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IMPROVING THE BENEFITS OF SELF-REGULATION OF THE PSYCHOLOGICAL STATE OF STUDENTS-HOCKEY PLAYERS DURING THE HOUR OF PLAYING ACTIVITY

The article summarizes the theoretical data and further develops the methodological foundations of self-regulation of the psychological state of hockey students. It is revealed that the conditions for improving the means of self-regulation of the psychological state of hockey students in the process of their playing activities. The peculiarities of self-regulation of the psychological state of hockey students depending on the game role, which is steadily manifested in the game activity, are determined. The results of the study allow to expand the approaches to the problem of managing the psychological state of hockey athletes in the course of their playing activities. Modern science actively uses the methods of mathematical statistics to establish the degree of objectivity and reliability of life processes and ongoing scientific research. This circumstance, to a certain extent, can be attributed to the field of sports. The activities of athletes, sports teams, and the entire field of sports are based on many indicators that require an objective analysis and then adequately made decisions.

The tasks that professional activity sets for a future specialist in the field of physical culture and sports are basically related to the analysis of the influence of random factors and require decision-making under risk, choice and uncertainty based on the possession of mathematical knowledge and skills. An important role in the structure of professional knowledge of a future coach and teacher is played by the identification, forecast, prevention of crisis situations both in the personal formation of an
athlete and in the development of communications in a sports team based on metrological data, the use of stochastic analysis methods and the study of probabilistic models of real processes and phenomena.

**Key words:** students, hockey, athletes, psychological state, self-regulation, game activity.

Formulation of the problem. Modern hockey as a sphere of sports life of society is characterized by three major features: an increase in social significance, an increase in the ideological factor and an increase in the degree of intensification of all components of this sport through the introduction of scientific and technological progress and the results of psychological and pedagogical research.

International ice hockey competitions of recent years undeniably prove that they involve athletes of the highest and approximately equal qualifications (in terms of relatively equal special abilities and professional skills), highly motivated to achieve the same goal - victory in socially significant competitions. Therefore, the problems associated with the self-regulation of the mental state of highly qualified hockey players become relevant. In other words, the psychological factor becomes dominant in the hockey players' playing activity [1].

**Analysis of recent research and publications.** The relevance of the study is due to the need to resolve the contradiction between the importance of improving the process of psychological preparation of highly qualified hockey players and the lack of theoretical and methodological foundations for using the means of self-regulation of the mental state for this. The accumulated material, the identified set of contradictions allow us to formulate the research problem: what are the pedagogical conditions for improving the means of self-regulation of the mental state of highly qualified hockey players in the game [2].

The methodological basis of the study is the theory of self-regulation of voluntary human activity (A. Bernshtein; O. Konopkin); the theory of individual differences in the self-regulation of the mental state (A. Buzyun; B. Kossov).

**Presentation** In relation to a particular athlete, regulatory processes should have individual specifics, which are determined both by individual psychological characteristics and the requirements of a particular sport. Consequently, one of the main tasks of the analysis of the problem under study is to identify the relationship of stable features of self-regulation of the mental state of an athlete and, in particular, a hockey player. Among them, there are features characteristic of the regulatory processes of planning, modeling, programming and evaluation of results that implement various parts of the self-regulation system [3].

The development and inclusion of conscious means and methods of mental self-regulation of the mental state in the competitive process of highly qualified athletes and, in particular, hockey players, is one of the promising areas of research in the problem of increasing the effectiveness of their competitive activity. In this connection, there is a need to develop a methodology for an individually oriented approach to self-regulation of the mental state of highly qualified hockey players in game activities.

The established features of the relationship between the components of the mental state and the effectiveness of the playing activity of highly qualified hockey players of various roles allow us to say that the specifics of performing a competitive exercise leaves a peculiar imprint on the nature of the mutual influence of the mental state and indicators of their playing activity. It has been determined that the playing role of an athlete leads to qualitative variations in the significance of the components of the subjective and objective mental state in the reliability and effectiveness of playing activity, which are predetermined by the individual characteristics of hockey players' self-regulation: the stability of the processes of assessing and correcting results in a stressful situation and, accordingly, the severity of subjective criteria for the success of actions. It was revealed that the regulatory influence of motivation on competitive activity is mediated by individual characteristics of self-regulation, which are in various ways related to the stability and success of the playing activity of highly qualified hockey players [4].

