

## Comparative Analysis of Procrastination and Stress Indicators among Accountants

Svetlana S. Kotova <sup>1\*</sup>, Irina I. Khasanova <sup>1</sup>, Daria V. Zhukova <sup>1</sup>, Alexander A. Shamshurin <sup>1</sup>

<sup>1</sup> Russian State Vocational Pedagogical University, RUSSIA

Received 4 July 2017 • Revised 1 September 2017 • Accepted 26 September 2017

### ABSTRACT

Relevance of the problem under consideration stemmed from the negative consequences of influence of procrastination phenomenon on professional activity of a person, reduction of personal productivity, work capacity and success, which manifests itself in acute emotional experience of personal failure and dissatisfaction of a person's own work results in a professional environment. The scientific work is focused on disclosure of relationship of procrastination phenomenon and stress among financial sector professionals, since specific features of their work lie in the unequal distribution of their working objects during a working month, which is connected with the reporting stages. The leading method to investigate the problem is psychological monitoring, a questionnaire and psychological testing to identify and study the theoretical and methodological approaches to assessment of the severity level of procrastination phenomenon and stress among accountants and carry out the comparative analysis of the indicators. Materials of the article are of practical value for consulting psychologists, managers and senior officials of PAO "Rostelecom" ready for studying and implementation of the remedial and preventive program to reduce procrastination level among workers in the accounting, and also to prevent their stress.

**Keywords:** procrastination, stress, procrastination main types, symptoms of well-being

### INTRODUCTION

Procrastination is putting off important actions, and it is a rather common phenomenon in modern life. It is closely related to personality and motivation. A number of writers associate it with personal perfectionism, general anxiety, disorder of self-esteem and evaluation of own resources etc. The procrastination problem has been in the field of foreign researchers' interest for quite a long time, since the late 1970s. Procrastination as a subject for study within the field of view of Russian psychologists is relatively recent, since the late 1990s.

Negative consequences of the effect of this phenomenon on society are reduction of productivity and success of an individual, acute emotional experience of personal failure, and dissatisfaction of person's own work results in a professional environment [1, 2]. All the above can be the most important factor causing stress of an individual. Procrastination phenomenon is a relatively new subject to study in psychology.

Russian proverbs say: "Never put off till tomorrow what you can do today", "Delays are dangerous", "For one that is missing there's no spoiling a wedding". All of you surely know these proverbs. They clearly demonstrate us a problem we might face. May be one day you felt deep resistance or unwillingness to begin an important task. We just put it off delaying determination and substituting it for useless tasks. This internal barrier preventing us from getting into action is called procrastination. There are proverbs speaking in support of it: "The work will still be there tomorrow", together with "I keep my fingers crossed", "All work and no play makes Jack a dull boy", "A man is born tired and he lives to rest" etc. Thus, the attitude to procrastination is not completely negative. If the

---

© **Authors.** Terms and conditions of Creative Commons Attribution 4.0 International (CC BY 4.0) apply.

\* **Correspondence:** Svetlana S. Kotova, *Department of Psychology of Education and Professional Development, Russian State Vocational Pedagogical University, Yekaterinburg, Russia.*

✉ [89193885388@mail.ru](mailto:89193885388@mail.ru)

procrastination phenomenon is not considered negative, is it possible to say the same about its influence on causing stress of an individual?

There are a lot of definitions of the term and the phenomenon of procrastination. Let's refer to them. Canadian psychologist P. Steel [3] speaks about procrastination as a voluntary delay of an intended course of action by a person despite the expected negative consequences because of the delay. P. Steel brings into focus that procrastination is most often considered by psychologists to be the irrational delay, because there is no acceptable reason for the delay. Besides, a person can delay both the beginning and the end of the intended course of action, despite realization this behavior would have neither financial nor psychological benefits [3].

Similar view is shared by C. H. Lay [4], who describes procrastination as voluntary irrational delay of the intended course of action, despite the fact that it will come with a high price tag or it will have negative effect for a person. In the big dictionary of psychology by B. G. Mescheryakova & V. P. Zinchenko [5] there is a definition of a procrastinator ("delayer") as a person who is subject to delay in decision making, delaying and putting different tasks off until later. Basically, it can be said that procrastination key features are irrationality combined with behavior awareness and understanding of possible negative consequences. This phenomenon can manifest itself in almost all fields of human activity: professional activity, learning activity etc.

