

# What makes successful entrepreneurs different in temporal and goal-commitment dimensions?

**Aneta Przepiorka**

Institute of Psychology, The John Paul II  
Catholic University of Lublin, Poland

## Abstract

**Purpose:** The article is an attempt to identify, with respect to temporal and goal-commitment dimension (effort, persistence, goal satisfaction), the characteristics of entrepreneurs in different stages of the entrepreneurial process (the prelaunch and postlaunch phases) and to indicate the differences between entrepreneurs and nonentrepreneurs.

**Methodology:** To answer this question, data from three samples were collected. Actual ( $N = 127$ ) and nascent ( $N = 344$ ) entrepreneurs filled questionnaires: the Scale of Entrepreneurial Success, the Zimbardo Time Perspective Inventory, and Goal Questionnaire. These two groups were compared to participants either not interested in opening their own business or showing low intention to start their business ( $N = 475$ ).

**Findings:** The results showed that both types of entrepreneurs were more future-oriented and perceived their presence less fatalistically than the group not interested in becoming entrepreneurs. Additionally, entrepreneurs put in more effort, were more persistent in pursuing their goals, and derived more satisfaction from their goals.

## Keywords

Entrepreneurship, time perspective, goal commitment, entrepreneurial success

---

### Corresponding author:

Aneta Przepiorka, Institute of Psychology, The John Paul II Catholic University of Lublin, Poland.  
Email: aneta.przepiorka@gmail.com

## Introduction

There is a broad consensus among researchers on the importance of identifying those characteristics in new entrepreneurs that may foster achieving success in starting up and running a business. Despite some criticism against the use of the personality approach in explaining the phenomenon of entrepreneurship (Gartner, 1989, 2001; Low and MacMillan, 1988), there are many advocates of the role of psychological factors in starting a business and achieving success (e.g. Capaldo, 1997; Hisrich et al., 2007; Koh, 1995; Stewart et al., 2003). A great body of research suggests certain characteristics that differentiate those who want to become entrepreneurs, for example inner locus of control (e.g. Hansemark, 2003; Rahim, 1996; Schiller and Crewson, 1997), self-efficacy (e.g. Laguna, 2013; Simon et al., 1999; Utsch et al., 1999), social skills (e.g. Baron and Markman, 2003), achievement motivation (e.g. Collins et al., 2004; Diaz and Rodriguez, 2003), or risk propensity (e.g. Hull et al., 1980). In accordance with these findings, recent meta-analyses confirmed the essential role of personality traits in entrepreneurship (Johnson, 1990; Müller and Gappisch, 2005; Rauch and Frese, 2007; Shane and Khurana, 2003; Stewart and Roth, 2001). Interpersonal differences among entrepreneurs in these characteristics may explain the fact that entrepreneurs will have different achievements (Baum et al., 2007).

### *The process of entrepreneurship*

The present study concerned Polish entrepreneurs. As indicated by Ireland et al. (2008), Poland is one of the countries in Central and Eastern Europe that have undergone transition from socialism to capitalism. The fact that the capitalism in this country is still in the stage of development makes the research even more interesting. Additionally, considering the fact that the presented study was conducted in the times of worldwide economic crisis, during which Poland sustained a relatively strong and stable position on the market, it is worth investigating the issue of private enterprise in that economic, cultural, and social context. The contribution of small and medium enterprises (SMEs) to the gross domestic product (GDP) in 2010 in Poland constituted 47.7% of the total (Łapiński et al., 2012). More specifically, almost 29.6% was produced by the micro business sector, 10.4% by middle-sized business, and 7.7% by small business. Small companies stimulate regional development and provide with new workplaces. These examples show the crucial role of small business in economic growth and argue for the relevance of accumulating knowledge on the entrepreneurial process.

Since starting a company is a long-term process and is the result of planned behavior when the person prepares a business plan and gathers

the necessary means in order to create their business, comparing entrepreneurship to goal-directed behavior becomes an increasingly common approach among researchers (e.g. Laguna, 2013). The decision to start a company is the result of deliberate action and careful planning that needs energy and commitment in order to be implemented. Bagozzi et al. (1998) indicated that positive emotions in the process of achieving a goal play an important role in predicting the possible outcomes of a given action and assure us that we are moving in the right direction in pursuing our goals. Zaleski (1987) pointed out that a long-term future perspective was related to higher persistence and goal satisfaction.

However, considering that entrepreneurship is a process (e.g. Baron, 2007; Laguna, 2013) and that each stage is of a different nature, with entrepreneurs having a different array of tasks to complete and challenges to face, the role of personality characteristics may differ depending on the stage of business creation. The same refers to the issue of measuring achievements at different stages. According to Baron (2007), the evaluation of success has a different nature in the prelaunch phase than in the post-launch phase. Measures of success in the postlaunch phase refer to the situation and position of the company in the market. However, for those who are in the prelaunch phase, the strength of the intention to start a company and the progress towards launching their own business may be adequate measures of achievement.

Referring to achievements, Frese (2007) underlines the role of the entrepreneur's activeness and dedication to the goal in the process of starting his or her own business and at a later stage as a key factor in the final outcome. Strong commitment and endurance, especially while launching a new business, are the basic requirements (Frese, 2009). In accordance with this result, being committed to the goal is a prerequisite for high performance (Hollenbeck and Klein, 1987) and is linked with the tendency not to decrease the level of the goal (Campion and Lord, 1982). Zaleski (1991) enumerated three dimensions of human action, namely: persistence, effort, and goal satisfaction—these will be referred to further in the analyses as goal-commitment dimensions. Additionally, he explained persistence as a construct similar to determination and will power to sustain a given goal even while facing obstacles. Effort is the amount of energy put into an action in order to obtain the expected higher level of performance. Goal satisfaction is linked with positive feelings: with pleasure derived from undertaking actions that bring one closer to the goal.

