# RELATIONSHIPS BETWEEN TIME PERSPECTIVES AND PROCRASTINATION OF EMPLOYEES WITH DIFFERENT JOB TITLES

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#### Abstract

This paper describes the current state of the problem of time perspectives and the phenomenon of procrastination in professional activities. The paper is primarily focused on special aspects of time perspectives and procrastination of employees with different job titles. The paper contains an empirical study of the interrelation of time perspective and procrastination of employees with different job titles. The results show that top managers usually focus highly on future time perspectives (59.03) and the positive past (36.06). Their level of procrastination is lower (53.45). Groups of middle managers show high procrastination (57.2); they focus on hedonist present (24.6) and the negative past (31.26). The article proves a statistically significant level of distinctions of procrastination expressiveness on the entire sample (1211 at  $p \le .01$ ). A connection between life-purpose orientation and time representation was established; the most effective lifepurpose orientations for top management were 'life goals' (35.28), 'locus control – life' (32.7)and 'sense of purpose of life' (155.25); in the middle management group these facts are faintly expressed. Correlation analysis using the Spearman's Rho allowed us to highlight a high level of procrastination in the middle management group determined by their orientation on time perspective of negative past against low focus on the future that complicates the success of professional activities. The regression analysis revealed the main predictors of procrastination in the groups of top managers (aims in life, process of life and locus control-ego) and middle managers (Fatalistic present and future). It may be assumed that personal time perspective and its time orientation are interconnected with procrastination processes and can be considered both negative and positive consequences that aligns with the results of the latest research examining procrastination in professional activities.

Keywords: time perspective, procrastination, structure of procrastination.

In professional activities, the skill to efficiently manage your time plays a vital role. Professional activity is a long-term process where time is a critical and nonrenewable resource. Efficient time management ensures life strategies in situations of uncertainty and determines time prioritization in professional fulfillment (Abulkhanova-Slavskaya & Berezina, 2001; Bolotova, 2007). Time is an important resource of personal mental organization; however, it is very rarely used well. When social development and the rate of activities intensify, the problem of procrastination becomes of practical significance. It becomes necessary to work under difficult time constraints, delay task fulfillment, reallocate time priorities and time limits in situations of interpersonal and professional communication (Bolotova, 2007). The rational use of lifetime, orientation on future time perspectives (Zimbardo & Boyd, 2010), looming professional horizons and personal growth result in high career achievements (Bennis & Nanus, 2001; Bluedorn & Ferris, 2004; Bolotova, 2007; Nestik, 2009, 2011; Bolotova & Chevrenidi, 2017). Today, the study of personal capacity and career opportunities assumes research of time perspectives and activity strategies. However, there are few of these studies in modern psychology (Barabanshchikova & Marusanova, 2015).

Employees with different job titles face procrastination in their professional activities. Procrastination influences the specific nature of organizing and implementing activities and more task oriented time use. The subjective value of time as a personal resource and the duration of time perspective appear to be regulators of organizing activities, self-realization and the frequency of procrastination (Bolotova & Chevrenidi, 2017). The phenomenon of procrastination correlates with the peculiarities of cognitive, emotional and motivational spheres of personality (Pychyl & Flett, 2012; Rebetez, Rochat, & Van der Linden, 2005). However, the holistic picture of the interaction of these constructs is still not clear enough (Wilson & Nguyen, 2012).

Leontiev (2004) classified types of personal attitudes to timing, where two groups were determined: people living "in time" and "outside the time". This classification shows how a person feels in the triunity of time and how the transfer from the past to the future is considered to be a continuous spatial changing process or lifetime. People living "in time" perceive their life at the intersection of interconnected time intervals where a person "moves from the past via the present to the future and the world moves from the future via the present to the past" (Ibid.). Those living "outside the time" have a tendency to postpone and delay everything, in other words procrastinate.

Ferrari (1990) suggested classifying the phenomenon of procrastination depending on personal qualities and personal behavioral strategies. According to his classification there are hesitatory or avoiding people and so-called thrill seekers or active procrastinators, who delay major decision-making on purpose.