The first classification was proposed by N. A. Milgram, G. Batori & D. Mowrer [6]. They identified 5 main types of procrastination depending on the scope of manifestation:

1. Daily life procrastination or household procrastination. It is putting off the tasks that should be done regularly, i.e. household duties, food shopping, tidying up.
2. Procrastination in decision-making, including small decisions.
3. Neurotic procrastination, that is putting off vital decisions (i.e. career choice of family-making).
4. Compulsive procrastination, when there is a combination of household behavioral procrastination and decision-making procrastination in one person.
5. Academic procrastination that is putting off class assignments and exam preparation.

N. A. Milgram & R. Tenne [7] reconsidered the above classification leaving only 2 types of procrastination: task avoidant procrastination and decisional procrastination.

The analysis of scientific sources indicated that procrastination study is conducted in the following areas:

- procrastination and anxiety relationship;
- procrastination and motivation relationship;
- procrastination and coping strategy relationship;
- academic procrastination research.

Let's refer to the stress phenomenon. It can be defined as "the psychological condition of the body when there is a discrepancy between his ability to adequately cope with the demands of the environment and level of these demands" [8]. According to R. Nietzsche, stress is a multiple meaning term including four main meanings:

1. Stress as an event carrying an additional load (situational stress).
2. Stress as an emotional response to a certain event [9].
3. Stress as an intermediate process between the stimulus and response to stimulus [10].
4. Stress as a transactional process that is the process of collision of an individual with the world around [11].

## MATERIALS AND METHODS

### Research Methods

5 methods were chosen for the study and they allowed us to identify the relationship between the two phenomena as follows:

1. Procrastination degree of manifestation [12].
2. Manager's time deficiency syndrome [13]; (The developed questionnaire "Manager's time deficiency syndrome" attempts to study the experience of time in the situational scale, particularly to define the frequency of time shortage experience during solving management problems).
3. To determine stress severity level there is a symptomatic questionnaire "Well-being in extreme conditions" [13]. (The symptomatic questionnaire allows determining predisposition for pathological stress-reactions and neurotic disorders in extreme conditions by the following health symptoms: psychophysical exhaustion (reduced mental and physical activity), violation of strong-willed regulation, mood swings (emotional instability), autonomic instability, sleep disorder, anxiety and fears, tendency to addiction).

