

## Game Sports and Their Role in The Formation of Psychophysical Qualities and a Healthy Lifestyle for Young People

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**Keywords:** physical culture, game sports, basketball, volleyball, psychophysical qualities, healthy lifestyle, youth, medical profession and sport

**Abstract:** The article shows the factors of the national and general educational level, which fruitfully affect the general physical, psycho-emotional, psycho-spiritual development of the youth by means of physical culture and sports. The place and role of playing sports are revealed as: (1) the components of the general discipline "Physical Culture" at the university; (2) types of mass sport of youth; (3) a special kind of team sport at the university. The paper analyzes the role of these sports not only in the development of certain psychophysical qualities but also as a special effective way for young people to achieve a healthy lifestyle. The relationship of the formed physical and mental qualities of athletes with the necessary physical and psycho-spiritual professional qualities of future specialists of different professions is revealed. A special place is given to the interconnection of the personal qualities of athletes of playing sports and the quality of the future doctor, which actualizes the teaching of physical culture and sports at a medical university.

### 1. Introduction

Physical culture occupies an important place in the life of any person striving to be physically and mentally healthy, self-confident, strong-willed, and organized, having an optimistic attitude, capable of various activities in everyday and social life. Currently, this aspect of the life of Russian youth is receiving considerable attention, including at the Altai State Medical University.

The purpose of the article is to determine the importance of game sports in the development of psychophysical qualities of students and the formation of a healthy lifestyle. Accordingly goals, the following tasks are identified: 1) To substantiate the importance of the general psychophysical training of modern Russian youth and the attention to this issue of the country's leadership; 2) To reveal the specifics, attractiveness and high effect of the impact on the health of students of playing sports, as a special way to a healthy lifestyle.

### 2. Materials and Methods

This article is a scientific and pedagogical overview. In particular, the authors review (a) government documents on the development of physical education and sports in our country; (b) experiences of the Russian universities in the organization of educational, training, physical culture and sports activities of universities, for example; (c) authors' own experiences gained in the process of psychological, pedagogical, and coaching work conducted in the Altai State Medical University and in the Altai State Pedagogical University. Also, we applied the following methods in our work: the methods of scientific analysis of an array of literature on the topic, psychological and pedagogical methods of working with students in physical education classes, methods of mass sports and coaching with students in game sports.

### 3. Results and its Discussion

Introduction to physical culture, of course, is largely due to regular physical culture lessons in educational institutions, where at the same time, the need for classes in sports sections is widely promoted in accordance with the inclinations of students. Physical education classes begin in preschool institutions, take place throughout the entire period of study at school, and continue at the university. Most often, children and youth come to engage in mass and professional sports. The legislative framework of the Russian Federation and a number of official government documents aimed at developing mass sports, the "Ready for Labor and Defense" (RLD) system, and improving the health of the population attest to the importance of physical culture and sports in human life, especially youth. First of all, one should mention the following documents: The Law of the Russian Federation "On Physical Culture and Sport in the Russian Federation" (December 4, 2007 No. 329-FZ) [8]; The Strategy for the Development of Physical Education and Sports until 2020 (August 7, 2009 No. 1101-r) [19]; The Law of the Russian Federation "On the Basics of Protecting the Health of Citizens in the Russian Federation" (November 21, 2011 No. 323-FZ) [7]; Decree of the President of the Russian Federation dated March 24, 2014 No. 172 "On the All-Russian Physical Culture and Sports Complex "RLD," and subsequent documents [15; 16; 20]. Regulation on the All-Russian Competition of Higher Professional Education Institutions Subordinate to Rosobrazovaniye "University of Healthy Lifestyle" (since 2009, the original document and up to the X contest in 2018-2019) [14].

In particular, at the disposal of the Government of the Russian Federation of August 7, 2009 states the following, "To recommend to the executive authorities of the constituent entities of the Russian Federation to develop measures to promote the development of physical education and sports, taking into account the provisions of the Strategy for the development of physical education and sports in the Russian Federation for the period until 2020" (Prime Minister of the Russian Federation V. Putin) [19]. The noted documents played a fundamental role in strengthening the status of physical culture, sports, and a healthy lifestyle in Russia [2; 12; 18]. Thanks to government documents, in universities, the teaching of physical culture began to be carried out in all courses of students at the university, theoretical training programs were introduced in the form of small lecture cycles for student courses. Much attention was paid to the development of the material and technical base for physical education and sports work in universities; networks of gyms, stadiums, sports fields have been expanded throughout the country. In particular, this played an important role in the victories of Russian athletes at the XXII Olympic Winter Games in Sochi in 2014.