Despite the relevance of the problem of procrastination in production activities there is still no common understanding about the contents of professional procrastination and its terminological understanding. Most existing research into the procrastination phenomenon is based on the academic sphere, therefore Barabanshchikova and Marusanova (2015) claim that research of the procrastination phenomenon in professional activity is based on materials of a wide range of professions of particular interest. The authors point out that studying the specifics of delaying things by specialists while performing their duties has high theoretical and practical value. The authors note that there are not enough studies of the procrastination phenomenon at professional levels in modern psychology. These reasons predetermined the subject matter of our research: relationships between time perspectives and procrastination of employees with different job titles.

Steel (2007) conducted a meta-analysis and said: "the fact of procrastination presents not just delay but also protraction and non-performance" (Steel, 2007, p. 65). Steel (2010) determined that distinctive features of procrastination include activities with a deadline.

In most studies, procrastination is seen as a negative component of activities that has a destructive impact on the quality and effectiveness. Along with the frequent statement of the negative consequences of procrastination, psychology also has data about the productive impact of this phenomenon. Chu and Choi (2005) subdivide procrastination into passive and active that have externally similar symptoms in activity, but different internal regulatory mechanism. Passive procrastination refers to the traditional understanding of this phenomenon, and active procrastination means a special type of psychological strategy of consciously delaying the execution of cases in order to achieve the best results. The authors have shown that persons prone to consciously postponing certain actions in order to concentrate on priority cases, are more similar to non-procrastinators than traditional destructive procrastinators in a number of characteristics (time control, ideas about the level of their own effectiveness, features of preferred coping strategies). To study the features of active procrastination, the authors developed the 'Active procrastination scale' (Ibid.), which was later improved and called 'The new active procrastination scale' (Choi & Moran, 2009). However, this study was also implemented on the basis of the academic sphere. Now this method is at the stage of initial adaptation to the Russian sample in relation to the work of professionals (Marusanova & Barabanshchikova, 2015).

There is also data confirming the possibility of a positive relationship between active procrastination and increased effectiveness of educational activities. The ability to rapidly change priorities may make active procrastinators more effective in postindustrial society. Moreover, they can complete the work on time, even if the activity has been started with a serious delay (Chu & Choi, 2005; Choi & Moran, 2009; Demeter & Davis, 2013; Lee, 2013). One of the main characteristic of a successful specialist is the ability to quickly redistribute tasks in changing conditions of the work process and the ability to fully mobilize for the best outcomes (Prokhorova, 2002).

We consider it important to study the new field of the psychology of time through the prism of extremely relevant, but still little-studied issue: procrastination as delaying professional activities by employees. Previously, we have produced a detailed retrospective analysis of this problem, examined the predictors and consequences of procrastination, the different types of this phenomenon as a special temporary modus (Bolotova & Chevrenidi, 2017). Chernysheva (2016) makes an integrational analysis of special aspects of procrastination and emphasizes the following characteristics: awareness, irrationality, internal discomfort and negative feelings (worries, guilt) caused by the delay. Vindeker and Ostanina (2014) also find that procrastination has a negative influence on people's success. In our work, we rely on the definition of procrastination by Barabanshchikova and Kaminskaya's (2013) who understood it as a psychological strategy of specialists' postponing the performance of prescribed duties. In addition, Barabanshchikova (Barabanshchikova & Marusanova, 2015; Barabanschikova & Ivanova, 2016) shows that procrastination has negative and positive consequences for a person's activities. A separate type of procrastination identified by Varvaricheva (2010) is conscious procrastination.

Procrastination occurs for a number of reasons: choosing behavioral strategies (avoidance), low level of motivation and volition and emotional components (fear and dismay). We can find explanations of procrastination in Ferrari's work (1990) where he determined the following reasons for delaying: looking for a thrill, hesitation, avoidance of failures, perfectionism and unwillingness to risk.

