

# Methods for Detecting Psycho-Emotional Disorders in Highly Skilled Athletes (Literature Review)

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**Abstract** The article deals with the problem of psycho-emotional disorders in athletes during training sessions, methods for identifying these conditions and ways of correction, as well as the role of a coach, psychologist and athlete in choosing methods and means of psychological training.

**Keywords** Psycho-emotional disorders, Psychologist, Athlete, Coach

## 1. Introduction

The problem of psycho-emotional disorders of a person today occupies one of the important places in modern scientific and clinical research in the field of clinical psychology. According to the existing WHO definition of mental disorders as “a wide range of problems with different symptoms”, more than 300 million people worldwide suffer from depression and more than 284 million from anxiety disorders (World Health Organization, 2017). According to the National Institute and Care Excellence (NICE) guidelines, the most common mental disorders range from depression to anxiety disorders and are the most common.

The problem of the stability of the psycho-emotional state of athletes, according to domestic literary sources, is practically not disclosed at the moment. The issues of organization and the most accurate methods for assessing the psycho-emotional state of highly qualified athletes remain open [1], while in Canada, America, Australia and the EU countries this problem is given much attention [2,3].

In the CIS countries, the method of formalized tests based on questionnaires is widely used, but this approach to assessing the psychological state does not provide reliable and unambiguously interpreted results of experimental psychological studies [4,5]. The disadvantages of the existing methods of anet-questionnaires in diagnosing the psychological state of an athlete are relatively low accuracy, spending a huge amount of time and fatigue during the survey, laboriousness in processing the results, etc.

Laboratory diagnostic methods based on the level of cortisol to dehydroepiandrosterone are also ineffective, since the equipment is bulky and not mobile, and the sports doctor receives the results of the analysis late, which in turn leads to a decrease in the functional, adaptive reserves of the body, as

well as an imbalance in the immune system and weakening of mechanisms immune defense in the body of athletes due to untimely psycho-correction [6,7,8,9].

At the moment, there are no objective diagnostic methods and criteria for predicting the premorbid state in athletes, while changes in the level of psycho-emotional state, in turn, trigger the development of psycho-emotional disorders associated with stress and lead to a weakening of the functional state of the athlete's body, reducing the chances of achieving high results.

Psychological testing and training in modern sports occupies a special place. An athlete can perform brilliantly with good preparation for the main start of the season at the peak of sports form, but usually loses at the main competition [10,11], this is due to the influence of all factors - technical, tactical, physical and psychological preparation, which have a direct impact on athlete's performance.

It is no secret that during competitions the stress factor increases, athletes whose anxiety is expressed in aggressive actions usually do not achieve high sports performance, because at the moment, against the background of stress, they are not able to control themselves and manage their emotional and physical state. [11,12].

For the psychological preparedness of an athlete for a competition, which determines the success of his behavior in the competition and his high result, it is necessary to determine the integral personal quality, i.e. a state of mental readiness adequate to the conditions of self-regulation of one's own actions, thoughts, feelings, behavior, leading to the creation of conditions for adaptation to extreme loads without damage [10,13]. The reliability of competitive activity and the effectiveness of the performances of highly qualified athletes depends on the mental state that precedes or accompanies it. The modern level of science in sports practice uses a number of methods for regulating the level of stress and adverse mental states as preventive measures before the start of the competition, or correcting these

conditions immediately before going to the start. The most effective of them are psychological and pedagogical recommendations focused on three time periods: before the competition, during the competition and after the performance.

Often, during training sessions, an athlete experiences excessive mental stress that occurs against the background of high physical exertion, which reduces the effectiveness of activity and, as a rule, in competitions, the one who has greater opportunities for self-control and self-regulation wins. Experts classify the "mental state" depending on the activity of the athlete, such as mental disharmony that manifests itself before the competition (starting fever, starting apathy, starting complacency, starting lack of composure, omens and talismans, stress sports immunodeficiency); disharmony arising during the competition (phobias, the burden of leadership, competitive confusion, premature competitive calmness, self-stress syndrome, motor disharmony); disharmony developing after the competition (depressive, hypochondriacal, hysterical, neurotic syndromes, remobilization disharmony). As a rule, disharmony does not depend on the time of the competition, so the state of overtraining, arrogant attitude towards others, intolerance to comments, and even more so to criticism, opposing oneself to other members of the team), errors in the representation of reality require careful study and correction. Timely correction helps to prevent unfavorable psychological conditions and disharmony of an athlete, thereby increasing his athletic performance.

