

ISSN: 2357-1330

https://doi.org/10.15405/epsbs.2019.12.26

19th PCSF 2019 Professional Culture of the Specialist of the Future

EFFECT OF WRESTLERS' EXPERIENCE ON THE CHOICE OF COPING STRATEGIES

Ali K. Namazov (a), Liudmila A. Guzikova (b)*, Kyazim A. Namazov (c) *Corresponding author

- (a) Peter the Great Saint-Petersburg Polytechnic University, Polytekhnicheskaya, 29, Saint-Petersburg. Russia, kuem@list.ru
- (b) Peter the Great Saint-Petersburg Polytechnic University, Polytekhnicheskaya, 29, Saint-Petersburg. Russia, guzikova@mail.ru
- (c) Peter the Great Saint-Petersburg Polytechnic University, Polytekhnicheskaya, 29, Saint-Petersburg. Russia, namazov2@mila.ru

Abstract

In sports psychology, the problem of athletes coping with the stress caused by unsuccessful performance in competitions is one of the most pressing and has great practical significance. An exhaustive explanation of why athletes choose one or another coping strategy, and reliable recommendations how to choose strategies providing the most effective coping with stress, currently do not exist. Most of the studies devoted to the problem of coping strategies in sports are empirical. The purpose of this article is to identify differences in the ways of coping with the stress caused by an unsuccessful performance at competitions used by wrestlers with different experiences of competitive activities. The methodology used is based on the tests of "Coping with Difficult Life Situations SVF120", "Proactive Coping Behaviour" and "Psychological Reliability". The respondents were wrestlers-athletes who are students of Peter the Great St. Petersburg Polytechnic University different in their experience of competitive activities. The study made it possible to draw conclusions about the most frequent coping strategies used by experienced and inexperienced wrestles, to evaluate the differences identified, to substantiate the coach's opportunities and reserves in situations related to coping with the stress of unsuccessful performance. The results of the study are addressed to the sports psychologists and coaches training the wrestlers or students-athletes of other sportive specializations as well as to the athletes who care of their successful sportive carrier and psychological comfort.

© 2019 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Stress, coping with stress, coping strategy, psychological reliability, preparation wrestlers for competitions.



1. Introduction

Today, sports psychology is a recognized tool for enhancing the capabilities of athletes and improving athletic performance. Problems of psychological stress occupy a special place in the practice of training, teaching and education of highly qualified athletes. The study of human behavior in extreme situations led to the discovery of coping mechanisms for stress reducing and overcoming (Lasarus & Folkman, 1984). Together with coping mechanisms, the problem of working out and choosing coping strategies as conscious actions aimed at overcoming stress is also considered (Folkman, 1984).

Stress is a critical component in competitions, and can either push athletes to progress or make them perform below their capabilities. Although the concept of stress coping efficiency is not yet fully developed, relation has been found between coping strategies and improving athletic performance Pensgaard and Duda (2002); Nicholls and Polman (2007) consider that in order to broaden understanding of the effectiveness of stress coping, it is necessary to study the effectiveness of coping strategies in the short and long term.

Based on empirical research, Tasaddoghi (2013) concludes that athletes use different coping styles depending on the origin, sport specialization, education and level of sport achievements, which should be taken into account by coaches. In order to improve the training and competitive practice, Belem et al. (2017) offer coaches periodically assessed the athletes' stress level in order to adjust training and thus avoid overloading and reduce stress and the possibility of injury. In addition, it is important that coaches give athletes challenging tasks that help them develop the ability to cope with adverse situations, encouraging the use of coping strategies and increasing psychological resilience.

However, the stress coping strategies used by athletes in certain sports have not been studied enough. In particular, the issue on the peculiarities of the wrestlers' coping strategies in the context of overcoming the stress caused by participating in competitions turned out to be practically not reflected in the available scientific papers of the last decade.

