A comparative examination of instructional methods in team and solo sports

UDC 796.08

Dr. Sc.Phil., Professor **O.S. Mavropulo**[1]
PhD, Associate Professor **L.M. Demyanova**[1]
PhD, Associate Professor **A.A. Tashchiyan**[1]
Senior teacher **D.A. Zhikharev**[1]
[1]Don State Technical University, Rostov-on-Don

Corresponding author: tashiyan@sfedu.ru

Received by the editorial office on 06.04.2025

Abstract

Objective of the study was to discern the distinctive aspects of training in team and individual sports.

Methods and structure of the study. To accomplish this objective, a combination of quantitative and qualitative analytical techniques and statistical analysis was employed. The research was conducted in a series of steps: data gathering and processing, summarizing the findings, and drawing conclusions.

Results and conclusions. Several key differences in approaches to training athletes in team and individual disciplines have been identified. Mainly, team sports require an emphasis on tactical training and player interaction, while individual disciplines are focused on developing the technique of performing a specific element and managing the athlete's psycho-emotional state.

Keywords: *analysis, comparative analysis, sports, team sports, individual sports, training methods.*

Introduction. In general, individual sports are aimed at developing the physical and mental qualities of an athlete. The main object of the training process in this case is, as a rule, the athlete himself, and in the process of his training it is necessary to take into account his qualitative features as fully as possible. Team sports require an athlete to regularly demonstrate those qualities that are much more difficult to develop in an individual sport. The ability to act in a team, to fulfill the requirements and tasks that are set for them during competitions depends not only on the athlete himself, but also on the multiple coordination of actions in the team and the correct distribution of roles. There are some differences in approaches to preparation and in the importance of certain training and competition modes. And these differences must be taken into account when conducting training. For example, in individual sports such differences begin to appear during training, and in team sports they become obvious even at the stage of pre-competition preparation.

Objective of the study was to discern the distinctive aspects of training in team and individual sports.

Methods and structure of the study. The following psychodiagnostic methods were tested in the study:

- N. Hall's test for the level of emotional intelligence;
- D. Guilford's method for diagnosing social intelligence.

The study sample consisted of 161 athletes, of which 100 represented team sports, 61 - individual.

Results of the study and discussion. This study identified several key differences in approaches to training team and individual athletes.

First, let us look at the results in the sample of athletes involved in team sports.

The successful performance of athletes largely depends on their emotional stability. Experts identify three key determinants of emotional stability. The first of these is emotion management, which was recognized as the most important component of emotional intelligence with a regression coefficient of = 0,560 and a significance level of p = 0,000. The second de-

terminant is the process of emotion recognition, which has a regression coefficient of β = 0,379 and a significance level of p = 0,019. The third determinant includes self-confidence and adequate modeling of the situation, which also significantly correlate with competitive stability.

Competitive motivation depends on internal drive and the degree of autonomy. These two components have equal weight in the general motivation model (R^2=0,545), but differ in the strength of their influence: self-motivation has a significance level of p=0,09, and autonomy significantly influences motivation with p=0,010.

Uncontrolled uncertainty reduces sensitivity to stressors, while emotional regulation (R^2=0,671) plays an important role in reducing reactivity, demonstrating a coefficient β=-0,5 and a significance level of p=0,01. Modeling and adaptability also correlate well with emotional stability.

Sensitivity to personally significant stressors (R^2=0,507) is reduced by emotional control (emotional intelligence) with a coefficient β of -0,3 and self-confidence (coefficient β of -0,4).

Neuropsychic stability (R^2=0,613) is also closely related to emotional management and constant internal self-organization. Important predictors of effective stability are also the ability to plan and model one's actions. In athletes specializing in individual sports, mental stability is increased by the general level of emotional intelligence, regulatory independence, modeling and self-esteem indicators.