For example, the individual features of the relationship between the effectiveness of playing activity and the components of the mental state of the forward are as follows: the component of the mental state «mood» has a weak relationship with such indicators of the athlete's playing activity as the number of goals scored in the game \((r = 0.307)\), the combination «goal / pass» \((r = 0.228)\) and participation in abandoned pucks in equal compositions \((r = 0.226)\).

Weak negative correlation between the «health status» component and participation in goals scored on the power play \((r = -0.301)\). The number of dismissals for violation of the rules of the game has a weak relationship with the components of the mental state «state of health», «excitement», «desire to compete». At the same time, a weak but negative relationship was also found between the "desire to compete" indicator and the level of reactive anxiety \((r = -0.249)\).

The effectiveness of the playing activity of the attacker is associated with the component of the mental state «the desire to compete». A weak correlation of this component with the indicator of the «goal / pass» ratio \((r = 0.234)\), participation in abandoned pucks when playing in equal compositions \((r = 0.245)\), indicator «plus / minus» \((r = 0.371)\), time of removals \((r = 0.372)\), 

The component of the mental state «the significance of the upcoming activity» has a number of correlation coefficients, indicating the presence of a weak relationship with the indicators of the forward activity of the attacker. In particular, it was found that there is a weak positive relationship of this component with the participation of a player in missed goals when playing in equal compositions and in the minority (both correlation coefficients \(r = 0.200\)) and a weak negative relationship with
participation in abandoned goals when playing in the majority \( (r = -0.282) \) and the number of points scored per game \( (r = -0.306) \).

Statistical analysis showed that the «readiness for the highest achievements» component of the mental state has a weak negative relationship with the «goal / pass» ratio \( (r = -0.392) \), the «plus / minus» indicator \( (r = -0.310) \), participation in abandoned goals when playing in equal compositions \( (r = -0.246) \), the number of points scored \( (r = -0.269) \) and participation in most goals scored \( (r = -0.331) \).

The revealed interrelations between the effectiveness of playing activity and the components of the mental state of highly qualified hockey players make it possible to determine the main directions for the development of a methodology for self-regulation of the mental state of highly qualified hockey players, the basis of which was individual texts of auto-influence. The purpose of the developed methodology of self-regulation of the mental state was: increase, decrease and stabilization of the values of the components of the mental state in order to increase the effectiveness of the game activity of highly qualified hockey players of various roles [5].

Thus, self-regulation of the mental state of top-qualified hockey players in game activity was effective, since:

- in the process of self-regulation of the mental state, the technique of an individually oriented approach to hockey players of the highest qualification was used based on the characteristics of the manifestation of their mental state;
- the methodology of self-regulation of the mental state is based on the individual features of the relationship between the mental state and the performance of the game activity of highly qualified hockey players;
- the technique of self-regulation of the mental state of highly qualified hockey players was focused on stabilizing and optimizing the values of the components of the mental state.

The relevance of the study is due to the need to resolve a number of contradictions between the level of development of the theory, which reveals the patterns of formation of an individual style of self-regulation among qualified hockey players, and the needs of modern sports practice aimed at achieving the highest results in socially significant competitions [6].

In the study, an actual psychological and pedagogical problem is analyzed, a methodological approach to the study of the problem of improving the means of self-regulation of the mental state, based on individual differences in the self-regulation of the athlete’s activity, to the study of the problem of self-regulation of the mental state in game activity is substantiated, and the concept of self-regulation of the mental state of highly qualified hockey players is substantiated.

It is necessary to consider as individual features of self-regulation of the mental state the individual characteristics of an athlete, which are steadily manifested in competitive activity. Among them, one should single out the features characteristic of the regulatory processes of planning, modeling, programming and evaluation of results. The most adequate and constructive representation of the activity of self-regulation of the mental state of highly qualified hockey players is a conceptual model based on the structural-functional approach.