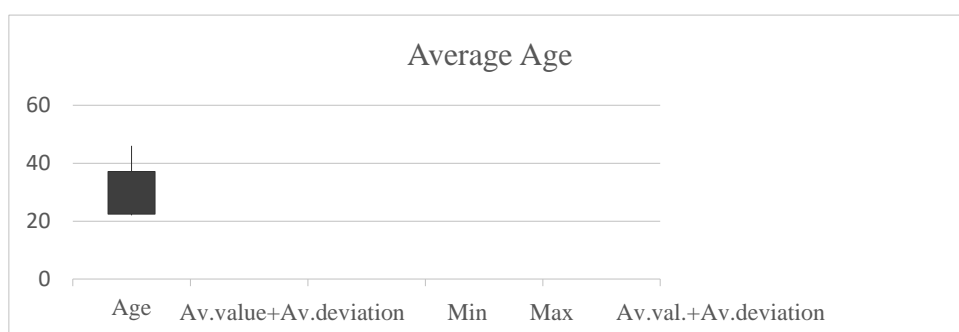


Figure 1. Average Age scale values

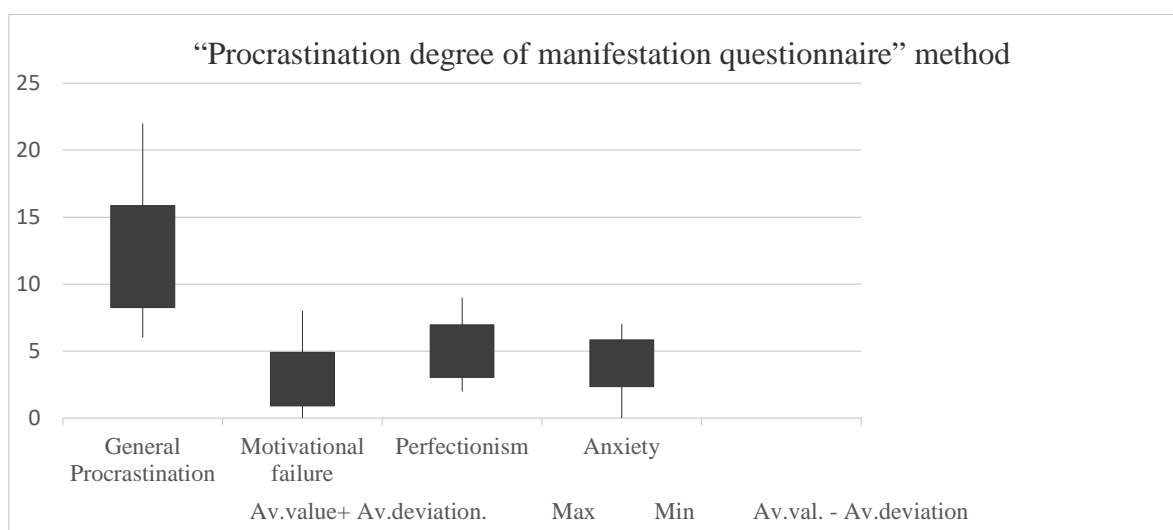


Figure 2. "Procrastination degree of manifestation" method results

4. Lemyr – Tessier – Fillion psychological stress scale PSM-25 is intended for measuring the phenomenological structure of stress experience. The aim is to measure stress experience in somatic, behavioral and emotional indicators. The method was originally developed in France, then translated and validated in England, Spain and Japan. The translation and adaptation of the Russian version are made by N.E. Vodopyanova [13].
5. Organizational stress scale by McLean (the Russian version is made by N.E. Vodopyanova [13]). (This scale measures susceptibility to organizational stress (OS) associated with insufficient ability to communicate, to accept values of other people, to assess the situation adequately without physical harm and working efficiency damage, behavioral inflexibility and passivity towards the active forms of relaxation and revitalization. The higher the OS rate is, the larger the vulnerability to work stresses is, the more frequent distress experience and such stress syndromes as mental burnout and chronic fatigue are.

### The Experimental Base of the Research

In November 2016 – February 2017 Institute of professional teacher education of Russian State Vocational Pedagogical University conducted a study in order to determine the stress level and procrastination level and their relationship.

The objects of the research were financial sector employees of PAO "Rostelecom", Voronezh. So far, 102 responders were interviewed.

## RESULTS

Research results are presented in diagrams. Average values are also calculated. Average Age scale values are shown in Figure 1.

4 scales results were obtained on the method "Procrastination degree of manifestation". They are presented in Figure 2.

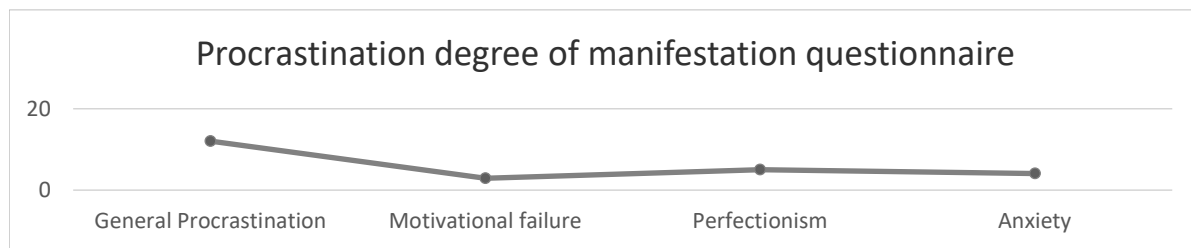


Figure 3. Graph of average indicator values on the method "Procrastination degree of manifestation" scales