Usually procrastinators delay things, which have certain deadlines, consequently, the phenomenon of procrastination can be associated with a certain type of the individual's time perspective. Procrastination, in our opinion, is connected with the time perspective of an individual, because people perceive and represent their future, they realize the relationship between the past and the present. The structure of time perspective has three components: psychological past (positive or negative), psychological present (fatalistic or hedonistic), psychological future (Zimbardo & Boniwell, 2004; Zimbardo & Boyd, 1999). These structural components play a significant role in the development of the individual, in their self-realization and self-organization, in the planning of activities and concrete actions. A person has a vision not only of the present, but also certain expectations, hopes, fears, desires, referring to the future. Taking timely decisions in significant life situations, a person predicts the sequence of actions in the time perspective.

Lewin (2001) was the first to offer the definition of time perspective. He understood it as a projection of his future or past in the present. Frank (1939) introduced the term 'time perspective' into psychological science. He characterized time limits as the interconnection and interconditionality of past, present and future presented in the existential model of human behavior.

The concept of 'time perspective' has received a variety of interpretations and is still ambiguous. There are a large number of approaches understanding and defining this phenomenon. We and some other authors discuss all time aspects: past, present and future (Frank, 1939; Lewin, 2001; Zimbardo & Boniwell, 2004 etc.), others focus on examining only one time zone, for example, future (Lens, 1986; McGrath & Kelly, 1986; Pavlova, 1988; Zaleski, 1996 etc.).

Zeigarnik (1982) shows that past personal experience plays an important role in determining time landmarks while learning to put a present situation in an unfolding future. This skill is critical for personal development.

In Russian psychology, Rubinstein defined time perspective as a "socially determined process having new developments at each stage" (2000, p. 72). Abulkhanova-Slavskaya and Berezina (2001) consider psychological time identical to the concept of time perspective as the reasonable management of personal activities. The authors note that a person's ability to predict and anticipate the future is a form of compensation for the "irreversibility" of time. Time planning acts as the initial personal level of achieving goals correlated with their specific placement in the time space.

We rely on the Zimbardo and Boyd's definition of time perspective: "time perspective is personal attitude to time which is often unconscious and a long-term process of existence which is united into time categories which helps to regulate structure and give meaning to life" (Zimbardo & Boyd, 2010, p. 58). Time perspective represents directives, beliefs and values connected with time. According to Zimbardo, time perspective includes several timelike dimensions and orientations: future, positive and negative past, hedonist and fatalist present (Ibid., p. 47–52).

The research of the relationship between the time perspective's depth and the ability to plan long-term activities manifested in effective strategic planning in organizations was conducted by Bluedorn and Ferris (2004). The study examined the relationship between a manager's time perspective and organizational success. The results of the study led to the conclusion that the length and long-term perspective of managers were associated with the amount of organizational profit.

Bennis and Nanus (2001) identified four main qualities in successful staff and managers, among which is the ability to manage the attention of their colleagues through the creation of a clear image of the organization's future.

Das (2004) investigated the ability to plan activities in relation to the personal characteristics of the staff and managers of an organization. It was found that the preference of managers for a long-term time perspective leads to higher efficiency of investments, and those leaders who were focused on a short-term strategy of behavior were able to successfully adapt in changing conditions and could easily neutralize them. The ability of managers to work with different time horizons, the ability to keep the attention of other employees and their subordinates on the tactical goals and strategic objectives of the organization has a positive impact on the organization's effectiveness. The author defines the ability of managers to change their time orientation as "competence in working with the future". Das notes that modern management theory underestimated the impact of a manager's psychological time on strategic planning in organizations and requires further in-depth study and development of appropriate psychodiagnostic instruments.

Today organizational management occurs in the conditions of constantly growing rates of production, short terms and advanced technologies. Management activities of the organization's leaders take place in a constant mode of multitasking and it is accompanied by decision-making in a tight time frame and informational limitations. In our view, the hallmarks of a top manager's time perspective are a temporary focus on the future, the length and consistency of their time perspective, and their realistic, positive attitude towards their present and future. For example, Nestik (2009) obtained data revealing the relationship between the time perspective and the managerial vision. A manager's orientation on future time perspective reflects their willingness to build long-term plans and goals, which helps to draw a clear image of the organizational future and their role in it in their imagination. A negative attitude to the past violates the individual's ideas about themselves and their role in the organization. A manager's negative perception about their past determines the lack of motivation to achieve in the present, which becomes a barrier to success. In addition, Nestik (Ibid.) revealed the negative correlation between the fatalistic present and the future time perspective of managers, which may indicate that the less leaders are confident in their ability to influence the future, the less optimistic and more detached they represent the future of their organization. Nestik (2011) also showed the relationship of time perspective and some features of organizational culture. The author found that successful employees and managers have high indices of orientation to the future time perspective.