On the basis of the pertinent literature search, a set of different characteristics related to their temporal perspective were indicated as distinctive ones for entrepreneurs. For instance, the studies that compared entrepreneurs with the unemployed or employees revealed that the former were

more future-oriented (Wesołowska, 2003), set more goals, and were better at planning and managing their time (Strzalecki, 2010). The former groups also differed in the ability to pursue long-term tasks, the ability to achieve them, and the willingness to postpone gratification. Moreover, effective entrepreneurs were more resistant to obstacles and less likely to dwell on negative events or miss opportunities (Baron, 2000), which may result from their forward-looking orientation. Future orientation is connected with looking ahead and creating a vision.

### *The role of time perspective*

Although research on time perspective seems promising in the context of entrepreneurship when it incorporates personality as well as motivational factors (Zaleski, 1988; Zimbardo and Boyd, 1999) that are predictors of entrepreneurial behavior, there has been, to my best knowledge, a limited number of papers devoted to the issue of time perspective in the context of entrepreneurship. Research to date has undertaken the issues of time dimensions in strategic planning and management (Das, 1991), marketing (Quintens and Matthyssens, 2010), and consumer behavior (Guy et al., 1994; Kaufman and Lane, 1990). Bird and West (2007) stressed the importance of temporal dynamics in entrepreneurship. The intention of starting a business develops over time, and business creation itself takes some amount of time (Bird, 1992). Time is a kind of bridge between formulating the idea and implementing it. Future time perspective is related to the vision of the company, the development strategy, and survival on the market. Specific events or actions such as formulating a business plan, or selling a product to the first customer mark the time frame in the history of one's business. Future orientation is displayed by the innovative approach in business and growth expectancy. Cooper et al. (1997) put a strong emphasis on the view of time as a resource that can be allocated and effectively managed. The authors conducted a longitudinal study and revealed that there was an association between time allocation and business performance. Time allocation depends on the primary goal at the stage of opening a company and managerial experience.

Time perspective as the preference for one of the temporal dimensions (past, present, or future) plays a great motivational role, exerting influence on goal setting, behavior, and decisions by storing experiences and structuralizing events in a person's daily life (Zimbardo and Boyd, 1999). As shown in the body of research, there is a relation between specific temporal dimensions and well-being (Drake et al., 2008), self-esteem, depression (Zimbardo and Boyd, 1999), mindfulness (Seema and Sircova, 2013), or personality (Kairys, 2010).

On the one hand, time perspective may be a predictor of positive behaviors such as physical activity (Hall and Epp, 2013) or planning (Paixao et al., 2012), but on the other it predicts risky driving or substance use (Keough et al., 1999). Those who show hedonistic present orientation are more prone to risky health behaviors, whereas being future-oriented has been found to prevent such behaviors (Henson et al., 2006). Additionally, being fatalistic-oriented was more often related to health-destructive behaviors. As has been shown, students with future time perspective more easily employ strategies that allow them to concentrate on actions leading to goal achievement and to overcome distractions (Avci, 2013). Future time perspective enhances motivation, task orientation, and self-regulation (Lens et al., 2002). It is related to planning and setting long-term goals. At the beginning of the entrepreneurial process, future orientation is the prerequisite for making the decision, implementing the idea, and undertaking certain activities to achieve the goal. In the course of time, future orientation may develop and help to achieve success. Considering the function of time perspective and its profound role in directing and stimulating motivation and goal-directed behavior, we may assume that time perspective will be another feature conducive to achieving the entrepreneurial goal—namely, launching as well as successfully running one's own business.

## The present study

In the present study, the aim was to identify the new characteristics that may facilitate the process of achieving entrepreneurial success, and therefore I examined the link between time perspective, goal commitment, and entrepreneurial success at different stages of the entrepreneurial process, namely the prelaunch and the postlaunch phases. The second aim was to compare these three samples in order to describe the most outstanding characteristics of entrepreneurs in terms of time perspective, dimensions of goal commitment (effort, persistence, and goal satisfaction), and entrepreneurial success.

We posed the following hypotheses:

H1: There will be a positive relationship between future time perspective and entrepreneurial success.

H2: There will be a positive relationship between entrepreneurial success and dimensions of goal-commitment (effort, persistence, goal satisfaction).

H3: Entrepreneurs both in the prelaunch phase and in the postlaunch phase will score higher on future time perspective than nonentrepreneurs.

H4: Entrepreneurs both in the prelaunch phase and in the postlaunch phase will score higher on effort, persistence, and goal satisfaction than nonentrepreneurs.

## Methods

### *Sample and procedure*

The sample comprised three groups. The first group consisted of 127 small business owners. They ranged in age from 32 to 64 years ( $M$  age = 39.14 years;  $SD = 10.34$ ). Most were male (73%). The data were collected on seminars designed for small enterprises or individually by appointment. All participants were owners of small businesses in different fields: trade, construction, production, and services. There were some criteria that had to be met to be included in this group. First, each employed up to 10 people. Second, they were all both founders and managers of their companies.