Gould, Eklund and Jackson (1993) conducted extensive comprehensive surveys of 20 wrestlers - members of the US Olympic team 1988. The analysis showed that the athletes used various stress coping strategies, including: (a) strategies for controlling thoughts (blocking distractions, perspective perception, positive thinking, coping with thoughts, prayer), (b) strategies for focusing on the task (narrow, more certain focus, focus on goals), (c) behavioral strategies (changing or managing the surroundings, following established rules), and (d) strategies of emotional control (control of arousal, visualization). The efforts of Olympic wrestlers to overcome stress were not limited to specific strategies or individual techniques to overcome certain stressors, but rather were a comprehensive dynamic process using several strategies, often in combination. It is necessary to note that the study of Gould et al. (1993) was retrospective.

Krohne and Hindel (1988) mention wrestling among the sports specializations, for the representatives of which avoidance-oriented coping strategies are more common. It should be noted that Tasaddoghi (2013) indicates that only in the use of avoidance coping- strategies there is a significant difference between athletes with different levels of sport achievement.

A study by Vandenburg (1992) demonstrated the effectiveness of mental images strategies for reducing wrestlers-students anxiety level.

Kristiansen, Roberts and Abrahamsen (2008) studied the relationship between involvement in tasks and coping with stress in the competitions of highly qualified wrestlers. The research methodology included

qualitative in-depth interviews and quantitative approaches. The participants were 82 highly qualified wrestlers (60 males and 22 females) aged 16–37 years from four European countries. As a result, it was revealed that the athletes involved in the tasks overcome competitive stress with more success through the use of more adaptive coping strategies. The hypothesis was also expressed that the experience of wrestlers makes them prefer to remain involved in the task and use adaptive coping strategies in competitions - both problem-oriented and emotionally-oriented.

Tomczak, Bręczewski, Sokołowski, Kaiser and Czerniak (2013), who studied members of the Polish cadet team, revealed that highly skilled wrestlers are characterized by a personality model with a low level of neuroticism and openness and a higher level of consciousness and extraversion. Based on this, the authors conclude that the type of personality can be the basis for choosing an individual style of stress coping and effective coping strategies. It was noted that emotion-oriented coping strategies can contribute to excessive emotional arousal in stressful situations, in particular, when participating in competitions. This stress relief style has been noted in female wrestlers (Tomczak et al., 2013).

2. Problem Statement

Coping with the stress caused by an unsuccessful performance at competitions is not only a problem for an individual athlete, but also represents an important task for his coach. The psychological state of an athlete's personality, his sports career, the psychological climate in a team, and the obtaining of objective results that can be demonstrated by an athlete in the event of a successful performance depend on the right solution of the problem.

For coping with the stress as quickly as possible and for minimizing its negative consequences, the correct choice of coping strategies is necessary. The first and most important condition for such a choice is the knowledge of the factors determining the effectiveness of a particular strategy depends.

3. Research Questions

The study should give answers to the following questions:

- What coping strategies are most often used by experienced and inexperienced wrestlers to overcome the stress caused by unsuccessful performance in competitions?
- How do experienced and inexperienced wrestlers use a proactive approach to coping the stress caused by unsuccessful performance?
- Are the differences between experienced and inexperienced athletes in the use of coping strategies significant?
- How are the most commonly used coping strategies related with psychological reliability, which ensures the stability of performances in competitions?
- What opportunities and reserves has the coach when working with experienced and inexperienced wrestlers in a situation of coping with the stress caused by unsuccessful performance in competitions?

4. Purpose of the Study

The purpose of the study is to identify the differences of coping strategies for stress caused by unsuccessful performance in competitions, used by the wrestlers with different competitive activity experience.

5. Research Methods

To study the features of coping strategies for stress caused by failure in wrestlers with different competitive activity experience, the following methods were used:

1) conducting surveys and subsequent data processing using keys:

- according to the method "Coping with difficult life situations SVF120" by Janke, Erdmann,
 & Kallus, (2004) in the adaptation of Vodopyanova (2009);
- according to the method "Proactive coping behavior" by Greenglass and Schwarzer (1998)
 in the adaptation of Vodopyanova (2009):
- according to the method of "Psychic reliability" by Milman (1983).
- 2) methods of grouping, analysis of variation series and correlation analysis.