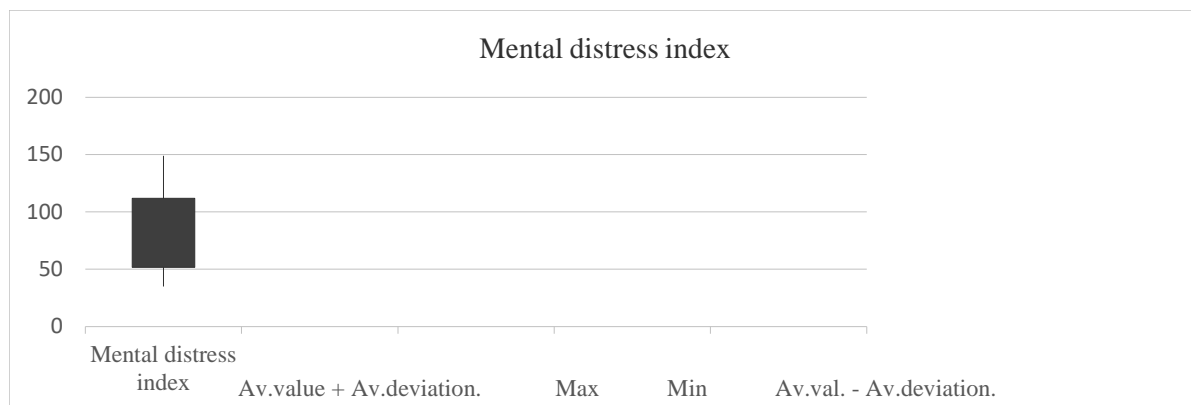


Figure 4. Diagram "Mental distress index"

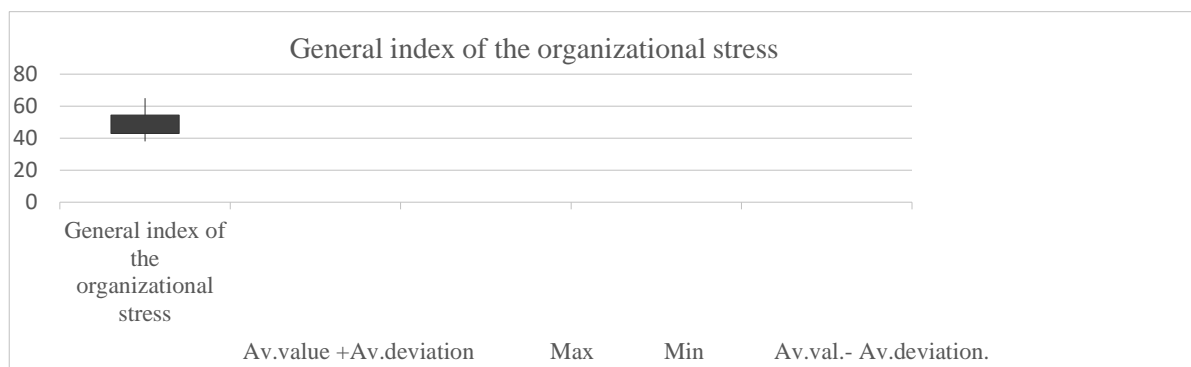


Figure 5. Diagram of the organizational stress index

After analyzing feedback forms of all the responders we obtained the average values of indicators for the group: General procrastination scale - 12.05; Motivational failure scale - 2.91; Perfectionism scale - 5.00; Anxiety scale - 4.09.

The graph of average indicator values is presented in Figure 3.

The responders have average level of general procrastination, low level of motivational failure, average perfectionism value and average anxiety value.