The data for the other two groups (potential entrepreneurs and nonentrepreneurs) were collected during the lectures, seminars, and trainings on the subjects of economics, business, and entrepreneurship. A majority of the participants were still students in the final year of their graduate studies. But in reality not everyone who participates in the trainings is willing to start a company, or at least the motivation varies. In order to differentiate those who really want to start a company from those who do not have such an intention or whose intention is weak, the group filled out the Scale of Entrepreneurial Intention, consisting of four questions. As a large body of literature suggests, intention is a good predictor of actual behavior (e.g. Ajzen, 1991) also in the field of entrepreneurship (e.g. Laguna, 2006). On the basis of the scores obtained on the scale the whole group was divided into two subgroups by median split: one showing a lack of intention or low intention ( $N = 475$ )—so-called nonentrepreneurs—and the other showing high intention ( $N = 344$ ), labeled as nascent entrepreneurs. This sampling technique offers the ability to compare nascent entrepreneurs with those who have no intention to launch their own business and it is often used in the literature (Laguna, 2010). In the group of nonentrepreneurs, participants' responses to questions on the Scale of Entrepreneurial Intention regarding whether they were interested in starting their own company were mostly 1 or 2. In this group, there were 273 women and 202 men with a mean age of 22 years ( $SD = 2.23$ ). The other group consisted of 344 potential entrepreneurs who expressed a strong intention to start their own company. On the Likert scale, they responded 4 or 5 to the majority of the questions. The group with the highest intention consisted of 167 females and 177 males ( $M$  age = 23.27 years;  $SD = 4.08$ ).

### *Measures*

In order to test the hypotheses, a battery of measures was used. The only difference in measures appeared in the case of evaluating success—because of the rationale mentioned in the introduction.

In the group of actual entrepreneurs, entrepreneurial success was assessed with the Questionnaire of Entrepreneurial Success. This method was compiled of two sets of questions (Baer and Frese, 2003; Wiklund and Shepherd, 2005) (e.g. *How successful are you in comparison with your competitors? How successful is your business in comparison to other businesses in the same industry and of about the same size?*). Consistently with other studies (e.g. Unger et al., 2008), factor analysis using the principal components method with *varimax* orthogonal rotation revealed one factor that accounts for 40% of the variance. The reliability of this scale was good ( $\alpha = 0.89$ ).

In the group in the prelaunch phase, Scale of Prelaunch Achievements (Przepiorka, 2011) was used, consisting of 20 items (e.g. *I thoroughly elaborated a business plan; I have an idea and vision for my company*). The scale had a good reliability ( $\alpha = 0.94$ ) and a one-factor structure.

In order to assess the strength of entrepreneurial intention among participants that did not have their own company the Scale of Entrepreneurial Intention was used (Laguna, 2010). The scale was used to distinguish two groups: those not interested in starting a company (without entrepreneurial intention) and potential entrepreneurs (with entrepreneurial intention). Four questions were answered on a 5-point rating scale, ranging from 1 (*not true at all*) to 5 (*very true*) (e.g. *I decided to start my own company; As soon as it will be possible, I will open my own company*). The internal consistency (Cronbach's alpha) was satisfactory ( $\alpha = 0.84$ ).

Time perspective was measured using 56-item Polish adaptation (Sobol-Kwapińska, Przepiorka, and Zimbardo, under review) of the *Zimbardo Time Perspective Inventory* (Zimbardo and Boyd, 1999). The Inventory comprised five time perspective dimensions: past negative ( $\alpha = 0.83$ ); hedonistic present ( $\alpha = 0.81$ ); future ( $\alpha = 0.76$ ); past positive ( $\alpha = 0.61$ ); fatalistic present ( $\alpha = 0.72$ ).

The dimensions of goal commitment were assessed using the Goal Questionnaire (Zaleski, 1991). All items were rated on a 7-point scale (1 – *totally disagree* to 7 – *totally agree*). The whole scale consisted of five subscales. The participants had to imagine a goal from their professional life that was important to them. It could be either launching a venture or successfully running a company, or anything related to their professions. They were asked to refer the questions to their goal. For the purpose of this study, three subscales referring to action were used: the Effort Subscale ( $\alpha = 0.95$ ) (e.g. *I put a great effort to achieve success toward my goal*), the Persistence Subscale ( $\alpha = 0.88$ ) (e.g. *Despite being tired I undertake some actions to accomplish a given goal*), and the Goal Satisfaction Subscale ( $\alpha = 0.87$ ) (e.g. *I am satisfied with the actions I undertake toward meeting my goal*).

**Table 1.** The correlations between demographic characteristics and success, time perspective and goal engagement in the whole group ( $N = 946$ ).

	Age	Gender	Education	Marital status
Success	0.48***	0.09**	0.48***	-0.05
Negative past	-0.08*	-0.04	-0.10**	-0.07*
Hedonistic present	-0.01	-0.10**	-0.03	-0.06
Future	0.18***	-0.02	0.11***	0.03
Past positive	0.00	-0.07	-0.07*	0.00
Fatalistic present	-0.08*	-0.03	-0.09**	-0.00
Effort	0.36***	0.05	0.33***	0.02
Persistence	0.20***	0.03	0.20***	0.04
Goal satisfaction	0.29***	0.05	0.29***	0.02

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

## Results

Considering that time perspective is related to age (Siu et al., 2014) and that entrepreneurship is related to education and gender (Jones, 2014; Warnecke, 2013), in the first step of analysis Spearman's correlations between success and demographic variables (age, gender, education, marital status) and psychological variables such as temporal perspective and goal commitment were tested (see Table 1). There was a positive relationship between success and age, gender, and education. Negative past correlated negatively with age, education, and marital status. Women tended to have a more hedonistic present perspective than men. Education and age correlated positively with future orientation as well as with all three goal-commitment dimensions: effort, persistence, and goal satisfaction; they correlated negatively with fatalistic present. Positive past correlated negatively with education.

