

Athletes' Psychological-Physiological Features of Training in the Group of Higher Sportsmanship in Kayaking and Canoeing for Competitions

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Abstract

Introduction: Currently, the image of Olympic sports has increased due to media popularization and the infusion of enormous material and technical resources. Leading sponsorship companies provide significant financial support to the sport, significant financial resources are required to train the world's leading athletes, and sports facilities with advanced professional equipment are being built to further improve the sport performance. More than 10 specialists, including analysts, doctors and psychologists are involved in training world-class rowing and canoeing athletes. But, due to increased competition among athletes, many athletes are not able to show and mobilize their psychological and physiological qualities at the level that is necessary to achieve the highest result.

Methods: Method used in this is description self-observation analysis and reviews.

Results: As a consequence, psychological training is of particular importance, because it forms and improves the necessary qualities of the athlete's personality, while there is a formation of personality, changes in the personal attitude of the athlete to the training and competitive process, increases self-esteem, builds a healthy relationship with the team and coaching staff.

The problem of psychological preparation is especially acute for athletes when completing the standard of Master of Sports, it is often during this period sport becomes a profession, and a person begins to feel the "burden of responsibility", because new sport victories are constantly expected and demanded of him.

Conclusion: For effective construction of the training plan for an athlete of the highest sportsmanship it is necessary to know the features of the personality of the rower. We should build training work only after psychological and physiological examination of the athlete, taking into account his psychological and physiological characteristics, and aimed at elimination of psychological and physiological defects that prevent to show the highest possible result at competitions.

Keywords: Physical Education and Sport; Psychological and Physiological Qualities; Canoeing and Rowing

Introduction

Individual-psychological characteristics of the rowers of the highest sportsmanship group

A huge number of people are engaged in sports activities, but only a few people achieve significant success in it. Many athletes when completing the standard of the Master of Sports become professional athletes and open the way to a new stage of life - the sport of the

highest achievements. The athlete, being engaged in professional sports, achieves high sports results for the sake of the prestige of the team, the country.

To get high results in "big" sports requires constant training, which involves extreme psychological and physical stress, high intensity and volume of various exercises. During the competition period, athletes are responsible not only for themselves, but also for the team. The main task of specialists working with professional athletes is not only to ensure that the athlete is physically well prepared, but also to ensure that he or she is as mentally prepared as possible to achieve high performance [3].

The formation of the personality model of rowers of higher sport skills includes three psychological blocks: a block of personal bio-psychic properties (nervous system properties: strength, mobility, balance, temperament); a block of maximum mobilization of volitional effort (motives and needs, mental activity, impulsivity, leadership, a sense of competition), a block of mental self-regulation (volitional self-control, emotional equilibrium, optimum anxiety) [1,5,11,12,17].

This model of the personality of an athlete in a group of higher sportsmanship allows us to solve the following main tasks in the training process:

1. Selection of athletes to the group;
2. Regulation of the training process and its management;
3. Individualized plan of training process;
4. Control and management of an athlete's mental state;
5. Targeted education of sports character;
6. Recommendations for team composition [2,7,9].

Methodology

Methods of psychological research of rowers of the group of higher sportsmanship

In sports psychology, methods of psychological research of a group of rowers of higher sportsmanship are used, such as: organizational (comparative, longitudinal and complex methods), empirical (objective observation, self-observation, experimental method and methods of psychodiagnostic), quantitative and qualitative analysis of scientific facts (mathematical and statistical methods: correlation, factorial, dispersion, discriminant and other types of analysis: qualitative methods: analysis of research materials on the content essence of the studied mental phenomena and in their differentiation by types, groups, options, etc.) and interpretation (various variants of theoretical analysis, generalization of research materials from the standpoint of system-structural, functional, genetic, cybernetic, information and other approaches to the problem being developed) [13-18].

Application of the results of psychological research in the preparation of rowers for the highest sportsmanship group

To select athletes for the team, coaching staff must pay attention to physical and psychological characteristics of athletes that will allow them to show the greatest adaptation to the sport.

Such requirements are:

- a) High level of strength of nervous processes, stipulating the ability to perform work with maximum effort, but relatively short in time, vital to sprinters rowers;
- b) High tolerance to the monotony of the course, which is important for sprinters. Manifestations of this property contribute to performance of long duration monotonous work;
- c) High lability of the nervous system, i.e. readiness to quickly make correct tactical decisions when rowing the course [1,2,13].