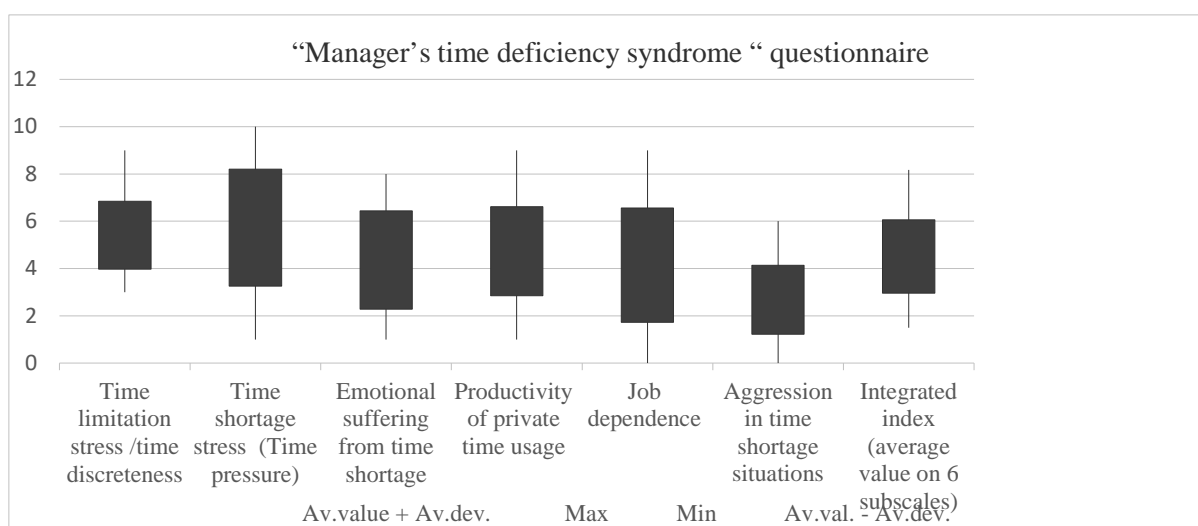
In relation to the problem under research that is "Stress level research among accountants with different procrastination level" on this method we can make the following conclusion. At an average level of anxiety at work there is an average level of procrastination, there is no motivational failure and there is an average level of ambition for the best result.

Result on the next method is presented in the diagram "Mental distress index" (Figure 4).

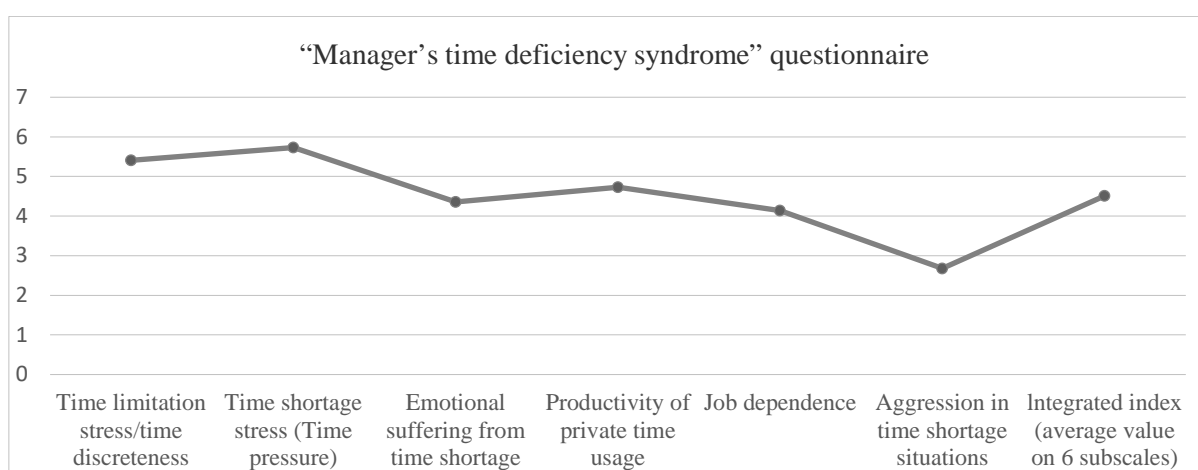
Integrated index of mental distress (IMD): 81,82. The larger the integrated index of mental distress (IMD) is, the higher the mental stress is.

The responders who participated in the test have low level of stress; IMD is lower than 100 points. This shows the state of psychological adjustment for the workload.

Analyzing the responders according to the "Organizational stress" scale we obtained the following data which are shown in Figure 5.



**Figure 6.** Diagram of "Manager's time deficiency syndrome" method indicators



**Figure 7.** Graph of average values according "Manager's time deficiency syndrome" method

General index of the organizational stress is 48,68. This scale measures susceptibility to organizational stress (OS) associated with insufficient ability to communicate, to accept values of other people, to assess the situation adequately without physical harm and working efficiency damage, behavioral inflexibility and passivity towards the active forms of relaxation and revitalization. The higher the OS rate is, the more vulnerability to work stresses is, the more frequent distress experience and such stress syndromes as mental burnout, chronic fatigue are.