Our research is dedicated to the procrastination and time perspectives phenomena within the framework of professional activities. Based on the theoretical foundations of the Zimbardo (1999), ideas of life-meaning orientations of Leontiev (2000) and understanding procrastination by Barabanshchikova and Kaminskaya's (2013), we put forward the following hypotheses: 1. Time perspective and its time limits (future, positive and negative past, hedonist and fatalist present) are related to procrastination and life-purpose personal orientation (Leontiev, 2004). 2. We also suggested that top managers and middle managers have different types of time perspective, life-purpose orientations, as well as different levels of procrastination.

# Method

### *Participants*

The study sample consisted of 120 people, including 58 top managers and 62 middle managers, working in various organizations in Moscow. All respondents occupy leading positions in state and private companies presented in such spheres of economic activity as: production of industrial equipment, educational institutions, companies of various spheres of services and telecommunications, and state unitary enterprises and ministries.

For accounting for gender differences, 30 men and 28 women were invited to the group of top managers. The age of participants was from 38 to 55 years (average age was 42.5 years; standard deviation is 11.2), higher education, work experience at top managerial positions — from 6 to 21 years. The group of middle managers consisted of 27 men and 35 women. The age of the participants was from 31 to 52 years (average age was 38.18 years; standard deviation is 2.28), higher education, work experience in a managerial position — from 3 to 17 years.

The questionnaires were filled anonymously in electronic form and upon completion were sent to the researcher. The results were collected from the end of 2016 to the third quarter of 2017.

### Measures

The study was carried out with help of scientifically based, reliable, tested and adapted psychodiagnostic measures:

1. Zimbardo Time Perspective Inventory (ZTPI, 1999), adapted by Sircova, Sokolova and Mitina (2008), consisting of 56 statements aimed at diagnosing the

system of individual's relations to time. The author identified five main indicators of time perspective's measurement:

a) Negative past expressing the level of rejection of an individual's past, causing disgust, pain and disappointment. Examples of statements on this scale: "I often think about what I should have done differently in my work"; "Painful experiences of the past continue to occupy my thoughts"; "I've had my share of abuse and rejection in the past"; "I have made mistakes in the past that I would like to correct," etc.

b) Positive past, expressing the level of acceptance of one's own past, in which any experience is perceived as contributing to development and leading to today's state. Examples of statements on this scale: "I'm happy thinking about my past"; "I miss my childhood," etc.

c) Hedonistic present, which is seen detached from the past and the future, the only purpose — pleasure in the present. Examples of statements on this scale: "I act impulsively", "I often forget about time listening to my favorite music"; "I make decisions under the influence of the moment," etc.

d) Fatalistic present is regarded as independent from the will of the individual as initially predetermined, while the personality is a hostage of fate. Examples of statements on this scale: "If something is destined to happen, it does not depend on my actions"; "Fate determines a lot in my life," etc.

e) Future expressing the presence of the person's goals and plans for the future. Examples of statements on this scale: "I believe that every morning a person should plan his or her day"; "If tomorrow you need to finish (pass) the work and also have other important things to do, I will think about them today, not about being enter-tained now," etc.

The respondents were asked to evaluate each statement of the questionnaire on a scale from "completely incorrect" (1 point) to "absolutely true" (5 points). Processing the primary data enabled the assessment of the severity of time orientations in the time perspective's structure of each respondent.

2. General Procrastination Scale (Lay, 1986) adapted by Vindeker and Ostanina (2014) that determines the degree of procrastination. It consists of 20 statements evaluated on a 5-point scale. Examples of statements on this scale: "I usually make decisions as quickly as possible"; "I usually do everything that was planned for the day"; "I always say: I will do it tomorrow," etc.

