Neuroscientific View on Making Urgent Decisions, Responding to Unusual Situations in Sports and the Role of Emotions

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Abstract: The article considers modern neurophysiological approaches to the readiness of future coaches to act adequately in unusual situations and clarifies real indicators of emotional readiness of future coaches. Objective of the article is complex. We planned to substantiate the role of the emotional-volitional sphere as decisive in quick and effective decision-making by coaches and athletes, to outline neurophysiological, psychometric (real emotional-volitional readiness of students) partially-pragmatic (requirements of today’s sports and coaching realities). We used mainly theoretical (analysis and generalization of sources), empirical (observations, surveys, questionnaires, psychometric testing and mathematical methods of data processing) approaches. Finally, we summarized and explained current trends in the context of understanding social, didactic and neurophysiological mechanisms of an emotional maturity.

In the article, the authors proved that in Ukrainian higher education institutions emotional readiness is not formed enough, and instead of the modern inter-scientific neurocentric approach, the modernist approach dominates. Statistical processing of a survey, questionnaire and test data showed mostly low indicators for all key parameters (anxiety, self-control, ability to self-regulate, etc.). This requires a further theoretical research and methodological reform of Ukrainian physical education and coaching education with the introduction of self-regulatory practices, the development of professional reflection and emotional stability. International significance of the article.

The article draws educators’ attention to the problems of psycho-emotional readiness of young people to solve difficult life and work situations, as recently young people in Europe prefer hyperreal activity and communication, which slows down the formation of readiness for rapidly changing highly responsible life challenges.

Keywords: Neurophysiological mechanisms; emotional and volitional sphere; stability-noise immunity; reflective practices; predicting the consequences of decision-making.

Introduction

It should be noted that at the stage of professional training in the university there is a purposeful development of students' knowledge of the chosen professional activity, the formation of holistic ideas about it, development and content of motives and goals of future activities as a coach. However, the emotional and volitional sphere of even undergraduate students remains insufficiently formed for coaching professional decision-making and effective decisions in extreme conditions of a team sports management. This indicates the need to significantly improve the level of development of not only cognitive but also emotional and volitional component of psychological readiness of the future coach to professional activity in the holistic educational process of the university.

Numerous facts of ineffective and even unprofessional behavior of young coaches in extreme conditions add to the urgency of the problem. In non-standard situations, when there are no normative orders "from above", an inexperienced coach, due to the conflict of available options for decision-making, begins to use what he has as if in "hidden form", in the form of examples of non-normative actions. As a rule, such a condensed reaction of the "inner" personality to an unusual situation is not rational, which can lead, according to Stsiborovskiy (2005), to quite serious difficulties in formulating a decision and its implementation. In addition, the separation of rational from irrational in decision-making is relative.

On the other hand, positive emotional reinforcement in coaching plays a significant developmental and formative role. Thus, participation in competitions for athletes and coaches is a highly motivated activity that has both a personal and social significance. According to our observations and results of the research by other authors, emotional and volitional personality traits that have a positive effect on achieving high results in sports, in the process of many years of training are significantly developed. It is subject to the principle of sufficiency (Rocchi et al., 2013). The high level of physical and mental stress characteristic of sports contributes to the development of the preserving properties of psychics, which reduce mental stress through more rational behavior. Such top personality traits include foreign scientists: self-control, caution, practicality, Lozhkin (2004). They are more typical for experienced athletes and coaches with significant experience.

Thus, the role of emotions (or lack of them, control) in coaching and sports acmeology is crucial, but Ukrainian specialists in sports psychology and pedagogy within the current paradigm advocate a comprehensive approach to building competencies to respond to unforeseen situations in
sports. For example, an influential contribution to the development of ideas about the psychological readiness of a specialist in physical culture made by Chichikin (2010) while studying the dynamics of the formation of its structural components such as operational, informational and motivational. The authors showed the importance of methodological training of students in junior courses, despite the fact that in this period their development is separate from professional readiness as a whole.