### *Correlations between demographic characteristics and success, time perspective, and goal engagement for the whole group (N = 946)*

The  $2 \times 3$  (ANOVA) was used to analyze the gender and group (nonentrepreneurs, nascent entrepreneurs, actual entrepreneurs) and to determine their effect on success. The ANOVA revealed significant main effect for group  $F(2,878) = 884.017$ ;  $p < 0.001$ ,  $\eta^2 = 0.003$  whereas main effect for gender were not significant  $F(1,878) = 3.044$ ; n.s.  $\eta^2 = 0.668$ . The explanation here is that males and females do not differ in terms of their success.



There is correspondingly no significant interaction effect  $F(2,878) = 1.010$ ; n.s.  $\eta^2 = 0.002$ . This indicates that there is no significant difference in the effect of group on success for males and females.

In order to verify the relationship between time perspective, the dimensions of goal commitment (effort, persistence, and goal satisfaction), and entrepreneurial success, further analyses were computed for three groups: nonentrepreneurs, nascent entrepreneurs, and actual entrepreneurs. The means, standard deviations, and Pearson correlations for these three groups are presented in Tables 2–4.

Hypothesis 1 was confirmed in the groups of nascent and actual entrepreneurs—success correlated positively with future orientation. Additionally, in the group of nascent entrepreneurs, success correlated negatively with fatalistic present. In each of the three groups, success was found to have a positive correlation with effort, persistence, and goal satisfaction, which supported Hypothesis 2. This may mean that those who put in more effort, were more persistent, and derived more satisfaction from their goals achieved greater success. In the group of nascent entrepreneurs there was a positive correlation between hedonistic present, persistence, and satisfaction derived from the goal. In group of nascent and actual entrepreneurs, future orientation correlated positively with effort, persistence, and goal satisfaction. In the group of actual entrepreneurs, negative past correlated negatively with effort. Those who perceived their past as negative put less effort into their actions. Fatalistic present correlated negatively with effort meaning that those who perceived their present as a miserable and negative period put less effort into running their companies.

In order to verify hypothesis on the characteristics that distinguish entrepreneurs from nonentrepreneurs (Hypotheses 3 and 4), the one-way ANOVA test was used along with the post-hoc Tukey's test for different  $N$  samples to test differences among the groups. Three groups were compared: those with low and high intention of starting their own business and those already running their companies. The results are presented in Table 5.

In terms of entrepreneurial success, actual entrepreneurs have the greatest achievements in comparison to other groups. Actual entrepreneurs scored the lowest on fatalistic present, significantly lower than the group with low intention to start a business. The group of entrepreneurs scored the highest on the future subscale. They also scored the highest on the dimensions of goal commitment: persistence, effort, and goal satisfaction.

## Discussion

The behavior of entrepreneurs is set in time. Formulating intention, collecting resources, and, finally, starting a business takes a certain amount of

**Table 2.** Means, standard deviations, and Pearson *r* correlations among the variables in the group of nonentrepreneurs (N = 475).

	M	SD	1	2	3	4	5	6	7	8	9
1. Success	1.18	0.30	—								
2. Negative past	2.73	0.71	-0.06	—							
3. Hedonistic present	3.27	0.55	0.01	-0.01	—						
4. Future	3.64	0.53	0.01	-0.11*	0.02	—					
5. Positive past	3.56	0.72	0.07	-0.05	0.31***	0.15**	—				
6. Fatalistic present	2.63	0.68	-0.00	0.41***	0.19***	-0.30***	0.12*	—			
7. Effort	2.34	1.06	0.15**	-0.08	0.11*	0.06	0.05	0.01	—		
8. Persistence	2.70	1.32	0.17***	-0.06	0.08	0.06	0.05	0.02	0.88***	—	
9. Goal satisfaction	2.10	1.03	0.12**	-0.13**	0.13**	0.07	0.08	0.00	0.80***	0.73***	—

\**p* < 0.05; \*\**p* < 0.01; \*\*\**p* < 0.001.

**Table 3.** Means, standard deviations, and Pearson *r* correlations among the variables in the group of nascent entrepreneurs (*N* = 344).

	M	SD	1	2	3	4	5	6	7	8	9
1. Success	1.82	0.69	–								
2. Negative past	2.73	0.78	0.02	–							
3. Hedonistic present	3.35	0.52	0.10	0.05	–						
4. Future	3.81	0.58	0.22***	–0.14**	–0.01	–					
5. Positive past	3.58	0.74	0.03	0.00	0.25***	0.15**	–				
6. Fatalistic present	2.54	0.71	–0.12*	0.39***	0.20***	–0.34***	–0.34***	–			
7. Effort	4.62	1.32	0.53***	0.00	0.10	0.12***	0.00	–0.03	–		
8. Persistence	4.96	1.21	0.33***	0.00	0.08*	0.11***	0.01	–0.01	0.81***	–	
9. Goal satisfaction	4.50	1.49	0.47***	–0.01	0.10**	0.11***	0.01	–0.04	0.86***	0.75***	–

\**p* < 0.05, \*\**p* < 0.01; \*\*\**p* < 0.001.

**Table 4.** Means, standard deviations, and Pearson *r* correlations among the variables in the group of actual entrepreneurs (*N* = 127).

	M	SD	1	2	3	4	5	6	7	8	9
1. Success	3.40	0.60	–								
2. Negative past	2.59	0.78	0.01	–							
3. Hedonistic present	3.29	0.62	0.06	0.36***	–						
4. Future	4.03	0.52	0.33***	–0.18*	0.03	–					
5. Positive past	3.61	0.81	0.06	0.15	0.35***	0.14	–				
6. Fatalistic present	2.33	0.81	–0.06	0.67***	0.44***	–0.25**	0.05	–			
7. Effort	5.72	0.91	0.41***	–0.24**	–0.13	0.47***	0.16	–0.23*	–		
8. Persistence	5.10	0.94	0.25**	–0.04	–0.03	0.28**	0.17	–0.03	0.58***	–	
9. Goal satisfaction	5.43	1.18	0.48***	–0.16	–0.13	0.34***	0.10	–0.16	0.56***	0.40***	–

\**p* < 0.05; \*\**p* < 0.01; \*\*\**p* < 0.001.