3. The Purpose-in-Life Test (Crumbaugh & Maholick, 1964) adapted by Leontiev (2000), consisting of 20 pairs of opposing statements reflecting the idea of the factors of life's meaningfulness, evaluated on a 7-point scale, allowing the evaluation of the "source" of the meaning of life that can be found by a person either in the future (goal), in the present (process), in the past (result), or in all three components of life. The Purpose-in-Life Test incorporates the General index of life's meaningfulness, five subscales that reflect the three specific meaning of life orientations: aims in life (examples of statements on this scale: "In my life I do not have certain goals and intentions"; "My life views have not yet been determined," etc.), the process (examples of statements on this scale: "I'm usually very bored"; "Life always seems to me exciting" etc.) and the performance of life (examples of statements on this scale: "My life is empty and uninteresting"; "My daily activities bring me pleasure and satisfaction" etc.) and two dimensions of locus of control: locus control — ego (examples of statements on this scale: "My life is in my hands, and I manage it by myself"; "I definitely can call myself a purposeful person" etc.) and locus control — life (examples of statements on this scale: "My life has developed exactly as I dreamed"; "I believe that I was able to find recognition and interesting goals in life" etc.).

# Procedure

The forms of the questionnaires were hosted on the enterprise server followed by duplication to personal email addresses of the respondents. Filling in the forms was voluntary and took place at a convenient time for respondents. The research procedure included computerized testing and individual feedback on its results.

### Results

The descriptive statistics of the main data set from General Procrastination Scale (Lay, 1986) adapted by Vindeker and Ostanina (2014), Zimbardo time Perspective Inventory (ZTPI, 1999) adapted by Sircova, Sokolova and Mitina (2008) and Purpose-in-Life Test (Crumbaugh & Maholick, 1964) adapted by Leontiev (2000) for the samples of top and middle managers is given in Table 1.

Table 1

Variables	М		SD		Me		Min		Max	
	Middle	Тор	Middle	Тор	Middle	Тор	Middle	Тор	Middle	Тор
Level of procrastination	57.20	53.40	7.18	4.28	57	53	47	48	81	62
Negative past	31.26	19.43	7.20	3.20	32	19	16	12	48	27
Positive past	21.40	36.06	5.19	8.50	21	36	12	18	36	55
Fatalist present	45.70	21.30	7.80	5.18	46.5	22	20	11	63	33
Hedonist present	24.60	19.80	7.34	6.06	23	20	13	11	47	48
Future	22.00	59.03	5.80	10.90	21	60.5	11	37	36	77
Aims in life	29.90	35.28	2.06	3.20	30	36	26	26	35	39
Process of life	27.70	34.38	2.26	3.17	27.5	34.5	23	28	37	39
Performance of life	24.10	28.38	3.60	3.30	24	29	19	21	33	35
Locus control — ego	21.25	24.60	4.00	2.60	21	25	15	19	30	30
Locus control - life	29.26	32.70	2.20	1.90	29.5	33	24	28	35	35
Sense of purpose of life	131.8	155.25	6.60	5.59	130.5	155	115	144	144	165

# The descriptive statistics of procrastination, time perspectives and Purpose-in-Life results in top (N = 58) and middle managers (N = 62) samples

Diagnostics of the dominating time perspectives, procrastination level and purposein-life revealed sufficiently high levels of the Future time orientation (M = 59.03) and Positive past (M = 36.06) in the group of top managers. The lowest rate of time orientation in this group was found on the scale of Negative past (M = 19.43) and Fatalistic present (M = 21.3). The results indicate that respondents rely little on chance or fate in decision-making, and they are not ready to be content with pleasures only in the present, they are focused on future achievements, despite the fact of having negative experiences. The group of top managers also showed lower levels of procrastination that indicates that this group is less likely to delay the performance of duties. In addition, top managers, unlike middle managers, have high scores of all scales in the Purpose-in-Life Test, which may indicate that top managers are more aware of the process of their life and their place in it, have clear goals and are able to control everything that happens.