It is worth noting the non-standard view on the problem of the professional development, which was expressed by Perfileva (2000) in the course of studying the choice of perspectives of a personal and professional development of the future specialist in physical culture and sports. The main idea of this approach is that a properly designed acmeological project and its flexible implementation is the key to success and well-being of student coaches. Central to the conceptual strategy of the future specialist in physical culture and sports is the formation of his ideas about ways to develop a competence.

Recently, the emotional and volitional concept is gaining popularity. Mental resilience, the ability to self-regulate, flexibility and independence in decision-making the main qualities of an emotionally stable coach (Mospan & Kovalchuk 2018). Foreign scholars believe that reflection (reflexive ability, quality, speed, reflexive strategy, etc.) is the main competence of such a coach (Knowles et al., 2005).

In recent years, it has become clear that reflection, emotional and volitional provocatives, the ability to self-regulation - these are mental categories of one qualitative order, which are based on relict mechanisms of a human perceptuality and reactivity. In this regard, the interdisciplinary paradigm of problems of subjects' response to various stimuli, including decision-making as the highest form of the response, has become a dominant. This interdisciplinary approach is based on the study of neurophysiological natural mechanisms and their relationship to a higher mental activity.

The relevance of the article is also added by the statistical fact: it was found that factors of effective, adequate decision-making in extreme activities, students consider emotional stability (52.39%), professional experience (28.57% of respondents), speed of decision-making (14.29%), innate features, intuition of the coach (9.52%), etc. On the other hand, it is very unfortunate that almost every fourth future coach (23.81%) does not know and does not think about what affects the success of his professional activities in extreme situations.
The above considerations allowed to formulate the purpose of the article - to identify and summarize on the basis of the modern foreign scientific discourse the latest neurophysiological and pragmatic (principles of sports and coaching) aspects of decision-making in non-standard situations of coaching and measure emotional parameters of future coaches.

Research methods: theoretical (analysis and generalization of psychological and pedagogical literature, generalization and comparison of data obtained from students and trainers-practitioners); empirical: observations, oral and written interviews (conversation, interview, questionnaire), psychometric testing (tests for self-assessment of mental states of Eisenko, to determine the motivation, mental reliability of Milman in sports, personal anxiety of Spielberger- Khanin, and some others). Note that all tests are well known and available on the Internet, so the authors did not represent or detail them in this article. We also used mathematical methods of processing research results (statistical, correlation analysis, methods to verify the reliability of differences in the studied indicators, etc.) for their analysis and interpretation.

The experimental study was conducted in Ukraine on the basis of Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University and Vinnytsia Socio-Economic Institute of the University "Ukraine" from 2019 to 2021. The study involved 336 students in grades from 1 to 4, 56 university teachers and coaches.

It should be noted that students and trainers have volunteered to take surveys and psychometric methods, and ethics committees of these institutions agreed to conduct a data collection.

**Neuroscientific view on making urgent decisions, responding to unusual situations in sports and the role of emotions in this**

Often non-standard decisions in sports must be made quickly or instantly. Their result is usually a verbal reaction of the coach to the team or athlete. In the formation of such competence, which should be brought to automatism, it is useful to generalize scientists who have studied the relationship of emotions and verbal reactions in standard and non-standard situations. Neuropsychological researches have shown that if a person finds himself in a predictable, expected situation, then before the verbal reaction, the brain rationally processes denotative, i.e. factual language (Kosholap et al., 2021; Sarancha et al., 2021). But if a person suddenly falls into an uncertain, unpredictable or risky situation, the first automatically turn on the reflex affective mechanisms and reactions (Hinojosa et al., 2019). This is one
of the biggest problems of everyday and professional behavior with a sharp change in the situation with possible negative consequences.