The survey was conducted from January 15 to February 15, 2017. The wrestlers - students of the Peter the Great Saint-Petersburg Polytechnic University of 1-6 years of study (bachelor's and master's programs) aged 18-25 years took part in the survey. The study was conducted in an individual form. All respondents took participation in the study on their own consent. Qualification and gender composition of the respondents is presented in Table 01. The abbreviations used to mark the groups are given in parenthesis.

Table 01. The composition of the respondents

(1st sports category,	nced athletes candidates for master of aster of sports)	Inexperienced athletes (no category, 3 ^d sports category, 2 nd sports category)				
Males (EAM)	20	Males (IAM)	20			
Females (EAF)	10	Females (IAF)	10			
Total (EAT)	30	Total (IAT)	30			

The significance of the differences (SD) between the variation series (order statistics) was evaluated using the Mann-Whitney test (U-test).

For data processing, calculations and analysis, the means of the tabular Excel processor were used.

6. Findings

6.1. Test "Coping with difficult life situations SVF120"

To identify typical ways of coping with stress, a questionnaire for the test "Coping with Difficult Life Situations SVF120" was used. The results are shown in Table 02. The significant differences are

highlighted. The obtained data allow drawing conclusions concerning the use frequency of certain strategies and the prevailing strategies in the groups under consideration.

Strategies 1-10 are considered positive, strategies 13-18 are considered negative, and strategies 11, 12, 19, and 20 are not definitely positive or negative. Among positive strategies, three groups are distinguished: 1) Strategies 1-3 are cognitive strategies aimed at reducing the significance of stress, that is, at protecting from stress; 2) strategies 4-7 show a tendency to distract from stress and are aimed at positive situations and / or states that eliminate stress; 3) strategies 8-10 suppose actions to control a stressful situation and assume that the person choosing such strategies considers himself capable to change the situation.

Regardless of experience, athletes more often resort to positive coping strategies. The dominant strategies belong to the active positive group: positive self-instruction, attempt to control situation and self-control. This indicates that athletes, when fail in competitions, first of all seek means to ensure success, recognition and self-affirmation; perform actions to control the situation, control their behavior, maintain self-control. Among positive coping strategies, control strategies are used more often compared with cognitive coping and stress reduction strategies.

The analysis of differences in the results of experienced and inexperienced athletes showed that significant differences were obtained on the following scales: self-incrimination, attempt to control situation, self-control, positive self-instruction. These strategies are positive, they relate to actions aimed at reducing stress, and are fundamentally suitable for this. Experienced athletes in comparison with the inexperienced ones, resort to control strategies more often. Distraction strategies, as mentioned above, are used by athletes less commonly. It is known that the ability to relax is an effective way to deal with stress. In this regard, it is interesting that experienced athletes more often than inexperienced ones resort to the psychic muscular relaxation strategy.

It is necessary to highlight the significant differences in the frequency of negative strategies use by experienced and inexperienced athletes. Inexperienced athletes resort to seeking social support (involving other people in their difficulties), self-pity, self-incrimination and aggression strategies more often.

Table 02. Indicators of coping strategies choice (according to SVF120)"