Results obtained in the sample of middle managers indicate that the respondents have a most pronounced tendency to time perspectives of Fatalistic present (M = 45.7), Negative past (M = 31.26) and Hedonistic present (M = 19.8). The lowest rate was found on the scale of Positive Past (M = 21.4) and Future (M = 22). Therefore, middle managers in their activities are strongly convinced that their future is predetermined, and it is impossible to influence it in any way, which means that all events need to be taken with humility, because all people are in the power of fate. We see their pessimistic attitudes to their past, as well as a low focus on goals and events in the future, which can determine procrastination in the workplace and meaninglessness of life. However, the results should also be checked for significance of statistical differences in two samples. The results of statistical analysis of differences between samples using the Mann-Whitney's U-criterion for the level of procrastination and types of time perspectives are presented in Table 2.

The results in Table 2 show statistically significant differences of the levels of procrastination in top and middle managers. Top managers have lower levels of procrastination that may be linked to higher levels of responsibility and their commitment to career achievements. These results show that time limits of top managers and middle managers have their distinctive features (for  $p \leq .01$ ).

Table 2

Variables	Middle managers	Top managers	U
Level of procrastination	57.20	53.45	1211**
Negative past	31.26	19.43	226**
Hedonist present	24.60	19.80	1023**
Positive past	21.40	36.06	168.5**
Fatalistic present	45.70	21.30	53**
Future	22.00	59.03	0**

Statistical analysis of diversities in the levels of procrastination and types of time perspectives

\*\*  $p \le .01$ .

Comparison studies of time orientation in two groups of respondents show high rates and predominance of Future (59.03 against 22) and Positive past (36.06 against 21.4) time perspectives only in the top managers' group. Top managers have low levels of Hedonist present (19.8 against 24.6) and Negative past (19.43 against 31.26). Low orientation of top managers on Hedonist present (19.8 against 24.6) may show the importance of target-setting and looking to the future to draw up long-term strategies of activities and orientation to achievements. It shows a lack of availability to combine active professional activities with enjoying the present "there and then". Top managers are prepared to sacrifice "the present" for success in the Future constantly setting new goals and trying to achieve top achievements in their career (Zimbardo & Boyd, 2010).

In accordance with the point of Leontiev's view (2000), time perspectives are linked to personal life-purpose orientation that influence success in professional activities. The results of our research reveal the life-purpose orientation of employees with different job titles that may determine time perspectives of either the future (target setting), the present (process), the past (goals, results) or all three time dimensions. The results of statistical analysis of differences between selections using the Mann-Whitney's U-criterion for Leontiev's test of life-purpose orientation are presented in Table 3.

The results of this statistical analysis allow us to confirm that statistically significant differences between top managers and middle managers can be seen by every measure, that is: Aims in life, Process of life, Performance of life, Locus control – ego, Locus control – life, and Sense of purpose of life. The strongest results can be seen in the following key figures of top management: Aims in life (35.29 against 29.9), Process of life (34.38 against 27.7), Locus control – life (32.7 against 29.26) and Sense of purpose of life (155.25 against 131.85). The middle managers' group shows much lower results. The received data illustrates major differences in leading components of personal potential while planning and building up one's career, which become a basis for career achievements (Leontiev, 2000).

In the following table you can see the results of correlation analysis of interconnections between quantitative measures and the Level of procrastination criteria

Table 3

Variables	Middle managers	Top managers	U
Aims in life	29.90	35.28	344**
Process of life	27.70	34.38	175**
Performance of life	24.10	28.38	715**
Locus control – ego	21.25	24.60	904.5**
Locus control – life	29.26	32.70	468.5**
Sense of purpose of life	131.85	155.25	3**

Differences of average group values of life-purpose orientations

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\*\* *p* ≤ .01.

inside each selection. The analysis was carried out using Spearman's pair Rho. Table 4 presents correlation ratio between quantitative measures and Level of procrastination for top managers and middle managers.