**Table 5.** Comparison among groups with different strength of intention to start up a business—low ( $N = 475$ ) and high intention ( $N = 344$ ) and actual entrepreneurs ( $N = 127$ ).

Variables	Low intention $N = 475$		High intention $N = 344$		Actual entrepreneurs $N = 127$		$F (df = 2)$	$\eta^2$	Post hoc
	$M$	$SD$	$M$	$SD$	$M$	$SD$			
Negative past	2.73	0.71	2.72	0.78	2.58	0.77	1.95	0.15	–
Positive past	3.55	0.72	3.58	0.74	3.61	0.82	0.24	0.02	–
Hedonistic present	3.27	0.54	3.35	0.52	3.28	0.62	2.48	0.14	–
Fatalistic present	2.62	0.67	2.53	0.70	2.33	0.81	8.60*	0.08	1-3
Future	3.64	0.53	3.81	0.57	4.03	0.51	27.99*	0.10	1-2, 1-3, 2-3
Effort	2.34	1.05	4.62	1.31	5.72	0.90	633.82*	0.70	1-2, 1-3, 2-3
Persistence	2.70	1.32	4.96	1.21	5.09	0.94	404.92*	0.49	1-2, 1-3, 2-3
Goal satisfaction	2.09	1.03	4.50	1.49	5.43	1.18	569.18*	0.48	1-2, 1-3, 2-3

\* $p < 0.001$ .

time, too. The whole action of planning and decision-making involves allocating time and concentrating on the crucial aspects that may facilitate the process of starting and running a company. Firstly, the present study attempted to identify certain psychological factors that distinguish entrepreneurs from nonentrepreneurs. Secondly, it was to define the association between time perspective, effort, persistence, and goal satisfaction in the group of successful entrepreneurs in the prelaunch and postlaunch phases.

In accordance with Hypothesis 1, it was true for both groups that those who were more future-oriented were more successful in what they were doing. Future orientation may be related to the lower tendency to think counterfactually that entrepreneurs are characterized by (Baron, 1999). Instead of ruminating over losses, entrepreneurs stay focused on what should be done and how to prevent any negative consequences in the future. Additionally, in the group of nascent entrepreneurs there was an association between persistence, goal satisfaction, and hedonistic present. This may stem from the fact that this group consisted mainly of young people, who need enjoyment and pleasures at this developmental stage (Erikson, 1968). They may still concentrate more on pleasure and follow more persistently the goal which they enjoy and find compelling.

The present results are consistent with the prediction regarding the association between the dimensions of goal commitment and entrepreneurial success (Hypothesis 2). At both stages—prelaunch and postlaunch—those who were more engaged, were more persistent, and satisfied with the goal

achieved higher success. Similarly, other evidence suggested that effort was related to higher performance at work (e.g. Blau, 1993; Gardner et al., 1989). These findings support the point stressed by Frese (2007), namely that being active is of paramount importance in achieving success and provides a person with more possibilities in pursuing their goals.

In line with Hypotheses 3 and 4 some differences with regard to time perspective, effort, persistence, and goal satisfaction were revealed between three groups. As regards time perspective, actual entrepreneurs were the group less fatalistically oriented towards the present. We may relate this results to what Zimbardo and Boyd (2008) indicated—namely, that those who have fatalistic orientation towards the present do not set themselves many goals; they have an external locus of control, they are not proactive, and they do not see the meaning in undertaking action on their own. This result may explain the fact that they are unwilling to put more effort into their action when they do not expect any positive outcome. Likewise, in the present study, those who perceived their present in a fatalistic manner put less effort into what they thought they had no influence on in their life. As other research indicates, such constructs as hope and optimism (e.g. Laguna, 2006) play an important role in the start-up process—which leads to the conclusion that being fatalistic about the present and dwelling on its negative aspects is not conducive to starting one's own business. Furthermore, entrepreneurs tend to be more future-oriented than groups of potential entrepreneurs or nonentrepreneurs. This is in accordance with other findings. Those running their company had a longer future perspective (e.g. Wesołowska, 2003). In the work of an entrepreneur, being proactive and discovering new opportunities is of paramount importance (Przepiorka, 2010). Being future-oriented is important in formulating the strategy and creating a vision of one's company. Entrepreneurs should look ahead and outstrip the competition. Being future-oriented means putting more effort into actions, persisting even when facing obstacles, being more satisfied with their goal and their life. On the basis of the analyses, we may outline the characteristic temporal profile of entrepreneurs. Taken together, these analyses suggest that these two characteristics—having a more positive attitude towards the present and being more future-oriented—distinguish entrepreneurs from nonentrepreneurs. Future time perspective in the prelaunch phase is related to the intention to become an entrepreneur and persevere in goal pursuit, and in the entrepreneurs group it is also a key factor in achieving success. In the beginning of the entrepreneurial phase it may be a kind of prerequisite to become an entrepreneur. Later on, judging from the fact that entrepreneurs score the highest on future time perspective compared to other groups, future time perspective may be a competence developed while running a company. As regards the dimensions of goal

commitment, actual entrepreneurs put the greatest effort, were the most persistent, and derived the highest satisfaction from a goal. They were more engaged in what they were doing, which may result from the fact that it was their occupation and they had already invested some money and time in order to create and then to develop their businesses.