To improve the effectiveness of the training process of athletes of the highest sports skill group, specialists need to conduct psychological studies of the rower on a regular basis. It is necessary to conduct a constant dialogue with the athlete, daily take interest in his/her well-being and emotional state, conduct periodic written testing of rowers, conduct research using advanced medical equipment capable of sufficiently accurate determination of the psychological and physical condition of the athlete. Also, when using the complex method of psychological study, it is effective to include in the training process a competitive struggle between athletes of equal strength, to determine and train their psychological stability to a high competitive struggle at a distance, the confidence in their own strength. It is important to adjust training with regard to the psychological and physical condition of the athlete. When psychological deficiencies in a rower are identified, it is important to have a dialogue with the athlete and build work in training to not only improve physical qualities, but also to eliminate these deficiencies [3,4,8].

Assessment of the personality traits of a rower and control of the level of his psychological and physical fitness

The psychological and physical fitness of rowers should be closely monitored, which is carried out on the basis of data on the personality properties and physical health of the professional athlete, obtained from a large amount of statistical material on the athlete, taking into account his individual psychological and physiological features.

Testing of rowing athletes of the highest sportsmanship group should be conducted with the use of tests that can determine such properties of personality, as: temperament, level of achievement motivation, intellectual and volitional control of behavior; desire to compete, as well as the level of physical health (heart rate; blood pressure; anthropometric, spirometry- and electrocardiography data; determination of aerobic capacity, adaptive capacity, health coefficient) [9,10].

Long-term practice of psychological preparation of an athlete for a long training process with high loads shows that of paramount importance is the organization of influence on the following types of relations providing success of the training process:

1. Attitude to the physical load borne. In addition to the physiological factor of physical load tolerance there is also a psychological factor. Often an athlete does not cope with the load and not because he is not ready physically, but because he was not prepared for it psychologically. If an athlete is afraid of the load, his ability to withstand it is significantly reduced [6,8].
2. Attitude towards one's ability to recover. This type of attitude is closely related to the previous one and is a logical continuation of it: the first is manifested in the process of training, the second - between training sessions. A rower with a sporty character is sure that the period between trainings gives him an opportunity to recover well, he does not fix his consciousness on fatigue, on any painful manifestations, has no fear for the state of his body [6,8].
3. Attitude towards possible neuropsychological overstrain. Modern sports training uses such high physical loads that it is not uncommon for an athlete to be in a state of mental overstrain of one degree or another [6,8].

4. Attitude towards the quality of training assignments. Conscientious attitude to training, high quality performance of exercises is important at any stage of sports improvement. But this type of attitude becomes particularly important at a high level of sportsmanship [6,8].
5. Attitude towards a sports regime. We mean mainly the following aspects of sports regime: systematic training, attitude to rest, to sleep, to nutrition, to recovery and preventive measures, to cultural and mass organization of leisure, to self-regulation activities and to self-education. The peculiarity of this type of relations is that the improvement of its individual sides is carried out mainly through the organization of activities. A rower with a sport character is distinguished by a thoughtful, deeply meaningful self-organization of his whole life, subordination of the whole regime of the day, all his actions to the solution of the main sports tasks [6,8].
6. A system of relations that ensures the success of an athlete's performance in competitions. Sports character is formed and improved in the training process. But it is hardened and truly manifested only in competition [6,8].

Results and Discussion

Evaluating one's own results

As a result of many years of work, coaches of the rowing and canoeing department of the state budgetary institution of the Kostroma region "Sports school of Olympic reserve named after Olympic champion Alexander Vyacheslavovich Golubev" revealed the following psychological characteristics of a high-class athlete:

1. Stress resistance, the ability of the athlete to mobilize their psychological and physiological qualities in an extreme situation to the maximum.
2. Formation of motor patterns on the basis of coordinating commands and thought processes of the brain in connection with trainability.
3. Building a training process based on the athlete's temperament.
4. Motivating the athlete for high achievement.
5. A healthy competitive spirit.
6. Self-mastery, the athlete's ability to keep everything under control.