The results of middle managers show that statistically significant positive interconnections with the Level of procrastination can be seen at the Negative past (0.78), Fatalistic present (0.76) criterion, and statistically significant negative interconnections with the Level of procrastination criteria can be seen at the Future (-0.46), Aims in life (-0.26), Locus control – ego (-0.28), Locus control – life (-0.43). We could see similar results in the research by Pychyl (Pychyl, 2000; Pychyl & Flett, 2012) and Lay (1986) that was based on the assumption of preferring instant pleasure rather than honors and rewards in the distant future. Top manager's results did not show any statistically significant negative interconnections with the Level of procrastination. Statistically significant negative interconnections with the Level of procrastination could be seen at Positive past, Future, Aims in life, Process of life, Performance of life, Locus control – ego, Locus control – life, and Sense of purpose of life criteria meaning lower levels of procrastination.

The obtained results show that the high level of procrastination of middle managers may be explained by the influence of their attitude to the past (31.26): they are full of memories of the past and do not pay enough attention to their Future time orientation. High levels of procrastination can also be connected with fatalist perception of the present (45.7) and low future achievements orientation (22).

We assume that the low level of procrastination of top managers can be explained by their positive past orientation that illustrates knowledge and experience of the past implemented in practical activities. We can also see high Future orientation

Variables	Level of procrastination				
variables	Middle managers	Top managers			
Negative past	0.78**	0.08			
Hedonist present	0.23	-0.11			
Positive past	0.02	-0.40**			
Fatalistic present	0.76**	0.23			
Future	-0.46**	-0.77**			
Aims in life	-0.26**	-0.57**			
Process of life	-0.23	-0.80**			
Performance of life	-0.08	-0.75**			
Locus control – ego	-0.28*	-0.79**			
Locus control – life	-0.43**	-0.70**			
Sense of purpose of life	-0.19	-0.52**			

Spearman's correlation coefficients

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

reflecting the ability of top managers to self-regulate and set targets when building their careers. The definition of "personal meaning" (Leontiev, 2004) correlates with these empirical observations thatcan often be estimated as an influence of results on career achievements.

We performed a regression analysis for the indicator Level of procrastination in groups of top and middle managers. As predictors of procrastination were used, the quantitative indicators of the time orientations and its purpose in life. Construction of models was carried out by step regression using the inclusion algorithm. The statistical significance of the regression model parameters was determined by the Student's criterion. The statistical significance of the entire model was determined by the Fisher's criterion.

Table 5 shows the predictors of procrastination in group of middle managers.

In the group of middle managers Fatalistic present and Future indicators were included as predictors of procrastination in the final model. All predictors were statistically significant. The whole model describes more than 84% of the original feature's variations. The biggest influence on the procrastination level is exerted by Fatalistic present followed by Future.

Table 6 shows the predictors of procrastination in the top managers' group.

For top managers, the Aims in life, Process of life, "Locus control-ego" indicators were included as predictors of procrastination in the final model. All predictors were statistically significant. The whole model describes more than 86% of the original feature's variations. The levels of the top managers' procrastination are most affected by Aims in life followed by Process of life and Locus control — ego.

### Discussion

Results of our research show that procrastination, orientation of time perspective and life-purpose orientation are interconnected confirming Hypothesis 1.

Table 5

Predictors	Standardized coefficient	Student's t	p
Fatalistic present	0.48	7.47	<.001
Future	-0.16	-2.80	.007

Results of regression analysis in the group of middle managers

Table 6

Predictors Standardized coefficient Student's t р Aims in life -0.46-6.57<.001 Process of life -0.34-4.99<.001 -0.18-2.47.016 Locus control – ego