Currently, neuroscientists mostly study compulsive, affective and instinctive decision-making mechanisms in non-standard situations. Such solutions are quick but ineffective. These are reactions that are almost independent of a human will. They are associated with the activation of relict mechanisms of self-preservation and a sharp release of neurotransmitters (Ross et al., 2016). This data provide little for the education of future coaches, but they allow us to predict the reactive behavior of athletes and coaches in extreme situations. Based on this, the future coach needs to learn to perceive any abruptly changed situation not as a situation of danger (destructive interpretation), but as a situation of uncertainty (potentially constructive interpretation). Practicing such awareness in combination with stress training, will minimize the affect. When working on this mechanism, it is necessary to take into account neurophysiology, sports psychology and pedagogy (cognitive methods of acquiring automated competencies). That is, our problem is interdisciplinary and requires a comprehensive approach to solve, according to Kahneman and Tverskaya (2000).

In practice, there is usually a greater or lesser period of time between new sporting circumstances and the outcome of a decision. Based on neurophysiological, i.e. the deepest resources of a human behavior, the optimal decision-making in an unusual situation is reduced to the lightning round of several options on the criterion of reward or punishment, their probability and criticality (Clark et al., 2004). Such a neurocognitive structure for a mature person with sufficient or high intelligence already provides minimal time and space for solving problem situations and making atypical decisions.

Emotional maturity is an important general option of a successful coaching. The very understanding of coaching implies psychological stability, the presence of at least a minimum of life and work experience and the absence of negative expectations. How can it be explained that experienced trainers make more effective decisions in non-standard situations, even if they do not have special methods of self-regulation and decision-making algorithms? Researches have shown that experienced middle-aged and older coaches make such decisions effectively not so much because of the knowledge, but because of an emotional maturity, experience in solving and experiencing a variety of stressful situations, as well as age-related reduced reactivity and sensitivity. This allows us to formulate a hypothetical pattern: “We train one to improve another”.

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In the most concentrated form, the subject of our research is manifested in the training of management and decision-making by coaches in risky and traumatic sports: mountaineering, gymnastics, most contact martial arts and some games. Experienced sports educators offer such coaches, first of all, to work out behavioral preparations, to study specific and to know the general specifics of the environment in which the competition takes place. And most importantly - to adequately assess the probability of a wrong decision and its possible consequences (Collins, & Collins, 2013). If the trainer does this work beforehand, his level of neurophysiological stress will decrease significantly before making decisions, as the level of uncertainty and expectations of failure will decrease. This technique is especially suitable for inexperienced coaches.

Specialists in neuropedagogy have long realized that the development of resilience and emotional stability in a rapidly changing environment is facilitated by developmental practices and the strengthening of one's own subjectivity and reflective practices. The simplest method of conducting such practices is the repeated reproduction of industrial incidents of adventures and force majeure situations with the help of their regular play by means of speech, movements and appropriate pauses. The effectiveness of such practices has been experimentally proven (Chambers et al., 2007). The theoretical basis for their effectiveness, in our opinion, lies in the natural, innate neurophysiological basis of both affective response to stress and the ability to subjective reflection - the main motivational tool for the development of self-identification “I” and self-development.

Metaphysical research on sports coaching as a way to realize their own subjectivity and its not fully realized needs offer future and current coaches to engage in introspection to determine motives for sports choices. This is especially useful for adventure and risk sports coaches. Scientists proceed from the postulate: if a student or former athlete chooses the professional path of a coach in risky or adventure sports, he a priori aspires for it and is ready (a person does not choose what he does not aspire to) (Eastabrook & Collins, 2020). Another similar argument is that coaching is creative and specific. Therefore, a person cannot choose it simply under the pressure of life circumstances. An analysis of semi-structured interviews conducted in 2020 among athletes at the highest risk of sports showed that people choose these sports to experience vivid emotional and cognitive experiences. The generalization of the motives of this choice allowed scientists to form three motivational concepts: integrity, authenticity, development. As the active activity of athletes is short-lived and significantly
limited by age, some of them choose the coaching path in order to somehow continue to gain such experience or be involved in it.

