

Psychological component of the basketball referee's activity

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Abstract.

The successful performance of a basketball referee depends on the complex of psychological qualities that are professionally important. The significance of the basketball officials' psychological preparation was the justification for studying and determining the criteria for evaluating the level of psychological preparedness of basketball referees, which included typological features of higher nervous activity (type of temperament), subjective control, speed of thought processes, level of anxiety, level of attention. The most important for the activity of a basketball referee are psychological personality traits. The selection of methods for examining basketball referees of various qualifications serving the games of the leading championships of the country made it possible to study the level of their psychological preparedness, according to the indicated criteria for evaluation. It was revealed that the type of the temperament 'sanguine' prevailed among officials examined in relation to the typological features of higher nervous activity – 49% of the subjects (32 of 65 examined). It is established that the experience of the practical activity of a referee affects his self-esteem, since of the 65 referees surveyed an average of 87.5% (57 people) showed the high level of subjective control (LSC) on all seven-test scales, considering themselves kind, independent, determined, fair, capable, friendly, honest, independent, unperturbed. However, it should be noted that 12.5% of the examined referees (8 people) showed a low level of LSC, describing themselves as selfish, dependent, indecisive, unfair, fussy, hostile, insecure, insincere, dependent and irritable. At the same time, the established response of the surveyed referees to the proposed situational tasks fully corresponded to the level of their subjective control. It is determined that the speed of the flow of thought processes of basketball referees is at a high level, as evidenced by the high efficiency of the proposed test, which was excellent for 80.0% of the subjects. It was found that the level of situational and personal anxiety in 89.5% of the examined referees was defined as 'moderate', characterizing them as individuals capable of adequately perceiving a threat to their self-esteem and vital activity in a wide range of situations and responding with a very restrained state of anxiety. At the same time, it should be noted that the high and low rates of personal anxiety expressed by the test in 10.5% of the examined referees give grounds to assume that they have an anxiety condition or complete indifference in a variety of situations, especially when they concern the evaluation of their competence and prestige. It was revealed that the level of attention of basketball referees also does not depend on their judicial qualification, and is characterized by high efficiency of work – 75.0% of referees, degree of practicing – 57.5% of subjects and mental stability – 81.0% of officials. The obtained results indicate that the level of psychological preparedness of the leading basketball referees in Ukraine have high indicators for all the specified evaluation criteria and confirms the influence on their degree of experience of professional refereeing activity over a long period.

Keywords: psychological preparation, a basketball referee (an official), personality characteristics, anxiety level, thought processes, attention properties, a level of control.

Introduction.

At the present stage it is important to find ways to build the training of referees in team sports. Nowadays, the activity of a basketball referee is considered more as a professional occupation. It is not enough for a modern basketball referee to have an excellent physical form and excellent theoretical education. He must have a high level of special physical preparedness, a stable psychophysiological state and considerable psychological reactivity (S.Bakumov, 2009; A. Govorov, 2016; F.Dmitriev, 2017; B.Zueyv. 2004; V.Kunyavsky, 2014). The problem of psychological training sports referee in different years was studied by M.Kuzmin (2004), V.Kovalchuk (2016), J.Kozina (2011), M.Mospan (2016), V.Sopov (2016), E. Turbin (2009), D.Fomenko (2012), A.Shibaev (2009).

The referees' department of the International Association of Basketball Federations (FIBA) recommends and notes the need to determine the level of psychological preparedness of officials. At the same time, neither methods, nor directions, nor means of determining the level of psychological preparedness of referees have been established. It is still unknown which specific requirements, dictated by the competition

conditions, are presented to a referee, to his psychological characteristics. The most important factor is that up to now there have not been found out the terms ensuring success in refereeing activity.

Formulation of the problem. Nowadays, the activity of a basketball referee is considered more as a professional occupation. It is not enough for a modern basketball referee to have an excellent physical form and excellent theoretical education. He must have a high level of special physical preparedness, a stable psychophysiological state and considerable psychological reactivity (M. Davydov, Ye. Yerofieiev, V. Koriagin, S. Morisson, S. Poliievskiy, L. Poplavskiy, S. Singina).