Results of regression analysis in the group of top managers

These results are in line with the results of a research by Barabanshchikova and Ivanova (2016) that reflects the fact that individuals inclined to procrastination are less able to control the situation and deter the decision-making process. Available research data proves the results of our study. The ability to manage time determines success in professional activities that was revealed by comparing the criterion of time perspective with procrastination in the top and middle managers' groups with their success determined by their focus on the future and low levels of procrastination. We assume that this may be connected with management experience when most important production tasks require immediate attention while all the others were delegated and procrastinated. This type of management conforms to the rational time management and Pareto 8/20 principle. Our work can also prove the results of research by Chu and Choi (2005), Choi and Moran (2009), Prokhorova (2002), Il'in (Iliin, 2011), Demeter and Davis (2013), Lee (2013), and Barabanshchikova and Marusanova (2015). The authors consider constructive procrastination an original coping strategy and a predictor of successful activities. From their point of view, procrastination serves as a deliberately chosen strategy leading to positive operating results instead of negative and allows the focus on more important things. Our research confirmed that personal time perspective, time orientations and Purpose-in-Life are related to the process of procrastination that confirms Hypothesis 1. It was also found that top managers and middle managers are characterized by different types of time perspective, Purpose-in-Life and procrastination levels, which confirms Hypothesis 2.

### Conclusion

The study of time orientation, perception of time and relations of the individual by time allows us to assume that time is one of important reserves of the organization of professional activities. As we have been able to verify, at the moment the bulk of the studies on the procrastination phenomenon, its nature and causes of manifestation, are realized on the material of academic activities, in connection with their undoubted relevance and accessibility of the object of study. The results of the research obtained on the student sample certainly contributed to understanding of the procrastination phenomenon. However, this problem is relevant not only in educational activities; it also applies to the professional activities of individuals. The obtained results allow us to plan some future perspectives for research of the contents and consequences of procrastination in different types of activities. The prospect of further study of the phenomenon of procrastination may be associated with identifying consequences of procrastination, both in its negative impact on the activities of individuals and on its positive consequences. We also see prospects of our further work in identifying a number of predictors of procrastination in the workplace.

### Limitations of the Study

One of the limitations of the study is the heterogeneous nature of the sample. In our next study, we will try to ascertain whether the differences may depend on the employment of respondents, rather than on their position in the organization. We will check whether employees of ministries and state-owned enterprises may be more prone to procrastination than respondents employed in the private sector, where market conditions leave less time. The data will allow us to deepen and expand the understanding of the phenomenon of procrastination and its causes in professional activity.

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### Взаимосвязь временны́х перспектив и прокрастинации у сотрудников разного должностного статуса

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### Резюме

Освещается современное состояние проблемы временной перспективы и феномена прокрастинации в профессиональной деятельности. В статье отражены результаты исследования особенностей временной перспективы и прокрастинации у сотрудников разного должностного статуса. Представлено эмпирическое исследование взаимосвязи временной перспективы и прокрастинации у сотрудников организации разных должностных статусов. Результаты показали, что топ-менеджерам свойственна высокая ориентация на временные перспективы будущего (59.03) и позитивного прошлого (36.06), а уровень прокрастинации снижен (53.45). В группе мидл-менеджеров выявлены высокий уровень прокрастинации (57.2), ориентация на временные перспективы гедонистического настоящего (24.6) и негативного прошлого (31.26). Доказан статистически значимый уровень различий выраженности прокрастинации по всей выборке (1211 при  $p \leq 0.01$ ). Установлена связь смысложизненных ориентаций и временных представлений: наиболее результативными оказались такие показатели СЖО у топ-менеджеров, как Цели в жизни (35.28), Локус контроля — жизнь (32.7) и Осмысленность жизни (155.25), а в группе мидл-менеджеров эти данные выражены слабее. Корреляционный анализ с применением коэффициента Спирмена позволил выявить в группе мидл-менеджеров высокий уровень прокрастинации, обусловленный ориентацией на временную перспективу негативного прошлого на фоне низкой направленности на будущее, что затрудняет успешность профессиональной деятельности. С помощью регрессионного анализа удалось выявить предикторы прокрастинации в группе топ-(цели в жизни, процесс жизни и локус контроля—Я) и мидл-менеджеров (Фаталистическое настоящее и будущее). Можно предположить, что временная перспектива личности и ее временные ориентации взаимосвязаны с процессами прокрастинации и могут рассматриваться как ее негативные, но и позитивные последствия, что соотносится с результатами последних исследований прокрастинации в профессиональной деятельности.

Ключевые слова: временная перспектива, прокрастинация, структура прокрастинации.

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