In the same year, Ukrainian scientists Debedeva and Onishchenko (2020) developed a structure of non-standard situations and psychological characteristics of their participants. We consider it necessary to briefly summarize their work, as it is characterized by the exhaustive classification of non-standard sports situations by defining parameters: a) short duration; b) stamina - responsibility - mobilization; c) the degree of uncertainty; d) readiness for operational action; e) willingness to obtain false manipulative or unverified information; f) the degree of criticality of results of the decision. These criteria are almost comprehensive and can help not only to form correct reactions and behavior of a coach or athlete in unusual situations, but also to become markers and indicators of psychological and ethical readiness to perform professional tasks and carry a high social status of an athlete or a coach.

Across the sports world, it is accepted that highly responsible coaching work (especially in popular sports) involves coaches who have been prominent players in the past. Recent Portuguese researchers have found a direct link between these facts based on a decision-making ability (Silva et al., 2020). The fact is that playing sports at a high level of skill very often puts the athlete in an unusual situation with the need to make quick and effective decisions. If he regularly demonstrates the correctness of tactical decisions by intuitive, cognitive and behavioral means, it lays a solid foundation for future strategic coaching decisions. As for the formation of athletes and future coaches' ability to make quick and effective (or at least adequate or optimal in severe cases) decisions, Silva, Sonte and Clemente (2020) propose to develop training programs based on short, simulated, but fast and clearly regulated games. Such games from the point of view of pedagogy will look like practical scenarios with a certain degree of uncertainty. The main indicator of the effectiveness of such training is the appropriate, rapid and effective intervention in the dynamic course of the scenario while maintaining emotional stability. This should be an intervention that minimizes uncertainty without violating the rules and resource losses (mental, temporal, rating, points, etc.).

For his part, German sports psychologist Haan (2021) last year conducted a thorough review of the latest concepts of the role of emotions in sports. He proceeded from the general idea of modern philosophy, psychology and pedagogy of sport. It sounds like the thesis of no “emotions”. And it no longer depends on the coaching concept or the sport. This is especially true of the elite level of most popular sports, where the
price of the wrong decision entails significant financial, rating, time and career losses, as well as affects a number of sporting aspects (national prestige, fan confidence, investment opportunities, etc.). Haan (2021) summarized the following counterarguments on the expression and stimulation of emotions in high-level sports:

- Emotions are always stress, and stress is a reduction in effectiveness.
- Emotions are a personal problem, and sports achievements are always the result of joint activities of the coach and team / athlete.
- Elite sports and the emotions of its participants are incompatible.
- The philosophy of modern coaching involves complete disregard for emotions of all participants in the training process.
- Coaches, sports officials, club owners have the right to use moral and psychological pressure to “introduce strong sportsmanship”.

It is clear that in the early stages of a career, neither the athlete nor the coach can be completely emotionless due to age (psychologically immature), social and production (lack of experience) factors. Therefore, in developed countries there is a whole system of youth training to gain a professional and emotional-volitional experience: youth sports leagues, developed network of sports clubs at all levels of administrative division, multilevel system of non-professional and professional leagues in playing sports and more.

Thus, in today's sports and pedagogical world discourse, the main obstacle to effective coaching of non-standard situations is excessive emotionality and inability to manage emotions, which encourages sports coaches and officials to react harshly to emotions in sports, and scientists - to seek deep emotional and neurophysiological mechanisms and impact on them.

**Psychometric measurements of emotional readiness**

The task of this part is to find out the role of emotional factors in decision-making at the initial stage of coach training (students), as well as (for comparison) to make psychometric measurements of similar factors in experienced coaches.

One of the important indicators of operational readiness for decision-making in extreme situations is the ability of the individual to mental self-regulation, self-management. For this purpose, a number of techniques were used, in particular, the technique for identifying the level of emotional and volitional self-regulation. The content of students' practical
classes necessarily included more complex emotional tasks, situations in classes, sports competitions, which required willful regulation.