The methodological basis of the research is the modern scientific provisions of the theory of physical culture and sport (Stoliarov, 1996, L. Matvieiev 2006), psychological and pedagogical problems of sport (V. Voronova, 2007, A. Grin, 2015, V. Kovalchuk 2016, M. Mospan 2017), scientific ideas about professional selection (L. Sierova 2007, O. Shynkaruk 2013), theory and methodology of sports games (V. Nikolaienko, Zh. Kozina, 2012, I. Pavliuk, 2008; O. Shynkaruk, 2017; Yu. Shkrebtii, 2006; O. Shlionska, 2016), sports refereeing and referees' preparation (V. Zuiev, 2004; F. Dmitriiev, 2015; S. Yerofieiev, 2009; A. Hairulin. 2005; V. Nasonov, 2011; V. Kunianskiy. 2014).

Purpose of the article. Revealing the results of developing model characteristics of the level of basketball referees' psychological preparedness.

Methods of research

To solve the research tasks, we used the following methods:

The analysis of specialized literature is presented in the form of synthesis of literary data and conclusions of specialists of various specializations and qualifications, as well as summing up and formulating general abstract definitions on the topic of referees' psychological preparation in sports games, and in basketball in particular.

Questionnaire. In the course of the research, we have drawn up and used a questionnaire to determine the role and importance of the basketball referees' psychological preparation, as well as the identification of the most significant criteria for the psychological preparedness of basketball officials.

Psychological methods. To determine the level of psychological preparedness of basketball referees, we identified the criteria – the most significant psychological characteristics, according to which the following methods were selected and used:

- to reveal the typological features of higher nervous activity, we adopted the methodology for determining the type of temperament using the Eysenck's personality inventory;
- to determine the level of subjective control, we used the LSC (Level of Subjective Control) questionnaire;
- to establish the speed of thought processes, we selected the subtest of the Wexler scale 'Encryption';
- to study the level of anxiety, we selected the Spielberger-Khanin test;
- to characterize the level of attention development, the method of using Schulte tables was chosen.

The research was carried out at the National University of Ukraine on Physical Education and Sport, during the interim seasonal seminar on basketball referees' preparation and re-training by the Referee Committee of the Basketball Federation of Ukraine (FBU).

In the research aimed at studying the significance of the basketball referees' psychological preparedness and determining the criteria for the psychological preparedness of basketball officials, 75 people – representatives of the Referee Committee of the Basketball Federation of Ukraine, referees of the FBU, as well as coaches and athletes of the leading Ukrainian teams, took part.

Directly in determining the level of psychological preparedness 65 people, i. e. the referees of the Basketball Federation of Ukraine, whose work experience at the games of Ukrainian championships of various rank was from 5 to 27 years, participated. Referee's qualification of the surveyed officials was distributed as follows: the referees of the International Association of Basketball Federations (FIBA referees) – 11 people; the referees of the National category – 19 people; the referees of the First category – 35 people.

Results and discussion.

We prepared and offered a questionnaire for a written anonymous survey, the answers of which helped to solve the following matters:

- Is there any concept of psychological preparedness of basketball referees?
- Is there a need to introduce the basics of psychological preparedness into the basketball referees' preparation system?
- What is the significance of psychological training in the overall definition of the basketball referees' preparation (in relation to theoretical, technical and physical preparation)?
 - Are there any basic criteria for evaluating the activity of a basketball referee?
 - What criteria for evaluating the activity of a basketball referee can be identified according to his psychological preparation?

The survey involved 75 people who were divided into three groups of respondents:

- the first group consists of representatives of the FBU, in particular 15 officials;

- the second group – referees of the FBU, serving the high ranked Ukrainian Championship – the Championship among men's teams ‘Super League’ – 30 people;
- the third group – athletes and coaches of the teams participating in the Ukrainian Championship among the men's teams ‘Super League’ – 30 people.

The received results of researches and the analysis of the questionnaire have shown, that only the representatives of the first group of respondents recognize the existence of the concept of basketball referees’ psychological preparedness: the FBU employees, the representatives of the officials’ department of the FBU, the commissioners of the International and National categories – 80% of respondents. The representatives of the second and third groups believe that the concept of psychological preparedness in training basketball referees does not exist – 63% and 87% of respondents, respectively. However, almost all respondents confirmed the need to introduce the basics of psychological preparedness in the system of selection, education and preparation of basketball referees: the first group – 100%, the second group – 87% and the third group – 100%.