The factor in ensuring the effectiveness of playing activity in hockey is the individual characteristics of self-regulation of the mental state of athletes: the stability of the processes of evaluating and correcting results in a stressful competitive situation and, accordingly, the severity of subjective criteria for the success of actions [7].

The identified pedagogical conditions for improving the means of self-regulation of the mental state of highly qualified hockey players, which guarantee an increase in the effectiveness of their playing activities and their implementation, are based on method of self-regulation of the mental state, taking into account the individual characteristics of the relationship between the mental state and the performance of the playing activity of highly qualified hockey players and aimed at stabilizing and optimizing the values of the components of the mental state.

The established features of the relationship between the components of the mental state and the effectiveness of the playing activity of highly qualified hockey players of various roles allow us to say that the specifics of performing a competitive exercise leaves a peculiar imprint on the nature of the mutual influence of the mental state and indicators of their playing activity. In other words, the playing role of an athlete leads to qualitative variations in the significance of the subjective and objective components of the mental state in the reliability and effectiveness of playing activity, which are predetermined by such individual characteristics of hockey players as: the stability of the processes of evaluating and correcting results in a stressful competitive situation and, accordingly, the severity of subjective criteria success of actions [8,9].

Specific information obtained on the basis of the use of this technique for diagnosing the subjective attitude of the hockey coaches participating in the experiment to the humanistic approach in the training of athletes indicates, first of all, the low level of informational readiness of the coaches for this approach: they are poorly informed about the ideals and values of humanism, the importance of their implementation in modern sports, about the main features, components and pedagogical conditions of the humanistic orientation in the training of high-class athletes. They have more complete and deeper knowledge about specific aspects of the humanistic approach in the preparation of athletes - the style of the coach, the means of preventing diseases and injuries of athletes, etc. The exception is their awareness of such an aspect of this approach as Olympic education and the upbringing of athletes.

Data were obtained on the features of the structure of the objective and subjective components of the mental state and the adequacy of its assessment in the game activity, which affects the quality of the competitive activity of top-class hockey players depending on the game role: motivational factor; activation-energetic factor; emotional and evaluative factor.

**Conclusions.** It was revealed that the regulating influence of motivation on competitive activity is mediated by individual strategies of mental state self-regulation, which are in various ways related to the stability and success of the playing activity of highly qualified hockey players.

The main directions of development of a methodology for self-regulation of the mental state of highly qualified hockey players, focused on stabilizing and optimizing the values of the components of the mental state in order to increase the effectiveness and ensure the effectiveness of the playing activity of highly qualified hockey players of various roles, are determined.
FOOTBALL AS AN EFFECTIVE MEANS OF DEVELOPING PHYSICAL QUALITIES IN STUDENTS OF HIGHER EDUCATION

Football is the most accessible, popular and popular means of physical education for modern youth. It was found that the more successfully the issue of morphofunctional development and motor training of students is solved, the more the physical condition and success in further play activities depend. It is established that along with learning techniques and tactics, this game has ample opportunities to increase the morphofunctional capabilities of student youth. As a result of long-term adaptation to physical activity in the process of playing football in the body of athletes are specific functional changes, supported by morphological and functional changes in body systems.

Improving the morpho-functional capabilities of students in the process of sectional football lessons is provided by directly influencing the development of general endurance, as this motor quality characterizes the functional state of the body and is most related to health indicators. The predominant use of special physical exercises aimed at improving the functionality of the circulatory and respiratory systems, conducting outdoor activities, high emotionality and variability of content to some extent increased the effectiveness of pedagogical tasks. At the same time, it is especially important to ensure constant and timely control over the effects of physical activity on the body of those involved. The issue of improving the health orientation of school physical education requires the search for improvement of the content and direction of physical exercises. It is known that the main form of physical education at school is a lesson in physical education. However, their number does not provide the necessary for the developing organism, the amount of motor activity and does not form in students a stable need for regular exercise.

Key words: students, football, physical qualities, institutions of higher education.