Scale	Mean		SD	Mean		SD	Mean		SD
	EAT	IAT		EAM	IAM		EAF	IAF	
1.Trivialization / minimization	7.8	8.4	0.278	7.6	8.2	0.262	7.9	8.6	0.284
2.De-emphazis by comparison with others	11.0	10.1	0.623	11.4	10.0	0.608	10.6	10.2	0.702
3.Rejection of guilt	7.4	8.9	0.072*	7.6	8.6	0.035*	7.2	9.2	0.052*
4.Distraction / deflection from a situation	9.5	10.5	0.828	9.7	10.4	0.724	9.3	10.6	0.625
5. Vicarious satisfaction	11.0	11.3	0.904	11.2	11.5	0.902	10.8	11.1	0.858
6.Search for self-affirmation	11.1	12.3	0.823	11.2	12.8	0.854	10.7	11.7	0.702
7.Psychic muscular Relaxation	14.5	11.2	0.068*	14.6	11.3	0.066*	14.4	11.1	0.064*
8.Attempt to control situation	16.2	14.1	0.072*	16.8	14.6	0.074*	15.4	13.6	0.078*
9.Response control	15.8	13.0	0.068*	16.0	13.1	0.030*	15.6	12.9	0.028*

10.Positive self-instruction	18.4	12.0	0.002*	18.8	12.4	0.024*	18.0	11.8	0.02**
11.Seeking social support	9.2	14.3	0.014*	9.9	14.0	0.08*	8.5	14.6	0.07*
12.Avoidance tendencies	8.2	8.4	0.823	8.6	8.4	0.925	7.8	8.4	0.823
13.Escapist tendencies	6.8	7.2	0.628	6.0	7.0	0.243	7.6	7.4	0.345
14.Social isolation	9.3	10.2	0.703	8.9	10.0	0.415	9.7	10.4	0.502
15.Mental perseveration	7.8	8.6	0.408	7.0	8.2	0.327	8.6	9.0	0.625
16.Resignation	6.7	7.2	0.326	6.2	7.4	0.414	7.3	7.0	0.328
17.Self-pity	11.4	13.8	0.082*	9.4	13.0	0.028*	13.4	14.6	0.088*
18.Self-incrimination	12.2	15.1	0.064*	12.0	13.1	0.032*	12.4	17.1	0.076*
19.Aggression	11.0	13.4	0.038*	11.8	14.4	0.088*	10.2	12.4	0.072*
20.Medicine-taking	6.6	6.8	0.876	6.6	6.8	0.825	6.6	6.8	0.888

^{* -} significance of differences $p \le 0.05$

In general, experienced athletes, compared to inexperienced ones, assess their actions in a competitive failure as more effective and perceive the situation not as a threat, but rather as a challenge.

An analysis of gender differences showed that the described trends are typical for males as well as for females, i.e. experienced female and experienced male athletes, unlike their inexperienced colleagues, resort more often to active control copings and less often to negative copings. It should be noted that studies conducted in groups of people without regard to their attitude to sport showed that "for women, the strategies for strengthening self-control s and the own actions turn out more difficult than for men" (Isaeva, 2009, p.54).

6.2. Test "Proactive coping behavior

Test "Proactive coping behavior" assesses the extent of certain coping strategies use by an individual. Proactive coping behavior is a multi-pronged strategy to cope with anticipated stress. Proactive coping behavior combines the intrapersonal regulation processes of a person's life, as well as self-regulated goal achievement.

It should be noted that in the traditional understanding the coping strategies are reactive, as they are applicable to the stress situations already occurred; and their goal is to compensate for loss or damage. Proactive coping strategies are more future-oriented.

One more difference between reactive and proactive coping is that the first is aimed at risk management, while the second is at the goal setting process (Aspinwall and Taylor, 1997). With proactive coping behavior, a person has the ability to anticipate, predict a particular situation. Such persons see the risk and perceived losses in the future, but they do not regard them as a threat, harm or heavy loss. Rather, they perceive the difficulties of everyday life as opportunities for an incentive nature. Proactive behavior is, first of all, targeted management, not risk reduction measures.

There are 6 types of proactive coping strategies: proactive coping (PO), reflexive coping (RO), strategic planning (SP), preventive coping (PrO), seeking instrumental support (SIS) and seeking emotional support (SES).

From Table 03, in which the results of the survey are shown, it can be seen that there are no significant differences in the studied parameters between experienced and inexperienced wrestlers.