It was also found that the ratio of the types of basketball referees’ preparation, namely, theoretical, technical, physical and psychological among representatives of the three categories was significantly different:

- The first group of respondents, despite the full support of the need to introduce the basics of psychological training in the system of long-term basketball referees’ preparation, preferred theoretical education, allocating to it 35% of the total 100%; further physical preparedness – 30%, technical preparation – 25%, and psychological training – 15%;
- The second group of respondents, with incomplete support for the need for psychological training, distributed the total volume of preparation from 100% as follows: physical preparedness – 30%, theoretical education – 25%, psychological training – 25% and technical one – 20%;
- The third group of respondents determined the ratio of the types of basketball referees’ preparation in the following way: physical preparedness – 35%, theoretical education – 35%, technical one – 20% and psychological training – 10%.

It was considered that, to the matter about the existence of criteria for evaluating the quality of basketball refereeing, the respondents of the first and second groups responded unanimously – 100%, confirming the existence of such.

The received data are confirmed by the fact of existence of the uniform of the report of referees-commissioners, which contains ten points, including an estimation of a game degree of complexity, the referee’s appearance, a level of his technical, physical and theoretical preparation. For each item at the end of the game, the referee-commissioner puts an estimate on a ten-point scale, where 10 is the highest score. At the end of the season, each referee receives a summary table of the total number of games and scores awarded for each game separately (S.Chiernova,2009, V.Ozerov, 2005, S.Tristan, 2010, V.Drabikovsky,2010, L.Shabanova,2010).

At the same time, it should be noted that, based on these estimation, the FBU Referee Committee issues a decision on the professional suitability of an official to serve the games of the championships of a particular rank, as well as the appropriation or downgrading his qualifications. The important fact is that in the system of estimating basketball refereeing quality, there is not one criterion for evaluating the level of psychological preparedness of a basketball referee, despite the noted importance of the psychological preparation in our research. At the end of the questionnaire, we were asked to select the most important respondents for each group, selected by us after consulting with experts in the field of sports psychology, possible criteria for estimating the level of psychological preparedness of basketball referees. There were typological features of higher nervous activity (type of temperament); character traits; system of motivational concepts; manifestation of the psychophysiological state.

Separately examined are professionally important psychological characteristics of a personality: plasticity of behavior; the level of subjective control; speed of thought processes; level of anxiety; level of attention; features of memory; the possibility of situational prediction.

It was established that the following criteria for estimating the level of psychological preparedness of basketball referee were singled out as the first group of respondents-representatives of the officials’ department of the FBU evaluating the referees’ activity. There were typological features of higher nervous activity (type of temperament); the level of subjective control; speed of thought processes; level of anxiety; level of attention; the possibility of situational prediction.

The second group of respondents, consisting of referees themselves, included the following components in the most significant criteria for estimating the psychological preparedness of their professional activity: typological features of higher nervous activity (type of temperament); manifestation of the psychophysiological state; level of attention; features of memory.

The third group of respondents singled out the system of motivational concepts as criteria for estimating the psychological preparedness of basketball referees; typological features of higher nervous activity (type of temperament); the level of subjective control; speed of thought processes; level of anxiety; level of attention.

The obtained results allowed us to generalize and determine the main criteria for evaluating the level of basketball referees’ psychological preparation: the typological features of higher nervous activity (type of temperament), the level of subjective control, the speed of thought processes, the level of anxiety and the level of attention. The identification of criteria for estimating the level of basketball referee’s psychological preparation

allowed to establish tests that would not only be simple and convenient in the further system of our research, but also had a high degree of significance and reliability.

To study the typological features of the higher nervous activity of basketball referees, we offered the Eysenck test (V.Nasonov, 2011). The research involved 65 basketball referees, who, depending on their qualifications, were divided into two groups:

- The first group – the referees of the International Association of Basketball Federations (FIBA referees) – 11 people and the referees of the National Category – 19 people;
- the second group – referees of the First category – 35 people.

The received results testify that the type of temperament in two groups of surveyed referees has the same tendency of correspondence (Fig. 1).