### *Possible applications*

Several applications of the study are worth noting here. Knowledge on the desirable temporal profile of the entrepreneurs may be useful for practitioners and institutions from entrepreneurial sectors. The results stressed the importance of future orientation, and emphasis should be put on its development while preparing vocational trainings for nascent or actual entrepreneurs. Entrepreneurs should be trained in the ability to set concrete and well-defined goals. Being motivated, persistent, and efficient in achieving goals is indispensable to become successful in starting and running one's own company. Teaching the skills of setting oneself appropriate goals and finding the right means of achieving them should be included in educational programs.

### **Limitations**

The present findings are subject to certain limitations. Firstly, in a cross-sectional study, we cannot follow the progress of achieving goals in a longer time perspective; the results were obtained only in a specific moment. A longitudinal analysis would be recommended in the future. The study was based on a correlational analysis, which makes it difficult to determine the direction of the effect; however, based on the obtained results, we may plan and predict further analyses. The low reliability of the ZTPI Past Positive scale deserves mentioning. However, other studies using this method show reliable results and the ZTPI is a widely used measure of time perspective. Additionally, success and progress in achieving entrepreneurial goals were measured using subjective measures based on entrepreneurs' self-perception. In the future research, in order to gain a better insight into the phenomenon of career, it is advisable to combine two kinds of criteria of success: subjective and objective ones—although a longitudinal study (Poole et al., 1993) clearly showed that subjective criteria were more important than objective ones in measuring perceived success. What is more, two different measures of success were used in the group of actual and nascent entrepreneurs. However, this approach has been suggested by other researchers as well because these two groups are in different situations and have different achievements. Another issue refers also to the measure

of the goal. The participants were asked to think about a professional goal they would like to achieve (e.g. running a company successfully, starting their own business). Although each of the participants may have had a different vision of the goal, other research using this technique yielded reliable results (see Laguna, 2009).

## **Conclusions**

The present research was to identify the differences between entrepreneurs and non-entrepreneurs and to construct a profile of successful entrepreneurs in the prelaunch and postlaunch phases. On the basis of the findings, it is possible to conclude that future orientation and less fatalistic perspective are those features that are related to higher success in entrepreneurship. As regards goal commitment—higher persistence, effort, and goal satisfaction are distinctive in successful entrepreneurs regardless of the phase. Research on time perspective and goal-directed behavior shows a new direction in investigating the entrepreneurial process. The study is consistent with the growing trend to focus on research that gives new insight into entrepreneurship and reveals the characteristics of entrepreneurs. Thus, investigating how entrepreneurs think and perceive time may not only be of interest to psychologists but also serve other disciplines.

## **Funding**

This work was supported by the National Science Centre (grant number N N106 420640).

## **Conflict of interest**

None declared.

## **Highlights**

- Entrepreneurs were more future-oriented and less fatalistically oriented towards the present than nonentrepreneurs.
- The entrepreneurs in the prelaunch or postlaunch phase of the entrepreneurial process who put in more effort were more persistent and satisfied with their goals and achieved higher success.
- The entrepreneurs in the prelaunch or postlaunch phase of entrepreneurial process who were more future-oriented were more successful. In the group of nascent entrepreneurs, there was also a relationship between hedonistic present orientation and entrepreneurial success.



## References

- Ajzen I (1991) The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 50: 179–211.
- Avci S (2013) Relations between self regulation, future time perspective and the delay of gratification in university students. *Education* 133(4): 525–537.
- Baer M and Frese M (2003) Innovation is not enough: Climates for initiative and psychological safety process innovations and firm performance. *Journal of Organizational Behavior* 24: 45–68.
- Bagozzi RP, Baumgartner H and Pieters R (1998) Goal-directed emotions. *Cognition and Emotion* 12: 1–26.
- Baron RA (1999) Counterfactual thinking and venture formation: The potential effects of thinking about what might have been. *Journal of Business Venturing* 15: 79–91.
- Baron RA (2000) Counterfactual thinking and venture formation: The potential effect of thinking about-what might have been. *Journal of Business Venturing* 15: 79–92.
- Baron RA (2007) Entrepreneurship: A process perspective. In: Baum J, Frese M and Baron RA (eds) *The Psychology of Entrepreneurship*. Mahwah, NJ: Lawrence Erlbaum, pp. 19–39.
- Baron RA and Markman GD (2003) Beyond social capital: The role of entrepreneurs' social competence in their financial success. *Journal of Business Venturing* 18: 41–60.
- Baum JR, Frese M, Baron RA, et al. (2007) Entrepreneurship as an area of psychological study: An introduction. In: Baum JR, Frese M and Baron R (eds) *The Psychology of Entrepreneurship*. Mahwah, NJ: Lawrence Erlbaum, pp. 1–18.
- Bird BJ (1992) The operation of intentions in time: The emergence of the new venture. *Entrepreneurship: Theory and Practice* 17(1): 11–20.
- Bird BJ and West GP III (1997) Time and entrepreneurship. *Entrepreneurship Theory and Practice* 22: 1–13.
- Blau G (1993) Operationalizing direction and level of effort and testing their relationships to individual job performance. *Organizational Behavior and Human Decision Processes* 55(1): 152–170.
- Campion MA and Lord RG (1982) A control systems conceptualization of the goal setting and changing process. *Organizational Behavior and Human Performance* 30: 265–287.
- Capaldo G (1997) Entrepreneurship in Southern Italy: Empirical evidence of business creation by young founders. *Journal of Small Business Management* 35(3): 86–92.
- Collins CJ, Hanges P and Locke EA (2004) The relationship of need for achievement to entrepreneurship: A meta-analysis. *Human Performance* 17: 95–117.
- Cooper A, Ramachandran M and Schoorman D (1997) Time allocation patterns of craftsmen and administrative entrepreneurs: Implications for financial performance. *Entrepreneurship: Theory and Practice* 22(2): 123–136.
- Das TK (1991) Time: The hidden dimension in strategic planning. *Long Range Planning* 24(3): 49–57.