On the problem of regulation of unfavorable mental states of athletes, there are a number of brief practical recommendations for the coach, where the author points out that in order to prevent anxiety, it is necessary to develop strong-willed qualities to provide the athlete with the necessary information for decision-making before the competition, to form an adequate self-esteem in the athlete, to develop emotional stability in the athlete, "equalize" the athlete's claims depending on his capabilities, provide insurance during exercise and emotional support before the start. In order to prevent frustration, it is necessary to reduce the level of anxiety in people with a weak nervous system and reduce the level of aggression in people with a strong nervous system. It is also recommended to reduce the psycho-emotional arousal of an athlete, to develop such qualities as perseverance, perseverance and patience. To prevent mental satiety, it is necessary to diversify training sessions by including new elements, change training conditions, increase motivation, increase the amount of work, etc. Also, excluding extreme external stimuli and influences, high physical and mental stress before the start, while developing confidence, determination, self-control, you can increase the level of resistance to stress, thereby preventing psycho-emotional stressful conditions, giving the athlete a chance to rise above himself to an unexpected height.

To organize psychodiagnostics in sports, it is necessary to know the main stages, methods, techniques and procedures of scientific psychological research. So in the

psychodiagnostics of sports, as a rule, they use general psychological methods and modified-adapted methods for studying sports activities and most often use methods of observation, self-observation, experiment, questionnaire methods, followed by processing the actual material of research using mathematical methods statistically (correlation, factorial, dispersion, discriminant etc.) Data analysis is also carried out by quantitative methods that reflect the content essence of the studied mental phenomena, their differentiation and classification according to types, groups, variants, etc.

In order to study the individual characteristics of the personality traits of athletes, empirical methods are used - K. K. Platonov's personality map, Eysenck's questionnaires, Rorschach tests, the study of the athlete's personality - sociometry, methods for studying thinking and creative abilities, and methods for identifying pathological features of the psyche. They also study psychomotor processes (coordination and accuracy of movements, sensorimotor reactions, study of the eye, biochemical studies).

To control the dynamics of functional shifts in emotional situations under the influence of mental stress factors in the conditions of training and competitive activity of an athlete, it is necessary to conduct research of a scientific nature that requires the use of valid and adequate psychological methods, with an assessment of the effects of influences and the aftereffect of mental stress on mental states, personal qualities of an athlete. Assessment of mental changes under conditions of competitive loads should be complex, since various functional systems of the body are involved in the process, due to the limited diagnostic capabilities of one or another empirical method.

Based on the analysis of psychological scientific works conducted and proposed in practice by researchers of scientific recommendations on the available methods of controlling mental states, personal properties, the following group of empirical methods can be used to assess emotional stress:

- observation and self-observation of external and internal experiences of an athlete;
- survey methods that allow quantitatively in arbitrary units, points to evaluate certain indicators of emotional stress (subjective questionnaire SAN, personality questionnaire 16-PF Cattal, Spielberger's test of personal and reactive anxiety, "Thermometer" test);
- projective methods designed to study the personal characteristics of an athlete, based on a stimulus situation that creates conditions for the manifestation of emotional reactions (P-test of Rosenzweig, color test of M. Luscher - the most adapted in the practice of psychological control);
- methods that include assessment of the physiological functions of the body (heart rate, respiratory rate, galvanic skin response, bioelectropotentiometry) based on stress indicators;
- methods that include the assessment of functional indicators according to the parameters of

self-regulation of sensory-perceptual and psychomotor processes (latent period of a simple and complex visual-motor reaction, reaction to a moving object, reaction to time, tapping test, dynamometry, associative experiment, correction test, time operating account according to Schulte, etc.).

In connection with the increase in the influence of mental loads, it is necessary to involve coaches and athletes in joint work, because the use of psychological control is associated with the need for constant and prompt determination of the specific effects of psychophysical loads, the individual limit of resistance to overloads, the dynamics of functional shifts in conditions of training and competitive loads.

## 2. Conclusions

Psycho-emotional disorders in an athlete in the absence of timely monitoring and adequate correction in the future will be permanent, so in the assessment and analysis of mental readiness for competitions, in the diagnosis of mental disorders at the initial stage, as well as clarifying the etiology of these conditions, the main role belongs to the psychologist, however, when the choice of methods and means of psychological preparation in the precompetitive period, the main position is occupied by the trainer-teacher. Analysis of psychodiagnostic data should meet such criteria as predictive value; reliability, stability of results in the same test athlete; scientific character, validity and persuasiveness; uniqueness and differentiation; adequacy to those qualities, which the test is aimed at assessing; objectivity, characterized by the greatest standardization of the test; authenticity; the existence of effective external criteria (i.e. criteria in practice); practicality of tests.

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