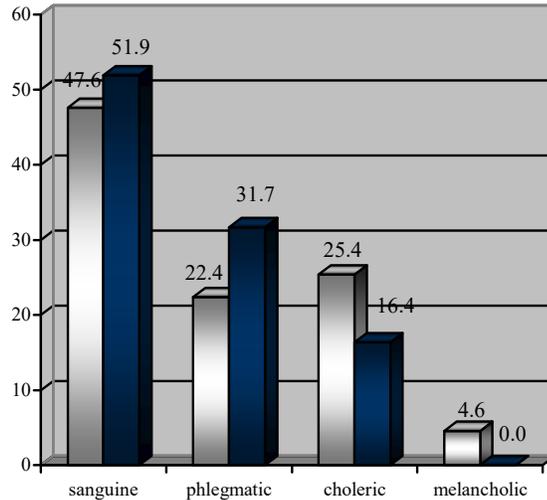


Fig. 1. Typological features of the higher nervous activity of basketball referees (%).

It is established that in the first group of referees the greatest number of respondents correspond to the temperament type ‘sanguine’ – 47.6%. The rest of the group were distributed according to the temperament type as follows: ‘choleric’ – 25.4%; ‘phlegmatic’ – 22.4%; ‘melancholic’ – 4,6%.

In the second group of surveyed referees, the distribution according to the type of temperament was as follows: ‘sanguine’ – 51.9%; ‘phlegmatic’ – 31.7%; ‘choleric’ – 16.4%; ‘melancholic’ – 0.0%.

Thus, it should be concluded that among the referees participating in our research the largest number of them have the temperament type ‘sanguine’, which is characterized by the mobility of the processes of excitation and inhibition; sociability; contact; sociability; talkativeness; unconstrained behavior; cheerfulness; not inclined to worry; seeks to take a dominant position; high adaptability to environmental conditions; fast movements and conversations, good attention switching and mood management; optimism and external demonstration of the state of mind (S.Polievskiy,2001, L.Kostikova, S.Yerofieiev,2001).

The method we selected to determine the level of subjective control for basketball referees made it possible to evaluate the LSC on seven indicators – scales (Fig 2).

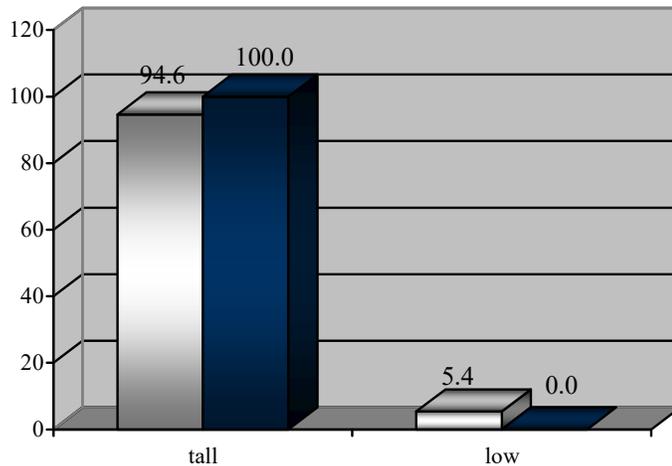


Fig 2. Level of subjective control.

The analysis of the results on the scale of general internality showed that in the first group of referees the high LSC was established in 94.6% of respondents, and the low one – at 5.4%. It should be noted that in the second group, the high LSC rate was registered among 100% of the referees.

At the same time, it should be concluded that for a high indicator on this scale there corresponds a high level of subjective control over any significant situations. Such people believe that most important events in their lives are the result of their own actions, that they can manage them, and thus feel their own responsibility for these events and for how their life as a whole develops. A low score on the scale corresponds to a low level of subjective control. Such people do not see the connection between their actions and the significant events of life for them, do not consider themselves capable of controlling this connection and believe that most of the events and actions are the result of the event or actions of other people.

It is established that the experience of the referee's practical activity influences his self-esteem, since of the 65 referees surveyed an average of 87.5% showed a high level of subjective control on all seven-test scales, considering themselves kind, independent, determined, fair, capable, friendly, honest, independent and unperturbed. However, it should be noted that 12.5% of the examined referees showed a low level of LSC, describing themselves as selfish, dependent, indecisive, unfair, fussy, hostile, insecure, insincere, dependent and irritable. At the same time, the established reaction of the surveyed referees to the proposed situational tasks fully corresponded to the level of their subjective control. Studying LSC, during the stage control, will allow to correctly determining the readiness of a referee to perform his professional duties, in view of the close connection between the level of subjective control and the person's sense of strength, dignity and responsibility for what is happening, self-esteem, social maturity and individual independence. The basis of psychophysiological reactions in sports games is the brain activity, which, as soon as possible, the brain perceives and processes information from various body systems (Ye.Illin,2003).