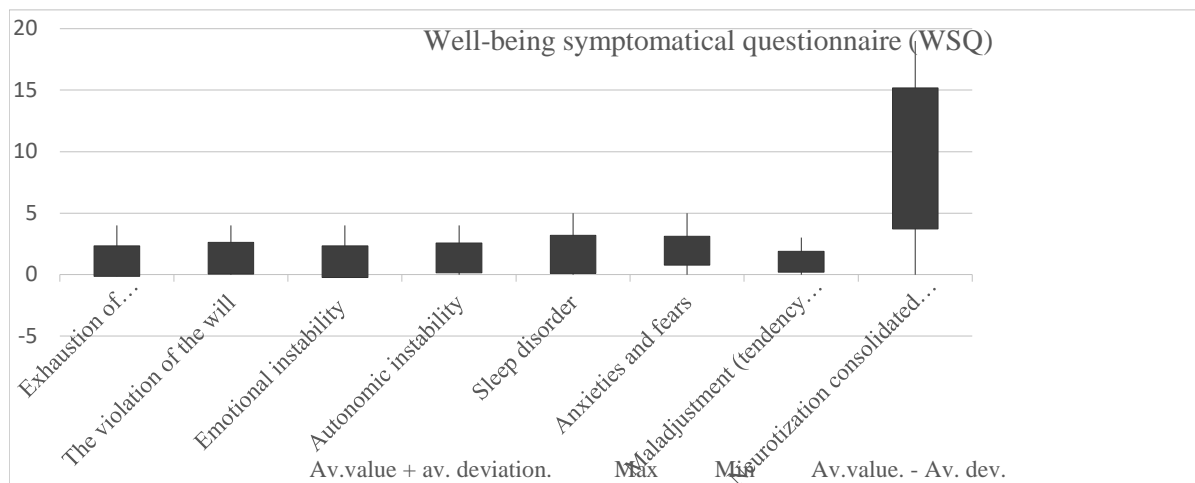
OS within the interval 49-40 points shows average stress tolerance and average stability of productive activity (intermediate behavior).

The next method is "Manager's time deficiency syndrome" and the results on scales are shown in **Figure 6**.

The following average values were obtained on the method scales during the test: Time limitation stress/time discreteness 5,41; Time shortage stress (Time pressure) 5,73; Emotional suffering from time shortage 4,36; Productivity of private time usage 4,73; Job dependence 4,14; Aggression in time shortage situations 2,68; Integrated index (average value on 6 subscales) 4,507.

The graph of average values is presented in **Figure 7**.

Time limitation stress/time discreteness value which equals 5,41 shows average severity. Time shortage stress (Time pressure) value which equals 5,73 shows low severity. Emotional suffering from time shortage value which equals 4,36 shows average severity. Productivity of private time usage value which equals 4,73 shows average severity. Job dependence value which equals 4,14 shows low severity. Aggression in time shortage situations value which equals 2,68 shows low severity. Integrated index (average value on 6 subscales) which equals 4,507 shows average severity.



**Figure 8.** Results on the method "Well-being symptomatic questionnaire" (WSQ)

Analyzing the data obtained we can emphasize that all indicators are on average or low level, which indicates that company's staff don't experience serious commotions from their work and cope with all the tasks during the working time without experiencing time shortage.

Results on the method "Well-being symptomatic questionnaire" (WSQ) are presented in **Figure 8**.

There is no such subscale interpretation, but considering that they all have the same number of points, we can compare the values in the sample to see which symptoms manifest them in a higher degree. Exhaustion of psychological and energy resources equals 1,09; The violation of the will equals 1,32; Emotional instability equals 1,05; Autonomic instability equals 1,36; Sleep disorder equals 1,64; Anxieties and fears equals 1,95; Maladjustment (tendency to addiction) equals 1,05; Neurotization consolidated figures equals 9,45.