It was found that such an indicator as the ability of the individual to mental self-regulation of states, behavior, senior students put in the ranking of 12th place and subjectively evaluate it as the worst. According to Eisenko's method, we also found that almost every second undergraduate has a high level of anxiety. These results correlate well with the results of the study of personal anxiety of students by the method of Spielberger-Khanin, which we present in table 1.

**Table 1.** Levels of personal anxiety of students - future coaches

<table>
<thead>
<tr>
<th>Students - future coaches</th>
<th>Levels of personal anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>The first year of study</td>
<td>0</td>
</tr>
<tr>
<td>The second year of study</td>
<td>0</td>
</tr>
<tr>
<td>The third year of study</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Author's own conception

This indicates an insufficient level of development of students' skills and abilities in a mental self-regulation. This affects their inability to reduce the level of such a destructive mental state as anxiety in extreme situations of sports.

In order to verify this statement, additional testing of students was carried out according to the method of mental reliability in sports by Milman (Table 2).

**Table 2.** Levels of development of mental reliability indicators for future coaches

<table>
<thead>
<tr>
<th>Students of the year of study</th>
<th>Indicators of mental confidence in competitions</th>
<th>Levels of mental reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low (the number of students in %)</td>
<td>Medium (the number of students in %)</td>
</tr>
<tr>
<td>First</td>
<td>Competitive emotional and volitional stability</td>
<td>85,00</td>
</tr>
<tr>
<td></td>
<td>Self-regulation</td>
<td>50,00</td>
</tr>
<tr>
<td></td>
<td>Stability-noise immunity</td>
<td>40,00</td>
</tr>
<tr>
<td></td>
<td>Competitive emotional and volitional stability</td>
<td>80,95</td>
</tr>
</tbody>
</table>
As you can see from table 2, approximately every second student is a future coach according to the above method also found a low level of formation of the ability to self-regulate mental states, behavior and their own actions in sports, competitions.

It was found that 80% of respondents showed low emotional and volitional stability in competitions. As you can see in table 2 from one year of study another a competitive emotional and volitional stability of students increases slightly, due to the increase in the number of hours in senior courses aimed at specialization, the development of their sportsmanship. However, students with a high level of competitive emotional and volitional stability according to this method were not identified.

The indicator of stability-noise immunity according to the method of Milman characterizes the stability of internal functional states of athletes, the stability of their motor skills and sports equipment, immunity to various stimuli, noise. In our opinion, it largely testifies to the ability of an individual to withstand various negative influences on the psyche in future coaching work. Using Spearman's test, it was found that this indicator at the level of p≤0.01 correlates with such an indicator as competitive emotional and volitional instability.

In our opinion, the research on gender differences gets considerable scientific and practical interest in the development of mental activity indicators of the future coach. Its results are presented in table 3.

**Tab. 3. Levels of development of indicators of mental reliability in young students**
As you can see from table 3, no significant differences in an emotional and volitional stability in young men and women. At the same time, boys have a much better ability to self-regulate behavior and mental resilience than girls. This once again confirms the fact that women’s emotional activity in extreme situations of sports is somewhat superior to volitional. That is why they have a higher tendency to emotionally respond to various stressors, lower levels of mental stability and the ability to self-regulate behavior in extreme situations of sports. Given the ability to transfer such skills and abilities to real professional activities of the coach, it can be argued about negative consequences of such an impact on the effectiveness of decision-making by coaches in extreme situations of sports.

Surveys of trainers about the reaction caused by their unusual situation when making a decision, the most common were negative, psychophysiological reactions (16.2% of respondents), associated with pale face (8.1%), excessive sweating (5.4%), hand tremors (2.7%).