It is also necessary to imagine possible changes in the game situation; otherwise, the efforts of the incumbent, namely a player, a coach or a referee, will not achieve the goal. Only after this, we can make the right decision in this situation and choose the necessary tactically correct response actions (N.Singina,2004).

All these processes – from the beginning of the situation perception to the performance of a basketball referee's admission, are only taken 1.5-2.0 sec. by referees starting their career and by referees of the highest category – only about 1 second. Hence, it is clear what the requirements for speed of brain reaction and the speed of the course of nervous reactions are demanded by the basketball game (A.Marcer,2017, Ye.Petrova,2018).

The investigation of the speed of thought processes was carried out by means of the subtest of the Wexler scale 'Encryption'. The results of the research are presented by the ratio of the total number of tasks necessary to complete the tasks with their correct implementation. The effectiveness of the test in the first group was high – 74.0% of the referees; above average – 12.0% and average efficiency – 14.0% of the referees. In the second group, the effectiveness of the test was established as high in 86.0%, above the average – 10.0% and average- 4.0% of cases. Thus, it should be noted that the speed of of thinking processes is of great importance, especially in the system of referees' selection at the initial stages of their professional activity. We established that the processing of information is improved in the course of long-term preparation. However, they are largely determined by the innate properties of the nervous system. It is determined that the speed of the basketball referees' thought processes flow is at a high level, as evidenced by the high efficiency of the proposed test, which was excellent for 80.0% of the subjects. The use of express methods for determining the thought processes speed and the level of attention manifestation will help, first, to establish the psychological readiness of referees for the upcoming games, and to carry out the correct selection of referees for games of various complexity.

It was found that the level of situational and personal anxiety in 89.5% of the examined referees was defined as 'moderate', characterizing them as individuals capable of adequately perceiving a threat to their self-esteem and vital activity in a wide range of situations and responding with a very restrained state of anxiety. At the same time, it should be noted that the high and low rates of personal anxiety expressed by the test in 10.5% of the examined referees give grounds to assume that they have an anxiety condition or complete indifference in a variety of situations, especially when they concern the evaluation of their competence and prestige.

The inclusion of an anxiety estimation in the system of step-by-step control of referees will allow us to determine in time officials with a high level of anxiety and make their psychological training, first of all, to form a sense of confidence and success, the need to shift the emphasis from external demand for meaningful reflection of their professional activities and specific planning its implementation by subtasks. For low anxious referees, on the contrary, it will be necessary to focus on awakening activity, emphasizing motivational components, stirring up interest, highlighting a sense of responsibility in solving various situational tasks in the game.

It was revealed that the level of basketball referees' attention also does not depend on their referee's qualification, and is characterized by high efficiency of work – 75.0% of referees, degree of practicing – 57.5% of subjects and mental stability – 81.0% of referees. The obtained results indicate that the level of psychological preparedness of the leading basketball referees in Ukraine has high indicators for all the specified evaluation criteria and confirms the influence on its degree of experience of professional referee's activity over a long period. However, it should be noted the presence of 15.0% of those surveyed having a low level of psychological

preparedness, which clearly affects the quality of performing professional duties and the emergence of problem situations in their personal lives. Implementing these recommendations into the system of referees' selection and preparation will allow to formulate the basic rules and direction of referee's psychological training, which in the end will make it possible to raise the effectiveness of their professional work reasonably, reduce the risk of occurrence and influence of overdrive and, directly, game stress situations, facilitate and improve the system control over the psychological condition of a basketball referee.

Conclusions.

Determining the psychological characteristics of a personality, which are professionally important for the activity of a basketball referee, will effectively solve problems related to professional orientation, referees' selection, provision of their preparation and psychological support of activities.

Implementing the psychological education in the referees' preparation will allow to formulate the basic rules and direction of referees' psychological training, which in the end will make it possible to raise the effectiveness of their professional work reasonably, reduce the risk of occurrence and influence before a game and, directly, game stress situations, facilitate and improve the monitoring system for the psychological state of a basketball referee.

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