^{** -} significance of differences $p \le 0.01$

 Table 03. Indicators of proactive coping-strategies]

Scale	Mo	ean	SD	Mo	ean	SD	N	Aean	SD
	EAT	IAT		EAM	IAM		EAF	IAF	
PC	40.4	44.5	0.869	41.8	44.3	0.438	39	43.8	0.236
RC	31.5	32.5	0.725	33	34	0.465	30	31	0.788
SP	12	11.5	0.632	12	12	0.326	12	11	0.902
PrC	30.9	29.3	0.334	32.2	30.2	0.288	29.6	26.5	0.624
SIS	20	19	0.626	20	20	0.584	20	18	0.528
SES	13.6	11.5	0.524	14.3	12.9	0.425	13	10.1	0.433

According to the results of the study, the most used strategy of the wrestlers is proactive coping, which is focused on the formation resources facilitating the achievement of important goals and promoting personal growth.

Less frequent strategy used by athletes is the reflexive coping. This strategy supposes focusing on thinking and analyzing possible behavior in a difficult situation and shows the ability to see the problems from different standpoints, to think through possible options and different ways of acting. This strategy demonstrates the ability to think and analyze the situation before undertaking purposeful actions.

The preventive coping strategy is the third of the most frequently used. This strategy indicates the anticipation of possible stressful situations, preparation for the neutralization of possible consequences. Anticipation of stressful events implies the use by athletes of thinking through strategic actions, analyzing situation few steps ahead, professional development, readiness for unexpected situations, taking into account accidentals in planning.

Interviewed athletes are least dependent on strategic planning. This strategy involves the creation of a well-thought-out plan of action, which allows decomposition of the goals difficult to attain into more accessible for understanding and reaching sub-goals; the ability to focus attention first on more important tasks, and then to solve the rest; and also the ability to solve problems gradually. All above makes it possible to use the resources more rational way.

The athletes rarely use seeking emotional and instrumental support coping strategies. The seeking emotional support supposes sharing feelings and emotions with the other people, the ability to talk about the personal situation, to entrust the personal feelings to other people, as well as an understanding of that who can emotionally support, take care and assist in improving the state and mood. Seeking instrumental support assumes informational assistance that can help in stressful situation. Tips, discussing the situation with other people, new information and feedback can contribute to a faster and easier resolution of the problem.

Comparison of the data with the results, obtained by use of the method for groups of various professions respondents, shows that athletes (regardless of experience) show higher rates on the proactive coping and reflexive coping scales (Vodopyanova, 2009, p. 225; Volkov & Namazov, 2018).

6.3. Test "Psychological Reliability"

Psychical reliability is regarded as the stability of the basic psychological mechanisms functioning in difficult competitive situations. Components of psychical reliability are: competitive emotional stability

(CES); self-regulation (SR); motivation and energetic component (MEC); stability and noise immunity of SNI). Table 04 shows the results of the test.

Table 04. Indicators of psychological reliability

Scale	Mean		SD	Mean		SD	Mean		SD
	EAT	IAT		EAM	IAM		EAF	IAF	
CES	-2.2	-3.5	0.023*	-2.0	-3.2	0.008*	-2.4	-3.8	0.01*
SR	-1	-1.8	0.191	-0.8	-1.4	0.174	-1.2	-2.2	0.176
MEC	2.3	0.3	0.018*	2.6	0.4	0.002**	2.0	0.2	0.014**
SNI	3.6	1.0	0.032*	3.9	1.2	0.018**	3.3	0.8	0.015*

^{*-} significance of differences $p \le 0.05$

Among the indicators of the wrestlers' psychical reliability, the leading factor is stability and noise immunity, which characterizes the stability of the functional state and motor components in non-extreme situations, as well as the degree of impact on the athlete of various interferences in both external conditions and in the internal sphere. From the standpoint of this property, the key component is the formation degree of the action system which should be implemented in a critical situation. The data are consistent with the idea that athletes of complex coordination sports have high noise immunity. The high level of stability and noise immunity shows the reliability of skills, which allows self-confidence forming.