Based on the results obtained we can see the highest points at subscale "Anxieties and figures" - 1,95 and "Sleep disorder" - 1,64, and this allows us to think that the responders in their period of neurotization will more likely experience anxiety, fear and as a result they will experience sleep disorder.

"Neurotization consolidated figures" scale is 9,45. The level up to 15 points shows a high level of psychological stability to extreme conditions, good adjustment condition.

### Comparative Analysis

After the analysis of the data obtained we received discrepancies on 5 scales. The first scale "General procrastination" has asymptotic significance ( $U = 0, P = 0$ )  $< 0,05$ , so there is a discrepancy. Rank sum in the group with an average procrastination level is higher than in the group with a high procrastination level ( $136 > 117$ ). This means there are significant differences. General procrastination among accountants with an average procrastination level is higher than that among accountants with a high procrastination level.

The second scale "Motivational failure" has asymptotic significance ( $U = 9,500 P = 0,004$ )  $< 0,05$ , so there is a discrepancy. Rank sum in the group with an average procrastination level is higher than in the group with a high procrastination level ( $145,50 > 107,50$ ). This means there are significant differences. Motivational failure among accountants with an average procrastination level is higher than that among accountants with a high procrastination level.

The third scale "Perfectionism" has asymptotic significance ( $U = 21,500 P = 0,047$ )  $< 0,05$ , so there is a discrepancy. Rank sum in the group with an average procrastination level is higher than in the group with a high procrastination level. ( $157,50 > 95,50$ ). This means there are significant differences. Perfectionism among accountants with an average procrastination level is higher than that among accountants with a high procrastination level.

The forth scale "Anxiety" has asymptotic significance ( $U = 21,500 P = 0,044$ )  $< 0,05$ , so there is a discrepancy. Rank sum in the group with an average procrastination level is higher than in the group with a high procrastination level. ( $157,50 > 95,50$ ). This means there are significant differences. Anxiety among accountants with an average procrastination level is higher than that among accountants with a high procrastination level.

The fifth scale "Mental distress indicator" has asymptotic significance ( $U = 8,500 P = 0,004$ )  $< 0,05$ , so there is a discrepancy. Rank sum in the group with an average procrastination level is higher than in the group with a high procrastination level. ( $144, 50 > 108,50$ ). This means there are significant differences. Mental stress among

accountants with an average procrastination level is higher than that among accountants with a high procrastination level.

The sixth scale "General index of organizational stress" has asymptotic significance ( $U = 22,000$   $P = 0,054$ ) = 0,05, so there is a discrepancy. Rank sum in the group with an average procrastination level is higher than in the group with a high procrastination level. (158, 00 > 95,00). This means there are significant differences. Organizational stress among accountants with an average procrastination level is higher than that among accountants with a high procrastination level.

## DISCUSSIONS

The influence of procrastination on stress level was studied earlier by the following authors:

- 1) O. O. Shemyakina [14], "The influence of procrastination on stress level among students". In the study these phenomena are connected by the fact that people with a high stress level are more suspicious to the others, cooperation ability reduces and high level of anxiety develops. In this regard a lot of tasks or decisions become hated, connected with a high stress level and their accomplishment is not appreciated and possibly stimulated. So it is assumed that people with a high stress level experience all psychological procrastination factors particularly intensively. According to the statistical information obtained based on regression analysis of interaction peculiarities and procrastination influence on stress level among students it can be concluded that the higher the procrastination level is, the greater the indicators of stress components.
- 2) Y. I. Varvaricheva [15] studied the relationship of procrastination and anxiety. According to the data obtained there are more testees with a high level of personal anxiety among prominent procrastinators. During the research the relation and the influence of procrastination on stress level and quality of training among Medical Department students of the 2<sup>nd</sup> year were studied. In connection with a higher level of anxiety and stress a lot of tasks are met with hostility and their accomplishment does not bring a feeling of satisfaction from completion, and therefore interest in learning process decreases. It is assumed that students experiencing stress regularly have a particularly intensive level of procrastination.