Emotional Intelligence and Modeling. Competitive emotional stability (parameter Y^2=0,434) is determined by a pair of key variables: «emotional intelligence» with the coefficient β=0,7 (p=0,01) and «modeling» (β=0,4, p=0,01). In terms of reliability, the tolerances of these parameters are 0,7 and 0,9, respectively. This is confirmed by the inverse relationship revealed in the subgroup of the «Expression Groups» (IG) test (β=-0,5, p=0,08, reliability 0,7).

Competitive motivation (Y^2=0,396) is determined by «independence» (β=-0,6, p<0,001). That is, the higher the independence, the lower the motivational activity of athletes. The «health» parameter (HP) has β=-0,4, p=0,06 and a confidence interval of 0,09, which may indicate instability of the relationship in the overall model.

Neuromedical stability. «Neuromedical stability» demonstrates the highest predictive characteristics in the form of the parameter Y^2=0,643. The level of emotional intelligence as the main negative predictor has a standard coefficient of β=-0,7 (p<0,001). The degree of modeling control (DC) is represented by β=-0,4, p=0,02. The parameter «technical preparation» (RAS): β=0,3, p=0,06 and «differentiation of self-assessment» (β=0,2, p=0,01) have a positive effect. Reliable acceptable values of variables from 0,09 to 0,9.

Thus, team sports require strategic thinking, which is based on interaction and mutual understanding between athletes. Therefore, during training, coaches must organize not only the application of individual skills, but also form a team spirit, which ensures effective interaction between team members. Team thinking developed during the training process helps athletes adapt to changes during competitions, which is necessary to achieve the best results.

In individual sports, the emphasis is on the personal responsibility of athletes for the result and continuous self-improvement. Here, coaching training is more specialized and often includes elements aimed at physical, technical and psychological preparation of an athlete to achieve his personal goals and increase motivation for training.

Conclusions. The results of the conducted analysis show that a combined approach to the training process, which takes into account both individual and team aspects, can significantly increase its effectiveness. For example, the introduction of team game elements into individual sports can strengthen the team spirit of an athlete and increase his level of motivation, and the use of an individualized approach in "team players" helps to reveal their personal individuality and develop unique qualities. It is also necessary to take into account the specifics of personal and team sports and the individual characteristics of each athlete to increase the return on the training process. A harmonious combination of various training methods adapted to the training conditions and scalability of small and large functionality leads to the maximization of the results of achieving the final goal in the process of sports activities. A fine balance in the choice of training methods, which takes into account the specifics of the team's activities as a group, as well as the personal characteristics of each participant in the training process, is the basis for the successful implementation of coaching plans. Thus, the research results show that personal resources play a unique role in

enhancing psychological resilience and overcoming stressful situations among athletes in team and individual disciplines.

References

1. Allyanov Yu.N., Pismenskiy I.A. Fizicheskaya kultura. Moscow. Yurayt publ., 2024. 451 p.
2. Babushkin G.D. Psikhologo-pedagogicheskiye osobennosti podgotovki sportsmenov k sorevnovatelnoy deyatelnosti. Study guide for universities. 3nd ed., Moscow. Lan publ., 2023. 348 p.
3. Bishaeva A.A., Malkov A.A. Fizicheskaya kultura. Textbook. Moscow. KnoRus publ., 2020. 312 p.
4. Vilenskiy M.Ya., Gorshkov A.G. Fizicheskaya kultura. Textbook. Moscow. KnoRus publ., 2020. 216 p.
5. Germanov G.N., Korolkov A.N., Sabirova I.A. Teoriya i istoriya fizicheskoy kultury i sporta. Study guide for SPO. In 3 volumes. Vol. 1. Olympic Games. Moscow. Yurayt publ., 2019. 794 p.
6. Gimazov R.M. Teoriya i metodika fizicheskoy kultury i sporta: obucheniye dvigatelnym deystviyam. Study guide for universities, 2nd ed. Moscow. Lan publ., 2024. 156 p.
7. Kazantinova G.M. Fizicheskaya kultura studenta. Textbook. 2nd ed. Moscow. Lan publ., 2024. 304 p.
8. Kapilevich L.V. Fiziologiya cheloveka. Sport. Moscow. Yurayt publ., 2024. 160 p.