These measures are very important for the development of physical education and sports. But an equally important factor is the students' awareness of the importance of becoming involved in a healthy lifestyle. In this regard, we will point out the opinion of a student who can evaluate the corresponding situation "from the inside" of student groups. In particular, S. V. Spirina writes about this. She states, "The problem of a healthy lifestyle of students is quite acute. In the student community, there is a lack of knowledge and understanding on this topic, and thus, a significant part of young people have an indifference to their health. Creating a targeted program aimed at improving the health of students and the formation of a healthy lifestyle can provide real help in solving these problems. This target program can be considered as part of the overall system of educational work at the institute" [18].

Among the sports that are an integral part of the programs in the discipline "Physical Culture," of course, game sports are available [5; 6; 17]. Their peculiarity lies in the fact that they are attractive for young people, cause genuine interest and excitement not only for players but also for fans, the desire to join the competition. In this article, we will turn to the main game sports that are used in physical education classes at any time of the year, such as basketball and volleyball [1; 3; 9; 10; 12; 13]. Besides, within the framework of general physical training, these sports are quite easily mastered; in them, the natural types of human movements, such as walking, running, jumping, various handwork with the ball, and active movements of the entire body are qualitatively developed. "Almost all body systems (respiratory, cardiovascular, neuromuscular, central and peripheral nervous systems) are involved in the work; the main mechanisms of energy supply, aerobic, and anaerobic metabolism are actively working. Volleyball and basketball are also a means of outdoor activities, which today is especially important for people engaged in the mental activity or "sedentary" work" [11].

Using the example of studying the effects of volleyball on the students' organism, N. I. Platonova shows that thanks to it, three main physiological components of the student's body are improved, namely,

adaptability, neurotism, and stability of the balance of nervous processes [13]. The author groups these characteristics of athletes in an informative and indicative table (Table 1, [13]):

TABLE 1. PHYSIOLOGICAL COMPONENTS OF THE STUDENT’S ORGANISM AND THE INFLUENCE OF THE GAME ON VOLLEYBALL ON THEM [13]

<i>Components</i>	<i>Impact of volleyball on components</i>
Adaptability	This component shows how well the student feels in society, whether they are satisfied with themselves and their lives, what their social status is. Volleyball (and basketball) improves this component, which leads to the student's ability to regulate their mental processes. □
Neurotism	Participation in the game of volleyball is the prevention of nervous breakdowns, excessive anxiety, emotional disorder.
The balance of nerve processes	The game promotes a balance between excitation and inhibition in the students' nervous system. Balance exists only when nervous processes are equally pronounced. People whose nervous processes are in balance are characterized by balanced behavior.

There must be a psychophysical development not only of one person but at the same time as the entire playing group, i.e., volleyball or basketball teams. So, Kurochkina, N. A., Guba, V. P., Bulykina, L. V. note, “Interpersonal relations in a sports team occupy an important place among other socio-psychological factors of successful sports activities, as their main function is to ensure cohesion, tone and psychological comfort among athletes in training and confidence in competitions. The importance of this socio-psychological phenomenon for achieving higher sports results of teams in competitions is emphasized not only by sports psychology experts but also by experienced trainers” [9].

We also would like to add that similar qualities of psycho-collectivism are manifested in the process of playing sports in physical education, especially in sports groups or university sports sections, in national university basketball and volleyball teams. In-game sports, on the site, the game situation is constantly changing. The course of events is not known in advance to either the athletes or the coach. Professional correct actions are needed from the situation and not according to certain programs. The main form of brain work in such conditions is not the development of standard skills (this happens during training), but their creative application. There is an instant assessment of the game situation, the solution of tactical tasks, a quick selection of the best collective game actions. Players on the court need to continually evaluate the location of other players of their team and the opposing team, analyze the characteristics of the combinations that arise, understand each other, predict the direction of the ball’s passes, etc. The success of the player's actions is determined not only by the correctness of the chosen decisions but in conditions of insufficient time, also the speed of the passage of nervous processes, the speed of the response.

The formation of the healing and strengthening psychophysical qualities of students in the process of fitness and health practices and the development of university sports is essential in shaping the professional excellence of future specialists. This is important in teaching physical education at a medical university. “The work of medical workers is one of the most complex, intense, and responsible types of human activity. In most medical specialties, it is characterized by great mental stress; it requires attention, high working capacity, and always considerable physical effort and endurance” [1]. Given the fact that the doctor's profession is associated with intensive mental work, the research work of students is also important at the Department of Physical Culture and Healthy Lifestyles at a medical university. It is associated with the scientific awareness of the importance of their physical, psycho-emotional preparation, and the formation of a healthy lifestyle by means of physical culture [4].