- Diaz F and Rodriguez A (2003) Locus of control nAch and values of community entrepreneurs. *Social Behavior and Personality: An International Journal* 31(8): 739–748.
- Drake L, Duncan E, Sutherland F, et al. (2008) Time perspective and correlates of well-being. *Time & Society* 17: 47–61.
- Erikson EH (1968) *Identity: Youth and Crisis*. New York, NY: Norton.
- Frese M (2007) The psychological actions and entrepreneurial success: An action theory approach. In: Baum JR, Frese M and Baron RA (eds) *The Psychology of Entrepreneurship*. Mahwah, NJ: Lawrence Erlbaum, pp. 151–188.
- Frese M (2009) Toward a psychology of entrepreneurship: An action theory perspective foundations and trends in entrepreneurship. *Foundations and Trends in Entrepreneurship* 5(6): 437–496.
- Gardner DG, Dunham RB, Cummings LL, et al. (1989) Focus of attention at work: Construct definition and empirical validation. *Journal of Occupational Psychology* 62: 61–77.
- Gartner WB (1989) Who is an entrepreneur? Is it still the wrong question? *Entrepreneurship Theory and Practice* 12(2): 47–68.
- Gartner WB (2001) Is there an elephant in entrepreneurship? Blind assumptions in theory development. *Entrepreneurship Theory and Practice* 25(4): 27–37.
- Guy BS, Rittenburg TL and Hawes DK (1994) Dimensions and characteristics of time perceptions and perspectives among older consumers. *Psychology and Marketing* 11(1): 35–56.
- Hall PA and Epp L (2013) Does domain-specific time perspective predict accelerometer assessed physical activity? An examination of ecological moderators. *Psychology of Sport & Exercise* 14(1): 50–56.
- Hansemark O (2003) Need for achievement locus of control and the prediction of business start-ups: A longitudinal study. *Journal of Economic Psychology* 24(3): 301–319.
- Henson JM, Carey MP, Carey KB, et al. (2006) Associations among health behaviors and time perspective in young adults: Model testing with boot-strapping replication. *Journal of Behavioral Medicine* 29(2): 127–137.
- Hisrich R, Langan-Fox J and Grant S (2007) Entrepreneurship research and practice: A call to action for psychology. *American Psychologist* 62: 575–589.
- Hollenbeck JR and Klein HJ (1987) Goal commitment and the goal-setting process: Problems prospects and proposals for future research. *Journal of Applied Psychology* 72(2): 212–220.
- Hull DL, Bosley JJ and Udell GG (1980) Renewing the hunt for Heffalump: Identifying potential entrepreneurs by personality characteristics. *Journal of Small Business* 18: 11–18.
- Ireland R, Tihanyi L and Webb JW (2008) A tale of two politico-economic systems: Implications for entrepreneurship in Central and Eastern Europe. *Entrepreneurship: Theory and Practice* 32(1): 107–130.
- Johnson B (1990) Toward a multidimensional model of entrepreneurship: The case of achievement motivation and the entrepreneur. *Entrepreneurship Theory and Practice* 14(3): 39–54.

- Jones S (2014) Gendered discourses of entrepreneurship in UK higher education: The fictive entrepreneur and the fictive student. *International Small Business Journal* 32(3): 237–258.
- Kairys A (2010) Correlations between time perspectives and personality traits in different age groups. *Bridges/Tiltai* 51(2): 159–172.
- Kaufman CJ and Lane PM (1990) The intentions and extensions of the time concept: Contributions from a sociological perspective. *Advances In Consumer Research* 17(1): 895–901.
- Keough KA, Zimbardo PG and Boyd JN (1999) Who's smoking, drinking, and using drugs? Time perspective as a predictor of substance use. *Basic and Applied Social Psychology* 21(2): 149–164.
- Koh HC (1995) Factors associated with entrepreneurial inclination: An empirical study of business undergraduates in Hong Kong. *Journal of Small Business Entrepreneurship* 12(2): 29–41.
- Laguna M (2006) Nadzieja i optymizm a intencja założenia własnej firmy [Hope, optimism entrepreneurial intention]. *Przegląd Psychologiczny* 49(4): 419–443.
- Laguna M (2009) Rola przekonań o sobie w planowaniu podjęcia pracy za granicą [Self-referent beliefs in the process of planning to work abroad]. *Psychologia Społeczna* 4: 228–238.
- Laguna M (2010) *Przekonania na Własny Temat i Aktywność Celowa Badania nad Przedsiębiorczością*. [Self-referent Beliefs and Goal-directed Behavior. Research on Entrepreneurship]. Gdańsk: GWP.
- Laguna M (2013) Self-efficacy self-esteem and entrepreneurship among the unemployed. *Journal of Applied Social Psychology* 43(2): 253–262.
- Lens W, Simons J and Dewitte S (2002) From duty to desire: The role of students' future time perspective and instrumentality perceptions for study motivation and self-regulation. In: Pajares F and Urdan T (eds) *Academic Motivation of Adolescents*. Greenwich, CT: Information Age Publishing, pp. 221–245.
- Low MB and MacMillan BC (1988) Entrepreneurship: Past research and future challenges. *Journal of Management* 14(2): 139–162.
- Łapiński J, Nieć M and Rzeźnik G, et al. (2012) Małe i średnie przedsiębiorstwa w Polsce [Small and medium enterprises in Poland]. In: Tarnawa A and Zadur-Lichota P (eds) *Raport o Stanie Sektora Małych i Średnich Przedsiębiorstw w Polsce w Latach 2010–2011 [Report on the State of Small and Medium Enterprises in Poland in 2010–2011]*. Warszawa: Wydawnictwo Naukowe Instytutu Technologii Eksploatacji – PIB, pp. 18–47.
- Müller G and Gappisch C (2005) Personality types of entrepreneurs. *Psychological Reports* 96: 737–746.
- Paixao MP, Abreu MV and Lens WW (2012) Motivation, future time perspective, and vocational planning behavior. In: Leontiev DA (ed.) *Motivation, Consciousness and Self-regulation*. Hauppauge, NY: Nova Science Publishers, pp. 41–63.
- Poole ME, Langan-Fox J and Omodei M (1993) Contrasting subjective and objective criteria as determinants of perceived career success: A longitudinal study. *Journal of Occupational and Organizational Psychology* 66(1): 39–54.

