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The development of students' attention at football training

Pichurin Valerii¹,
Umerenko Viktor²,
Dutko Taras³

¹ Doctor of Science of Physical Education and Sport, Candidate of Psychological Sciences,
Docent, Head of the Department of Physical Education and Sport;
Ukrainian State University of Science and Technologies; Ukraine

² Lecturer at the Department of Physical Education and Sport;
Ukrainian State University of Science and Technologies; Ukraine

³ Docent, Associate Professor at the Department of Physical Education and Sport;
Ukrainian State University of Science and Technologies; Ukraine

Abstract.

The purpose of the study was to examine the specific features of the development of selectivity, concentration and attention steadiness of students in physical education classes. The research involved 60 students (men aged 18–20). The control group consisted of 30 students (15 each) from the faculties of «Technical Cybernetics» and «Mechanical Science» who did not play sports at the university (assigned to the main or preparatory medical groups for health reasons) and attended physical education classes (4 hours per week) in the study groups of the main department for two years. The experimental group was also made up of 30 students of the faculties of «Technical Cybernetics» and «Mechanical Science» (15 each), who were assigned to the main medical group for health reasons and had been playing football at the university (4 hours per week) in the study groups of the sports department for 2 years. Diagnostics of students' selectivity of attention were carried out with the help of the Munsterberg test. Concentration and steadiness were diagnosed with the use of the Bourdon's proofreading test (the task was performed within 10 minutes). All the data were statistically processed via the Mann-Whitney U-test.

Keywords:

attention
selectivity of attention
concentration and steadiness of attention
students
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Correspondence of a person to the professional requirements is determined by many structural components of the personality. In this case, it was proposed such a characteristic of the personality as its professional adequacy. This is also true for the development of various attention characteristics of a specialist. Contemporary workplaces place particularly high demands on such characteristics of a specialist's attention as selectivity, concentration, and steadiness. According to observations, success in their work largely depends on the quality of attention (for some professions, it is extremely important). Attention improves with the growth of professional skills and requires long-term efforts. The problem of attention has been studied in psychology by such prominent specialists as T. Ribot, E. B. Titchener, D. M. Uznadje, L. S. Vygotsky, A. M. Leontief, P. Y. Halperin, Y. B. Hipenreiter, and others. Such scientists as F. Genov, V. A. Gavrilenko, V. M. Dyachkov, L. S. Nersesyan and others have studied the peculiarities of the attention of athletes. There have been established the characteristics of attention of representatives of different sports. Meanwhile, the issue of attention development of students in physical education classes is still insufficiently researched in special studies. Therefore, it is appropriate to mention one of our works [1].

Attention is considered to be the focus and concentration of a person's mental activity. At the same time, the focus is understood as the selective nature of the activity, and the concentration is the immersion in this activity. The regulating function of attention is quite clear. As a result, experts classify its types according to the level of mental regulation. According to this classification, attention can be divided into involuntary, voluntary and post-voluntary. If the focus and concentration are involuntary, then we speak about involuntary attention. It is caused by both the physical characteristics of the stimulus (intensity, contrast, duration, unexpectedness, etc.) and its significance for the person. If a person's focus and concentration are associated with a consciously set goal, then we speak of voluntary attention. In addition to these two types of attention, there is a third type - post-voluntary attention. In this case, the

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conscious fulfilment of a task is accompanied by personal involvement (absorption) in the activity and does not require any effort of will.

The main characteristics of attention consist of volume, selectivity, steadiness, concentration, distribution and switching. All the characteristics of attention represent a functional unity and their distribution is conditional.

This research aimed to study the peculiarities of the development of selectivity, concentration and steadiness of students' attention in physical education classes.

The objectives of the study include the following:

1. To examine the peculiarities of selectivity, concentration and steadiness of students' attention.
2. To study the effectiveness of the use of football training for the development of selectivity, concentration and steadiness of students' attention.

We assumed that sports games are an effective means of developing students' attention in the domain of physical education. An independent variable in our study of attention was the content of students' academic activities, which included football lessons. The dependent variable was the indicators of the level of development of students' selectivity, concentration and steadiness to attention.

It was assumed as a statistical null hypothesis that the difference between the indicators of the level of development of selectivity and concentration and steadiness of attention among students of the sports education section who were engaged in football and students of the physical education section does not differ significantly from zero. As an alternative statistical hypothesis, it was assumed that the difference between the indicators of the level of development of selectivity and concentration and steadiness of attention of students of the sports education section who played football and students of the physical education section is significantly different from zero.

The research involved 60 students (men aged 18–20). The control group consisted of 30 students (15 each) from the faculties of "Technical Cybernetics" and "Mechanical Science" who did not play sports at the university (assigned to the main or preparatory medical groups for health reasons) and attended physical education classes (4 hours per week) in the

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study groups of the main department for two years. The experimental group also consisted of 30 students from the faculties of "Technical Cybernetics" and "Mechanical Science" (15 people each), who were assigned to the main medical group for health reasons and had been playing football at the university (4 hours per week) in the training groups of the sports department for 2 years.

Diagnostics of students' selectivity of attention were carried out with the help of the Munsterberg test. Concentration and steadiness were diagnosed with the use of the Bourdon's proofreading test (the task was performed within 10 minutes). Statistical data was processed via the Mann-Whitney U-test. The results are shown in Table 1.

Table 1

The statistical values of the indicators of selectivity and concentration and steadiness of attention of students of the main and sports departments (football specialisation)

Characteristics of attention	Main department n=30				Sports department (football) n=30			
	\bar{x}	Me	Mo	S	\bar{x}	Me	Mo	S
Selectivity, number of words	16,4	16,5	12	4,4	19,8*	21,0	18	3,9
Concentration and steadiness, number of characters	1160,23	1190		213,36	1532,00*	1514,50		253,12

Notes. Differences are statistically significant between the same indicator in the groups of the main and sports departments (football) at * $p < 0.01$.

We assumed in our hypothesis that football training during physical education classes has a significant positive impact on the formation of students' attention characteristics such as selectivity as well as concentration and steadiness. We conducted a study involving two groups of students - experimental and control - to test the hypothesis. According to the data obtained during the research on the development of students' selectivity of attention, football training has a significant positive impact on this process. This is evidenced, in particular, by the statistical indicators obtained by comparing the results of the experimental and control groups.

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The data obtained in the study on the development of students' concentration and attention span also showed that football training has a positive impact on the development of these characteristics. This is confirmed by the statistical indicators obtained from the comparison of the results of the experimental and control groups.

To sum up the main results of the study, we would like to note that football is an effective means of developing selectivity, concentration and attention steadiness among students.

According to the analysis of the obtained data, it is also possible to establish higher indicators of selectivity of attention in student football players who are better technically trained and more creative in their actions during the game. This can be explained, in our opinion, by the fact that technical players concentrate less on the execution of technical techniques and are more focused on analysing constantly changing game situations. Observations show that the development of various characteristics of attention in a football player often begins only once the player has mastered a certain "set" of techniques and can concentrate on other components of the game.

One of the most important issues related to the establishment of the level of psychophysical fitness of a specialist of a particular profile is the question of determining such an indicator of this level, which would reflect, as far as possible, all the changes that have occurred at the moment of his or her mental organization. We believe that such a criterion can be the quality of the specialist's attention.

References:

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