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Control of the parameters of attention in basketball at the stage of preliminary basic preparation

Abstract. Purpose: to determine the parameters of attention of basketball players aged 13–14 years old before and after the exercises of various kinds. **Material and Methods:** the study involved 3 teams of basketball players aged 13–14 years old from training groups. The total number of investigated people is 50. The study was carried out on the basis of Sports Children and Youth Olympic school № 5 in Dnepropetrovsk. We used the methods of theoretical analysis and synthesis of the literature, the method of analysis of documentary materials, pedagogical supervision, psychological testing, pulsometry, methods of mathematical statistics. The following techniques were used to determine the parameters of attention: «Mixed up line», proofreading test with Landoldt rings, proofreading test with letters. **Results:** during our research there was defined the predominantly low level of attention of basketball players at the stage of preliminary basic preparation. It was found out the specific nature of the load influences the decrease of the parameters in a greater degree, especially concentration, switching, and stability decline, the number of errors increases. **Conclusions:** on the basis of studies arises the necessity to improve monitoring systems in the Sports Children and Youth schools with usage of tests to determine the components of psychological readiness.

Keywords: young players, the stage of preliminary basic preparation, the control parameters of attention, technical and tactical actions.

Introduction. The main tasks at the stage of the previous basic preparation is the profound check of a compliance of the previously selected contingent of children to requirements of a successful specialization in the chosen sport, the detection of expediency of the subsequent sports improvement and the definition of its direction (V. N. Platonov [5], O. A. Shinkaruk [9]).

The analysis of practical experience of basketball coaches testifies that they remain unsatisfied with the level of preparedness of young basketball players on the end of a study in groups of the initial preparation during the implementation of control and reverse tests when a selection of the most gifted and perspective sportsmen is in the educational-training groups that answers the stage of the previous basic preparation in basketball.

A selection in most cases happens on the basis of an expert assessment of the leading coaches of a performance of technical elements and the accounting of weight-growth indicators of children that doesn't open the full range of prospects of a child for the follow-up sports activity [1; 3; 9].

A revision of the training program existing for CYSS on basketball in Ukraine (in 1999) testifies that identical tests for all age groups from 12 till 17 years old are offered in a control of different parties of preparedness, differences are observed only in an assessment of indicators. Besides, the program didn't provide a control of psychological preparedness [3].

It is proved for a long time by scientists that a successful speech of a sportsman in competitions depends not only on the high level of physical, technical fitness, but also on his psychological preparedness [2; 6–8; 10]. Psychological features of competitions, regularities, reasons and dynamics of precompetitive states define high requirements to mentality of a sportsman. In total that was fulfilled and saved up in the course of a study and trainings within months or years can be lost during a sports fight. Therefore psychological preparation for competitions is an important and obligatory element of study and training [7; 9].

The organization of psychological preparation for competitions has to be directed on the formation of properties and qualities of the personality and mental states, with which always the progress and stability of the competitive activity are caused. Its purpose needs to be considered the adaptation to competitive situations, the improvement and optimization of reactivity of the display and the corresponding reaction to specific extreme conditions of the activity [2].

The success in a game is achieved by the whole complex of mental qualities which can be divided into such groups: a) psychomotor which are connected generally with the existence of opportunities precisely and to expedite quick actions in rather unambiguous situations: "I saw – I made"; b) perceptual qualities which belong to features of manifestation of mechanisms of a perception of a situation (speed of a perception of information, property of attention, volume of a field of vision); c) intellectual that define the efficiency of the solution of tactical tasks (speed and accuracy of an operational thinking, volume of a random-access memory) [2; 8].

The researches of S.E. Shutova [8] testify that the most significant role is played by the found indicator of the narrow efficiency of attention (51,9%). It is connected also by that the attention of a basketball player is directed not so much on the structure of a performance of this or that reception, how many on an assessment of a concrete game situations are and a choice of the most expedient action. As for the adoption of the rational tactical decision to a sportsman it is necessary, first of all, not only to estimate a game situation, but also to be able to concentrate at the right time attention on a minimum of the most important objects (in defense – an action of a player with a ball, in attack – an action of a defender, for the purpose of the definition of an optimum suitable way of an outgaming of a defender, etc.).

It is proved by a number of authors in the researches that the development of different parameters of attention is of rather great importance for the game activity which in turn promote more accurate course of mental processes to (feeling, perception, thinking) when performing game actions. According to the most of authors [1; 2; 7; 8], a factor of the successful tactical activity of a player is the high level of the development of attention.

Therefore the topical issue of the present is the implementation of an assessment of parameters of attention at basketball players as to a factor which defines efficiency of the competitive activity at the stage of the previous basic preparation.

Communication of the research with scientific programs, plans, subjects. The research is carried out according to the Built plan of the RW in the sphere of physical culture and sport for 2011-2015. The Ministries of education and science, youth and sport of Ukraine, by a subject: 2.6 "Theoretic-methodical bases of the improvement of the training process and the competitive activity in the structure of long-term training of sportsmen" No. of the state registration is 0111U001168.

The objective of the research: to determine attention parameters at basketball players of 13-14 years old before and after physical activity of a different orientation.