## CONCLUSION

The sample consisting of 22 people under research allowed us to make a comparative analysis and evaluate the phenomenon of stress and procrastination among accountants. We identified three levels of procrastination: low, average and high. Our responders were of average and high level. Discrepancies were found on 6 scales. The result on the 1st scale is: General procrastination among accountants with an average procrastination level is higher than that among accountants with a high procrastination level. The result on the 2nd scale is: Motivational failure among accountants with an average procrastination level is higher than that among accountants with a high procrastination level. The result on the 3d scale is: Perfectionism among accountants with an average procrastination level is higher than that among accountants with a high procrastination level. The result on the 4th scale is: Anxiety among accountants with an average procrastination level is higher than that among accountants with a high procrastination level. The result on the 5th scale is: Mental distress among accountants with an average procrastination level is higher than that among accountants with a high procrastination level. The result on the 6th scale is: Organizational stress among accountants with an average procrastination level is higher than that among accountants with a high procrastination level.

Drawing a conclusion from the data obtained, we can see that accountants with average procrastination levels have a higher level of mental distress, anxiety and a higher level of organizational stress. The procrastination level does not have influence on the stress level in this case.

## REFERENCES

1. Boyko, A. D. (2015). Disposition diagnostic means of defensive and coping behavior in the educational environment. *The Education and science journal*, 8, 65-81.
2. Vorobyeva, M. A. (2016). Connection of the emotional intellect and the emotional burnout of students. *The Education and science journal*, 4, 80-94.
3. Steel, P. (2007). The Nature of Procrastination: A Meta-Analytic and Theoretical Review of Quintessential Self-Regulatory Failure. *Psychological Bulletin*, 133(1), 113-124.
4. Lay, C. H. (1986). At last, my research article on procrastination. *Journal of Research in Personality*, 20, 68-79.
5. Mescheryakova, B. G., & Zinchenko, V. P. (2003). *The big dictionary of psychology*. Saint-Petersburg: Praim-Euroznak.

6. Milgram, N. A., Batori, G., & Mowrer, D. (1993). Correlates of academic procrastination. *Journal of School Psychology, 31*, 487-500.
7. Milgram, N. A., & Tenne, R. (2000). Personality correlates of decisional and task avoidant procrastination. *European Journal of Personality, 14*, 141-156.
8. Garanyan, N. G. (2006). Perfectionism and mental disorders (The review). *Therapy of mental disorders, 1*, 18-21.
9. Shimanskaya, M. A. (2013). *Procrastination personal correlates*. South-Russia Humanitarian University: Graduation works digest, 2009. Direct access: [www.urgu.org/partneram/dajdzhest-diplomnykh-rabot/38/](http://www.urgu.org/partneram/dajdzhest-diplomnykh-rabot/38/) (reference date: 15.09.2017).
10. Wolters, C. A. (2003). Understanding Procrastination from a Self-Regulated Learning Perspective. *Journal of Educational Psychology, 1*, 29-32.
11. Perez, M., & Baumann, U. (2007). *Clinical psychology*. Saint-Petersburg: Piter.
12. Kiseleva, M. A. (2015). Theoretical justification of the questionnaire "the severity of procrastination" (SVP) Direct access: [http://sociosfera.com/publication/conference/2015/87/teoreticheskoe\\_obosnovanie\\_oprosnika\\_stepen\\_vyrazhennosti\\_prokrastinacii\\_svp/](http://sociosfera.com/publication/conference/2015/87/teoreticheskoe_obosnovanie_oprosnika_stepen_vyrazhennosti_prokrastinacii_svp/) (reference date: 17.09.2016).
13. Vodopyanova, N. E. (2009). *Psychodiagnosics stress*. Saint-Petersburg: Piter.
14. Shemyakina, O. O. (2013). The influence of procrastination on stress level among students. *Psychology and law, 4*. Direct access: <http://psyjournals.ru/psyandlaw/2013/n4/66242.shtml> (reference date: 05.09.2017).
15. Varvaricheva, Y. I. (2008). The study of relationship between procrastination, anxiety and IQ among school children. Health of the nation – the basis of Russia's prosperity: materials of scientific and practical congresses of the IV all-Russian forum. Moscow: A. N. Bakoulev Scientific Center for Cardiovascular Surgery, 2, 147-149.

**<http://www.eurasianjournals.com>**