Excessive fuss was also found during the difficult decision-making process. It was shown by 11% of respondents, which indicates a lack of ability to focus and build a clear plan of action in one’s head, and then systematically and consistently implement it in practice. In the decision-making situation there were such asthenic reactions of coaches as a certain inattention (7% of respondents); search for sympathy (2.5%). At the same time, much more coaches with certain reactions were found: they swore, clearly showed an excess of emotions 16%, aggression - 8% of respondents, and so on.

According to our observations, more complex emotional experiences in extreme conditions of sports competitions are typical for students (Table 4).
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Tab. 4. Dynamics of anxiety and aggression for students in situations of extreme activity

<table>
<thead>
<tr>
<th>Students of the year of study</th>
<th>Anxiety</th>
<th>Levels of aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Absent (the number of students in %)</td>
<td>Present (the number of students in %)</td>
</tr>
<tr>
<td>First</td>
<td>50,00</td>
<td>50,00</td>
</tr>
<tr>
<td>Second</td>
<td>61,29</td>
<td>38,71</td>
</tr>
<tr>
<td>Third</td>
<td>39,12</td>
<td>60,88</td>
</tr>
<tr>
<td>Fourth</td>
<td>36,00</td>
<td>64,00</td>
</tr>
</tbody>
</table>

Source: Author's own conception

Characteristics of the decision-making in non-standard situations are indicators of dynamics of the coach's calm, i.e. his transition to a normal mental state from the changed one, which was caused by the extremeness of the situation.

These indicators are determined primarily by the mental stability of the individual, as an integrative characteristic, the effectiveness of the decision, the presence of positive or negative experience of management. The results of the experimental study showed that immediately after the decision, about 40% of coaches calmed down, and within 5 - 10 minutes - 15% of respondents, which indicates a fairly high level of self-control in most coaches. At the same time, for 45% of coaches, it takes a day or even a few days to calm down. This is objectively related to the individual nature of the course of mental processes that occur in combination with two stressors: non-standard conditions and non-standard tasks. Quantitative indicators of the effectiveness of solving problems in different types of situations are a clear confirmation of this. The results of the study convinced us that the coach needs a combination of reflexive abilities and the ability to self-regulate to make effective decisions in non-standard situations of the highest level of complexity.

We should not forget, that along with conditions and tasks, the structural element of the situation is the individual. In this regard, it is necessary to take into account the perception of students and even decision-making coaches, non-standard situation as subjective-extreme.

Subjectively extreme (stressful state of mind) is a specifically altered state, which is caused by acute perception of an unusual situation and is accompanied by a narrowing of the field of consciousness and weakening of
psychological control over the situation, Avdeev (1992). Common in the manifestation of subjective extremism is the loss of mental control, and for an individual is the presence of signs of frustrating, conflict and crisis response due to the changed state of mind. We conducted a study of the mental states in which students are during the competition, where making decisions in unusual situations.

Conclusion

The work of neurophysiologists of the late twentieth century shows that the basis of unconscious motives for behavior, reactions to personally or socially significant irritant, stimuli or situations are natural neurophysiological mechanisms of lower order (affect, expectation of positive stimuli, increased neurohumoral activity). This brought the factor of emotions in decision-making to drastically changed circumstances in the first place. And in the third millennium with the help of magnetic resonance imaging of individual microparticles of the brain, scientists proved that the mechanisms of primitive perceptual decisions are carried out by mobilizing several populations of selectively tuned sensory neurons (Heekeren et al., 2004). These and other neuroscientific arguments presented in the first part of the article finally prove the paramount importance of the psycho-emotional factor in making non-standard decisions by athletes and coaches. This is supported by the pragmatics of sports activities: to achieve the highest results at the "elite" sports level, it is necessary to completely eliminate the influence of emotions as a determining factor.