Material and methods of the research. Methods of the theoretical analysis and synthesis of references, a method of the analysis of documentary materials, pedagogical supervision, psychological testing, methods of mathematical statistics were used in the research.

Such methods were used for the determination of parameters of attention: "The mixed up lines" was used for the determination of the level of concentration, the proof test with Landoldt's rings was used for the research of accuracy and quantity of mistakes, the proof test with letters was used for the research of switching, firmness and productivity of attention [4]. The method of pulsometry was applied to the determination of intensity of physical activity.

Three teams of basketball players of 13-14 years old of the educational-training groups took part in the research. The total of the studied is 50 persons. The research was conducted on the basis of SCYSS №5 in Dnepropetrovsk.

Results of the research and their discussion. At the beginning of the research we analysed thee competitive activity of two teams during ten games of the All-Ukrainian Junior Basketball League (AUJBL).

The analysis of the competitive activity testifies that indicators had no reliable difference on average for a game ($p>0,05$). So, a large number of mistakes ($2,32\pm0,43$ on one player), losses of a ball are observed ($4,41\pm0,45$ on one player) on average for a game on group at basketball players that it is possible to explain with the slowed-down decision-making. A low percent of hit of penalty shots ($35,4\pm2,3\%$ for one player) is explained by the imperfection of technique and the low level of concentration of attention. Few interceptions of a ball for a game ($0,28\pm0,05$ on one player) testify that young basketball players don't get on well at defense yet, seldom risk to come for interception of a ball, have no resistant level of integrated preparedness and so forth. At this age a large number of mistakes is assumed that is connected with features of the teenage period, inconsistency of decision-making with physical actions, the unstable level of attention under the influence of emotional and physical competitive activity.

The determination of parameters of attention before loading was carried out after a registration of heart rate. Results of the research are presented in the table.

Indicators of parameters of attention at basketball players of 13-14 years old (n=50) before and after loading of a different orientation

Attention parameters	Type of loading	$\bar{X}\pm m$	HR
Concentration, points	before loading	$3,4\pm0,6$	67,8
	nonspecific	$2,8\pm0,3^{**}$	118,0
	specific	$2,1\pm0,15^{***}$	169,2
Productivity, points	before loading	$11,5\pm1,3$	67,8
	nonspecific	$8,7\pm0,9^{**}$	118,0
	specific	$8,2\pm0,3^{***}$	169,2
Firmness, points	before loading	$5,5\pm0,68$	67,8
	nonspecific	$4,1\pm0,53^{**}$	118,0
	specific	$3,9\pm0,49^{***}$	169,2
Accuracy, points	before loading	$12,1\pm1,6$	67,8
	nonspecific	$8,7\pm1,4^{**}$	118,0
	specific	$8,0\pm1,3^{***}$	169,2
Switchings, %	before loading	$58,1\pm2,99$	67,8
	nonspecific	$65,6\pm3,2^{**}$	118,0
	specific	$71,2\pm3,5^{***}$	169,2
Quantity of mistakes, times	before loading	$36,9\pm5,67$	67,8
	nonspecific	$45,8\pm3,81^{**}$	118,0
	specific	$48,9\pm2,80^{***}$	169,2

Note. ** – the reliability of divergences between indicators before loading and after nonspecific loading *** – the reliability of divergences between indicators after nonspecific and after specific loading.

The analysis of parameters of attention before loading testifies that HR equals $67,8 \text{ bpm}^{-1}$ before loading. In the group of basketball players it was revealed that such parameters of attention, as: concentration, productivity and firmness were at the low level; accuracy and switching – at the average level, the high level of mistakes is noted.

The following stage was that nonspecific loading of aerobic character was set to sportsmen after a warm-up (6-minute run on a basketball platform), then heart rate was measured and repeated testing of parameters of attention was held.

After nonspecific loading it was revealed that concentration lowered on average by 0,6 points (low level). Productivity of attention decreased by 2,8 points (low level). Accuracy lowered by 3,4 points; firmness lowered by 1,4 points; switching worsened for 7,5%. Quantity of mistakes increased on average on group on 8,9 times.

On the following training loading of specific character in aerobic anaerobically mode was set to basketball players (exercises of a technical and tactical orientation with an active counteraction of defenders, educational game) and parameters of attention were defined.

The received results testified that the influence of specific load of parameters of attention was considerable. So, concentration in comparison with results to loading lowered by 1,3 points, productivity lowered by 4,1 points; firmness worsened on 1,6 points; switching lowered by 13,1%; mistakes became on average 12 more.

Conclusions:

1. The analysis of the existing training program of CYSS on basketball of rather control standards found out that, despite of a great importance of manifestation of mental and morally strong-willed qualities as a factor which influences the progress of the competitive activity of sportsmen, the level of psychological preparedness isn't controlled, the program needs the improvement according to modern requirements of the system of preparation in sports.

2. It is found during the research which was conducted by us mainly the low level of the development of parameters of attention in basketball players at the stage of the previous basic preparation. It is certain that mainly decrease in parameters of attention is influenced by loading of specific character, indicators of concentration, switching, firmness especially go down, the quantity of mistakes increases.

Prospects of the subsequent researches consist in the improvement of the monitoring system of integrated preparedness of basketball players on the basis of factors which influence the efficiency of the competitive activity at the stage of the previous basic preparation.

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