For effective performance of the team at the competition the coaching staff needs to know the cyclical changes in the level of psychological and physiological qualities of each athlete. Timely correction of these qualities will relieve situational anxiety of athletes before competitions, increase motivation and self-esteem, thereby leading the team to a successful performance. Coaching staff should conduct at least three psychodiagnostic tests of the rower during the training cycle of preparation for the competition and adjust the training process taking into account the results of testing.

Structure of psychological preparedness of rowers in the group of highest sportsmanship

For the formation of an athlete's personality and team spirit, the coaching staff uses various methods in the training process, such as conversations, lectures on moral education, creates various situational tasks in the team to manifest the moral and ethical qualities of the athlete.

One of the methods that determine team morale is the sociometry method. It allows you to identify the role of each athlete on the team, the interaction between members of the team, the attitude of athletes to each other. An important task of the coaching staff is to build athlete motivation. To do this, the coaching staff sets long-term and short-term goals for athletes; relies on positive team experience; stimulates athletes with praise; develops athletic ambition; focuses attention on the success of team members; delegates some authority to athletes in addressing individual tasks facing the team; sets a personal example of a conscientious attitude toward the training process; shows input and output parameters of the training and competition process.

Nurturing willpower qualities

For the best realization of his capabilities in the period of competitive activity it is necessary to rely on certain traits of the athlete, such as persistence and tenacity, determination and courage, determination, self-control and self-control, self-demanding, confidence in their abilities, the ability to mobilize the reserves of the body.

To form volitional qualities, the coaching staff uses different types of training process. Conducting additional exercises after a grueling workout to achieve the highest result allows you to form endurance and perseverance, mental stability to overcome difficult sensations. The use of braking devices allows you to form reliability and confidence in your abilities. Setting a certain speed or tempo with distractions in a large number of rowers on the same team builds up stamina and self-control. Competition in training and competition builds fighting ability and the will to win.

Thus, having acquainted with the psychological features of a rower of the highest sportsmanship group, the coach must not only competently and individually build the training process of the athlete, but also psychologically adjust him before the race directly at the competition.

Conclusion

1. Gradual and purposeful formation of an athlete's position system for sport and improvement of his sport character takes place at the expense of formation and improvement of a mental state of personality favorable for training and competition. Even when the innate qualities of the athlete's personality do not meet the conditions of the respective sport good psychological readiness of the rower, the ability to show perseverance and "character" at the distance of the rower to the start creates a productive sports career.
2. There are two most important conditions that affect a rower's psychological readiness for a start:
 - 1) An athlete's mental health level influences the state of stress tolerance.
 - 2) A high level of intelligence is the basis for a quick process of good training of the athlete.
3. It is necessary in the training process to rely on the temperament and neuroticism of the athlete. Extroverts are more specialized for sprint distances, and introverts for staires.
4. An athlete should use proven variants of behavior and methods of self-control of his psychological and physiological state at competitions.
5. The trainer influences the athlete using a complex of psychological and pedagogical measures (conversations, lectures, hetero-training, suggestive relaxation, auto-training, etc).

6. The effectiveness of psychological preparation is enhanced when the process of education and self-education complement each other. The process of self-education should be based on motivation, the athlete's desire for self-improvement.
7. The coaching staff of the group of higher sportsmanship should conduct psychodiagnostic in-depth testing at least 2 - 3 times during the annual training cycle, recording the psychological features of the athlete and his psychological state of health. Then the collected data should be analyzed by specialists and the training process should be built taking into account the results of the test analysis. If a depressed psychological state of an athlete or any psychological deviations is revealed, individual work with an athlete at trainings on improvement of psychological readiness to starts is necessary.

Author's Contribution

Liliya Mansurovna Smirnova developed the methodological framework for the study, advised the design of the study, gave critical feedback to the writing of the manuscript and conducted interviews. All the authors have read and approved the final manuscript.

Nuriya M. Kharissova reviewed the literature, conducted interviews, analyzed transcripts and wrote the manuscript, performed data collection and data analysis as her research project, and developed the manuscript.

Vitaly Dmitrievich Maslov reviewed the literature, conducted interviews, analyzed transcripts and wrote the manuscript, performed data collection and data analysis as her research project, and developed the manuscript.

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Declaration of Interest

The authors declare no conflict of interest. The authors are responsible for the content and writing of the article.

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