Relatively high values are obtained for motivation and energetic component. In competitive motivation, the state of internal motivating forces contributing to the full useful effect in competition is focused. Success in competition may depend on such motivational factors as the basic needs stability, the ratio of the achieving success and avoiding failures motivations, the overall intensity of motives and interests. Competitive motivation is the competitive spirit of an athlete.

Analysis of the significance of differences allows stating that experienced athletes differ from inexperienced ones by all indicators of psychical reliability. Significant differences are identified in competitive emotional stability, motivation and energetic component and stability and noise immunity.

Lower levels of psychical reliability on the scales of competitive emotional stability and stability and noise immunity may indicate that for inexperienced athletes the mood swings, irrational waste of energy, insufficient ability to distract from the situation and to tune to win are more common. Differences between experienced and inexperienced athletes within gender-based groups confirm the identified general trends.

Thus, wrestlers have a high level of stability and noise resistance and strong competitive motivation. Experienced athletes are characterized by a higher level of psychical reliability compared to inexperienced ones.

6.4. Results of Correlation Analysis

The undertaken correlation analysis allowed revealing significant positive correlation of competitive emotional stability with coping strategies such positive self-instruction, control of the situation and response control, and a less pronounced negative correlation with coping strategies such as seeking social support, self-pity and resignation. Figure 01 shows the corresponding correlation pleiad.

^{**-} significance of differences $p \le 0.01$

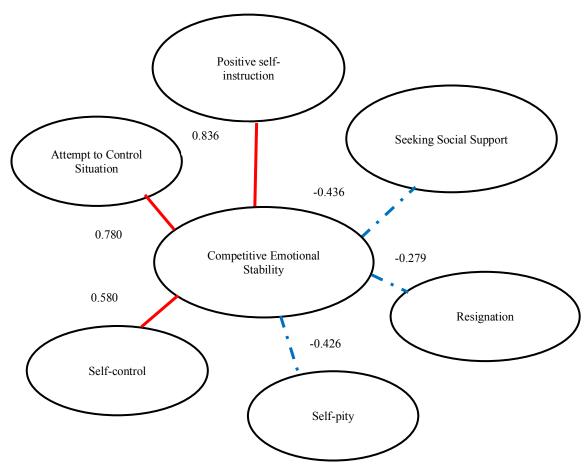


Figure 01. The relations of competitive emotional stability and coping strategies

7. Conclusion

An experimental study aimed at identifying the features of coping strategies for stress caused by an unsuccessful performance in competitions, among wrestlers with different competitive activity experiences, led to the following conclusions.

In a situation of unsuccessful performance at competitions, wrestlers, regardless of their competitive activities experience, resort to positive coping strategies more often. Dominant strategies belong to the "active positive" group. At the same time, experienced athletes reliably more often than inexperienced ones use control and self-control strategies, while inexperienced athletes reliably more often use emotional coping strategies. An analytical work related to identifying the reasons for failure in competitions should be considered as the resource opportunity of an athlete and a coach.

Among the strategies of proactive coping behavior used by wrestlers, proactive, reflexive and preventive coping prevail, that reflects the skills to anticipate possible stressful situations, and preparing actions to neutralize their negative consequences. Proactive strategies that are least used by athletes include the seeking emotional and instrumental support and strategic planning. Attracting more attention to seeking instrumental and / or emotional support strategies and strategic planning, as well as expanding the range of coping strategies used, can help athletes to get out of competitive stress being enriched with extra resources.

Wrestlers have a high level of stability and noise immunity and pronounced competitive motivation. Experienced athletes in comparison with the inexperienced are characterized by a higher level of psychological reliability. Increased control of the situation and self-control contribute to competitive emotional stability. The use of emotionally-oriented coping strategies related to the search for emotional support, self-pity and helplessness, leads to a decrease in emotional stability in a competition situation.