Before summarizing the main psychometric emotional indicators, in our opinion, it is important to present views of students-future coaches on factors that determine the correctness of the coach's decisions in extreme situations of wrestling. The survey has found that, according to students, the strongest influence on the effectiveness of decision-making, actually mental, emotional and volitional readiness of the coach (his ability to self-control, emotional stability, high level of mental self-regulation, etc.). This was stated by 52.39% of respondents. But here we observe a paradoxical dissonance: the level of real development of students' emotional and volitional stability, sufficient for participation in competitions, and the ability to self-regulation are very low. Below we present the generalizations made on the basis of the psychometric indicators given in the previous sections.

Thus, the research has found that the situation of anxiety manifests itself in students as a consequence of an emotional and social immaturity, lack of awareness of the cause of failure, lack of understanding of ways out of difficult situations. There is also aggression which directing negative
energy to the object that caused the failure, or to yourself / the team (autoaggression). We found that significantly higher levels of anxiety are characteristic of first- and final-year students. Similarly, they change the rate of aggression of the individual. In our opinion, this is due to the processes of their adaptation: in the first year - to study at university, in senior years - to their adaptation to a more intense educational process and in connection with the decision on further life (continued training or employment).

80% of students were diagnosed with a low emotional and volitional stability, which indicates their inability to withstand the high pace and intensity of competitions, to restrain themselves in extreme situations. Based on the above, it is safe to say that the low level of restraint is due to the lack of special psychological training of students in higher education institutions. Students show the same negative trait for the coach and athlete in competitions and in the process of managing the team's sports activities. They will no doubt transfer it to future coaching work in the absence of a corrective action. Selective observation of the behavior of individual undergraduate students in the performance of coaching functions in most cases confirmed the above assumption.

The results of the research of the levels of emotional and volitional stability and self-regulation in first-, second- and third-year students indicate that there are significant problems with their development in future coaches at the university. The main reason is the lack of educational and psycho-correctional content line aimed at the practice of self-regulation and psychotherapeutic correction.

It was found that almost half of the surveyed students are characterized by a low level of stability and noise immunity. External negative factors of noise immunity in the conditions of a sports team management at competitions can be actions of fans, competitors, aimed at destabilizing the relationship in the team, moral pressure, etc.

The result of comparing future and current coaches is important. Based on a set of numerous parameters and the results of a survey of coaches, we found that the vast majority of coaches based on the experience and professional design ability to create an adequate image of an unusual situation and objectively assess the complexity of the sports situation. This was stated by 72% of respondents.

Among students, we see the opposite trend: the exaggeration of the complexity of the situation was reported by 19% of respondents and only 9% of future coaches tend to reduce the complexity of the situation.

Thus, the results of the analysis allowed to identify latent and obvious emotional and volitional factors that actively determine the
decision-making process and its effectiveness. The search for the most closely related characteristics allowed us to conclude that the subjective perception of complexity (non-standard situation) is integrated with its real (objective) complexity and is the most important psychological characteristic of personality behavior during decision-making.

**Limitations of the research.** In the article we proved that the emotional component of readiness to make decisions in extreme situations of sports activity was insufficiently formed in students of 1-4 courses. Thus, their ability to a mental self-regulation in sports and competitive activities was poorly developed; emotional and volitional stability, noise immunity. In extreme situations of wrestling, students have a high level of anxiety, aggression, and in case of defeat - frustration. Undergraduate students and even graduates do not have modern technologies of mental a self-regulation, management of their own destructive states, and therefore are not able to fully behave adequately in terms of managing a sports team in extreme situations of wrestling. Our article demonstrates the statistical scale of these problems and current trends in their solution, but there is an urgent need to develop and implement special programs to form students' psychological readiness to make decisions in non-standard situations of the sports management and implement them in the educational process.

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AUTHORS 1 and 6 adapted and applied the psychometric methods mentioned in the introduction, and AUTHOR 2 performed statistical processing of the obtained data. Theoretical argumentation of the need for neurophysiological clarification of the mechanisms of coaching and sports decisions was made by AUTHOR 3. Description and interpretation of the obtained data is AUTHOR 4. AUTHOR 5 carried out the final work on summarizing the results, annotating, reviewing and technical design of the article.

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