P. G. Vorontsov, K. N. Polotnyanko, M. S. Terentyev, and others note, “Students – future medical specialists – themselves must have their own high potential of physical, psycho-emotional, and spiritual-moral health, which they absolutely need for the medical profession. To a large extent, students accumulate the potential of their health in physical education classes, including in-game sports, as well as in extracurricular time, by participating in various sports sections, in various types of sports events where sports games are prominent a place <...> As several specialists, such as (Krinitzky, 1995), (Batyrev and Ryazantsev, 2000), (Mandrikov et al.,2012), and others note that sports play an important role in the medical profession. This is fairly easy to verify. Having examined the qualities inherent to basketball players and doctors, we can notice the similarities and thereby understand that basketball plays an important role in healing” [5].

For example, the quality and effectiveness of a doctor's work are largely determined by his personal health, functional, and psychophysical readiness. Medical specialists need endurance (both general and static) to walk on floors, stand idle for hours at the operating table, and fulfill the duties of a rural and district doctor. Speed and coordination (both movements and reactions) are very important to quickly reach the patient, quickly navigate the situation, quickly bandage a bleeding wound, etc. Strength (both dynamic and static) is necessary to lift or transfer the patient. Flexibility is important when it comes to helping the patient in any situation. A doctor cannot do without agility, in which he/she is able to quickly and accurately perform all the necessary manipulations during emergency care, surgery, during resuscitation, in extreme and catastrophic situations. Of great value is the psycho-spiritual feeling and instant sensation of another person in order to timely and expertly come to his/her aid, etc. But we emphasize that all these bodily and psycho-spiritual qualities, which are most important for the future doctor's profession, are excellently developed and fixed for a long time when young people master playing sports.

#### **4. Conclusion**

Thus, it should be noted that a number of important government documents and legal laws have been adopted in Russia since 2007. They enshrined the right and duties of youth to strengthen their own health, actively engage in physical culture and sports, and join a healthy lifestyle. However, directive documents alone are not enough. On the one hand, constant systematic pedagogical educational and health-improving work in universities and other educational and physical-sports institutions is necessary. On the other hand, the formation of a sustainable worldview of youth aimed at introducing a healthy lifestyle is necessary. In aggregate, the complex of such events significantly changes students' life guidelines, strengthens their psychophysical health. In the process of students engaged in physical education, including playing sports, as well as their training in sports sections, with their participation in mass sports, very important psychophysical qualities of a person are formed and fixed. These qualities include both individual-personality and collectivist characteristics. These qualities are absolutely necessary in the process of training a future specialist in a medical university, who is obliged to show a model of health and a healthy lifestyle.

#### **References**

- [1] Blazhko, A. V., Vorontsov, P. G., Polotnyanko, K. E., & Terentyev, M. S. (2016). Basketball in the system of sports and recreational practices and sports mass educational activities. In I. P. Saldan (Ed.), *Collection of Scientific Works Dedicated to the 50th Anniversary of the Pediatric Faculty of ASMU (1966-2016) "Half a Century on Guard of Children's Health"* (pp. 41-46). Barnaul, Russia: ASMU Publishing House.
- [2] Wegner, P. G., Polotnyanko, K. E., Ushakova, E. V., & Khimicheva, N. A. (2016). The problem of forming a healthy lifestyle and the diversity of pedagogical management systems. *Philosophy of Education*, 5, 166-174.
- [3] Belyaev, A. V., & Savin, M. V. (Eds.). (2000). *Volleyball*. Moscow, Russia: Physical Culture, Education and Science.
- [4] Vorontsov, P. G., Krylova, T. I., Lobygina, N. M., Prosekova, T. S., & Ushakova, E. V. (2018). Research work of students in the system of university management on the problems of sports and recreation activities. *Professional Education in the Modern World*, 8(1), 1694-17021.
- [5] Vorontsov, P. G., Prosekova, T. S., Polotnyanko, K. N., & Terentyev, M. S. (2017). Impact on the mental health of future physicians of physical education and playing sports. In *Materials of the International Scientific and Practical Conference "Strategy for the Formation of a Healthy Lifestyle for Young People: Experience and Development Prospects"* (pp. 85-87). Barnaul, Russia: AltSPU.
- [6] Gordon, S. M., & Ilyin, A. B. (2004). Assessment of the personality of athletes of different specializations and qualifications (on the example of cyclic, game types and combat sports). *Theory and Practice of Physical Culture*, 2. Retrieved from <http://sportlib.info/Press/TPFK/2004N2/p46-49.htm>.
- [7] Russian Federation. (2011). *Federal law "On the Basics of Protecting the Health of Citizens in the Russian Federation"* (November 11, 2011 No. 323-FZ). Retrieved from <https://base.garant.ru/12191967/>.
- [8] Russian Federation. (2007). *Federal Law "On Physical Culture and Sport in the Russian Federation"* (December 4, 2007 No. 329-FZ). Retrieved from [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_73038/](http://www.consultant.ru/document/cons_doc_LAW_73038/).

