-

Brockhaus, R.H., Nord, W.R., 1979. An exploration of factors affecting the entrepre-
neurial decisions: personal characteristics vs. environmental con-

Brockhaus, R.H., Nord, W.R., 1979. An exploration of factors affecting the entrepre-
neurial decisions: personal characteristics vs. environmental con-

Brockhaus, R.H., Nord, W.R., 1979. An exploration of factors affecting the entrepre-
neurial decisions: personal characteristics vs. environmental con-

Brockhaus, R.H., Nord, W.R., 1979. An exploration of factors affecting the entrepre-
neurial decisions: personal characteristics vs. environmental con-

Brockhaus, R.H., Nord, W.R., 1979. An exploration of factors affecting the entrepre-
neurial decisions: personal characteristics vs. environmental con-

Brockhaus, R.H., Nord, W.R., 1979. An exploration of factors affecting the entrepre-
neurial decisions: personal characteristics vs. environmental con-

Brockhaus, R.H., Nord, W.R., 1979. An exploration of factors affecting the entrepre-
neurial decisions: personal characteristics vs. environmental con-

Brockhaus, R.H., Nord, W.R., 1979. An exploration of factors affecting the entrepre-
neurial decisions: personal characteristics vs. environmental con-