References

- Aspinwall, L., & Taylor, S. E. (1997). A stitch in time: Self-regulation and proactive coping. *Psychological Bulletin*, 121, 417-436.
- Belem, I. C., dos Santos V. A. P., Caruzzo, N. N., Rigoni, P. A. G., Both, J., & Vieira, J. L. L. (2017). What Coping Strategies Are Used for Athletes of MMA More Resilient to Stress? *Journal of Physical Education*, 28, 2448-2455. https://doi.org/10.4025/jphyseduc.v28i1.2843
- Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology*, 46(3), 839-852.
- Gould, D., Eklund, R. C., & Jackson, S. A. (1993). Coping strategies used by more or less successful U.S. Olympic wrestlers. *Research Quarterly for Exercise and Sport*, *64*, 83-93.
- Greenglass, E., & Schwarzer, R. (1998). The Proactive Coping Inventory (PCI). In R. Schwarzer (Ed.), *Advances in health psychology research* [CD]. Berlin: Free University of Berlin. Institut for Arbeits, Organizations-und Gesundheitspsychologie.
- Isaeva, E. R. (2009). *Coping behavior and psychological protection of the individual in terms of health and illness*. Saint-Petersburg: Publishing of St. Petersburg State Medical University.
- Janke, W., Erdmann, G., & Kallus, K. W. (2004). *Stressverarbeitungsfragebogen mit SVF 120 und SVF 78*. [Stress Coping Inventory]. Göttingen: Hogrefe. [in Ger].
- Kristiansen, E., Roberts, G. C., & Abrahamsen, F. E. (2008). Achievement involvement and stress coping in elite wrestling. *Scandinavian Journal of Medicine and Science in Sports*, 18(4), 526-538. https://doi.org/10.1111/j.1600-0838.2007.00646.x
- Krohne, H. W., & Hindel, C. (1988). Trait anxiety, state anxiety, and coping behavior as predictors of athletic performance. *Anxiety Research*. 1(3), 225-234.
- Lasarus, R., & Folkman, S. (1984). Stress, appraisal and coping. New York: Springer.
- Milman, V. E. (1983). Stress and personality factors of activity regulation. In Yu. L. Khanin (Ed.) *Stress and anxiety in sports: Collection of scientific proceedings* (pp. 24-26). Moscow: Physical Culture and Sport.
- Nicholls, A. R., & Polman, R. C. J. (2007). Coping in sport: A systematic review. *Journal of Sports Sciences*, 25(1), 11-31.
- Pensgaard, A. M., & Duda, J. L. (2002). "If we work hard we can do it!" A tale from an Olympic (gold) medallist. *Journal of Applied Sport Psychology*, 14(3), 219-236.
- Tasaddoghi, Z. (2013). The Styles of Coping with Stress in Team and Individual Athletes Based On Gender and Championship Level. *Annals of Applied Sport Science*, *1*(1), 23-27.
- Tomczak, M., Bręczewski, G., Sokołowski, M., Kaiser, A., & Czerniak, U. (2013). |Personality traits and stress coping styles in the Polish National Cadet Wrestling Team. *Archives of Budo*, *2*, 161-168|.
- Vandenburg, L. G. (1992). *The Effects of Imagery on Competitive Anxiety in High School Wrestlers*. (Master's thesis). Retrieved from https://digitalcommons.brockport.edu/cgi/viewcontent.cgi? article=1080&context=pes theses
- Vodopyanova, N. E. (2009). Psychodiagnostics of stress. Saint-Petersburg: Piter.
- Volkov, I. N., & Namazov, A. K. (2018). Coping behavior of initial students of Peter the Great SPbPU courses engaged in physical culture. In V. A. Shchegolev, & Sh. A. Kerimov (Eds.) SPbPU Science Week. Materials of a scientific conference with international participation (pp. 36-38). Peter the Great Saint-Petersburg Polytechnic University.