- [9] Kurochkina, N. A., Guba, V. P., & Bulykina, L. V. (2019). Psychological factors to increase the effectiveness of competitive activity in women's volleyball. In *the Collection of Materials of the All-Russian Scientific-Practical Conference with International Participation "Innovative Technologies in the System of Sports Training, Mass Physical Culture and Sports"* (pp. 247-249). St. Petersburg, Russia: St. Petersburg Research Institute of Physical Culture.
- [10] Mandrikov, V. B., Turkin, R. A., Mitsulina, M. P., Ushakova, I. A., & Golubin, S. A. (2012). *Basketball in physical culture classes at medical and pharmaceutical universities*. Volgograd, Russia: VolSMU Publishing House.
- [11] Polotnyanko, K. E., Wegner, P. G., Rusinov, N. V., & Shebalina, L. G. (2017). Game sports in the system of physical education and sports activities at Altai State Medical University. In A. A. Geraskin (Ed.), *Physical culture and sport in the life of students* (pp. 340-346). Omsk, Russia: OmSTU Publishing House.
- [12] Polotnyanko, K. N., Polyakova, O. S., Roganov, O. A., & Ertel, V. A. (2016). Volleyball in the system of sports and recreational practices and sports mass educational activities. In *Collection of Scientific Papers Dedicated to the 50th Anniversary of the Pediatric Faculty of the ASMU "Half a Century on Guard of Children's Health"* (pp. 217-222). Barnaul, Russia: ASMU Publishing House.
- [13] Platonova, N. I. (2016). Volleyball as a means of developing the physical qualities of university students. *Kontsept*, 7, 1-6.
- [14] TSMU Official Website. (2019). *Regulation on the All-Russian Competition of Higher Professional Education Institutions Subordinate to Rosobrazovaniye "University of Healthy Lifestyle" (since 2009, the original document and up to the X contest in 2018-2019)*. Retrieved from <https://tvgm.ru/content/6/33006/>.
- [15] Government of the Russian Federation. (2014). *Decree of the Government of the Russian Federation "On approval of the Regulation on the All-Russian physical culture and sports complex "Ready for Labor and Defense" (RLD)"* (June 11, 2014 No. 540). Retrieved from <https://base.garant.ru/70675222/>.
- [16] Government of the Russian Federation. (2014). *Order of the Government of the Russian Federation "On approval of an action plan for the phased implementation of the All-Russian physical culture and sports complex "Ready for Labor and Defense" (RLD)"* (June 30, 2014 No. 1165-p). Retrieved from [http://sh270.krsl.gov.spb.ru/SSK/2015-2016/rasporjzhenie\\_1165\\_gto.pdf](http://sh270.krsl.gov.spb.ru/SSK/2015-2016/rasporjzhenie_1165_gto.pdf).
- [17] Rodin, A. V., & Luganskaya, M. V. (2019). The effectiveness of competitive activities of young athletes in game sports, taking into account the impact of stress factors. In *The Collection of Materials of the All-Russian Scientific-Practical Conference with International Participation "Innovative Technologies in the System of Sports Training, Mass Physical Culture and Sports"* (pp. 124-126). St. Petersburg, Russia: St. Petersburg Research Institute of Physical Culture.
- [18] Spirina, S. V. (2019). The formation and adoption of healthy lifestyle among students. In *The Collection of Scientific Articles of the All-Russian Scientific-Practical Conference with International Participation "Human Resource Management in the Field of Physical Culture, Sports and Healthy Lifestyle"* (pp. 468-470). St. Petersburg, Russia: Politekh-Press.
- [19] Government of the Russian Federation. (2009). *Order of the Government of the Russian Federation "On Approving the Strategy for the Development of Physical Culture and Sports in the Russian Federation for the Period Until 2020"* (August 7, 2009 No. 1101-p). Retrieved from <http://docs.cntd.ru/document/902169994>.
- [20] Presidential Executive Office. (2014). *Decree of the President of the Russian Federation "On the All-Russian Physical Culture and Sports Complex "Ready for Labor and Defense" (RLD)"* (March 24, 2014 No. 172). Retrieved from <https://base.garant.ru/70619520/>.