- Przepiorka A (2010) Time perspective proactive personality and the intention of starting a business. In: *The XVth European conference on personality*, Brno, The Czech Republic, 20, 24 July.
- Przepiorka A (2011). *The determinants of realizing entrepreneurial goals*. Unpublished Doctoral Thesis, The John Paul II Catholic University of Lublin, Poland.
- Quintens L and Matthyssens P (2010) Involving the process dimensions of time in case-based research. *Industrial Marketing Management* 39(1): 91–99.
- Rahim A (1996) Stress strain and their moderators: An empirical comparison of entrepreneurs and managers. *Journal of Small Business Management* 34: 46–58.
- Rauch A and Frese M (2007b) Born to be an entrepreneur? Revising the personality approach to entrepreneurship. In: Baum JR, Frese M and Baron RA (eds) *The Psychology of Entrepreneurship*. Mahwah, NJ: Lawrence Erlbaum, pp. 41–65.
- Schiller BR and Crewson PE (1997) Entrepreneurial origins: A longitudinal inquiry. *Economic Inquiry* 35: 523–531.
- Seema R and Sircova A (2013) Mindfulness – A time perspective? Estonian study. *Baltic Journal of Psychology* 14(1/2): 4–21.
- Simon M, Houghton SM and Aquino K (1999) Cognitive biases risk perception and venture formation: How individuals decide to start companies. *Journal of Business Venturing* 15: 113–134.
- Siu NF, Lam HY, Le JY, et al. (2014) Time perception and time perspective differences between adolescents and adults. *Acta Psychologica* 151: 222–229.
- Shane S and Khurana R (2003) Bringing individual back in: the effects of career experience on new firm founding. *Industrial and Corporate Change* 12(3): 519–543.
- Sobol-Kwapińska M, Przepiorka A and Zimbardo P (under review) Zimbardo Time Perspective Inventory – structure of time perspective in Poland.
- Stewart WH Jr, Carland JC, Carland JW, et al. (2003) Entrepreneurial dispositions and goal orientations: A comparative exploration of United States and Russian entrepreneurs. *Journal of Small Business Management* 41(1): 27–46.
- Stewart W and Roth P (2001) Risk propensity differences between entrepreneurs and managers: A meta-analytic review. *Journal of Applied Psychology* 86(1): 145–153.
- Strzałecki A (2010) Twórczość i prawdopodobieństwo subiektywne osiagania celów życiowych a czas psychologiczny [Creativity and subjective probability of achieving goals in life and psychological time]. In: Sedek G and Bedyńska S (eds) *Życie na Czas. Perspektywy Badawcze Postrzegania Czasu [Life Time. Research Perspectives on Perception of Time]*. Warszawa: Wydawnictwo PWN, pp. 293–328.
- Unger J, Rauch A, Lozada M, et al. (2008) Success of small business owners in Peru: Strategies and cultural practices. *International Journal of Psychology* 43(3–4): 561–561.
- Utsch A, Rauch A, Rothfuss R, et al. (1999) Who becomes a small scale entrepreneur in a post- socialist environment: On the differences between entrepreneurs and managers in East Germany. *Journal of Small Business Management* 37(3): 31–42.

- Warnecke T (2013) Entrepreneurship and gender: An institutional perspective. *Journal of Economic Issues (M.E. Sharpe Inc.)* 47(2): 455–464.
- Wesołowska E (2003) *Psychologiczny Portret Prywatnego Przedsiębiorcy [Psychological Portrait of Private Entrepreneur]*. Olsztyn: Wydawnictwo Uniwersytetu Warmińsko – Mazurskiego.
- Wiklund J and Shepherd DA (2005) Entrepreneurial orientation and small firm performance: A configurational approach. *Journal of Business Venturing* 20(1): 71–91.
- Zaleski Z (1987) Behavioral effects of self-set goals for different time ranges. *International Journal of Psychology* 22: 17–38.
- Zaleski Z (1988) Transtemporalne JA: Osobowość w trzech wymiarach czasowych [Transtemporal SELF: Personality in three time dimensions]. *Przegląd Psychologiczny* 4: 931–943.
- Zaleski Z (1991) *Psychologia Zachowań Celowych [Psychology of Goal-directed Behaviors]*. Warszawa: Państwowe Wydawnictwo Naukowe.
- Zimbardo PG and Boyd JN (1999) Putting time in perspective: A valid reliable individual differences metric. *Journal of Personality and Social Psychology* 77: 1271–1288.
- Zimbardo P and Boyd J (2008) *The Time Paradox: The New Psychology of Time that will Change Your Life*. New York, NY: Free Press.