



## Optimization Of The Learning Process Of Basketball Exercises

*U. A. Farmonov*

*Bukhara State University head*

*teacher of the "Interfaculty department physical culture and sports "*

### ABSTRACT

The article raises the problem of optimization of the educational process in physical education classes at the basketball department. Among the students of 1-2 courses aged 17-20 years old, who go in for basketball, priority motives were identified that played a major role in the choice of this sport out of fifteen others presented at the Faculty of Physical Education of BSU. " In the article, we present the main forms of physical education used in the lessons of the educational department of basketball. A comparative analysis of training programs of various orientations during the learning process has been carried out. The main factors of optimization of health-improving physical education classes for students involved in the basketball department have been determined.

### ARTICLE INFO

*Article history:*

Received 15 Feb 2021

Received in revised form 17 March 2021

Accepted 27 March 2021

*Keywords:* basketball, students, health, motivation, optimization, health improvement, organization, technique, tactics, methodology.

© 2021 Hosting by Research Parks. All rights reserved.

### Introduction

Recent biomedical studies indicate negative changes in the health status, physical fitness and performance of student youth. This is due, in our opinion, to modern socio-economic conditions, environmental conditions, informational, intellectual and emotional overloads, hypokinesia, lack of time, irrational organization of work, rest and nutrition. These factors lead to a violation of the mechanisms of self-regulation of the functional systems of the body, a decrease in immunity, daily changes in the activity of the cardiovascular system.

E-mail address: [info@researchparks.org](mailto:info@researchparks.org)

Peer review under responsibility of Emil Kaburuan.

ISSN (electronic): 2620-6269/ ISSN (printed): 2615-4021 . Hosting by Research Parks All rights reserved.

Physical education as an integral part of higher education in the humanities should contribute to the formation of a healthy lifestyle among students [1,2].

The purpose of physical education in higher educational institutions is to promote the training of harmoniously developed highly qualified specialists. To achieve this goal, it is necessary to solve a number of tasks, among which the priorities are health promotion and ensuring high mental and physical performance due to the comprehensive development of physical abilities based on the individualization of the content of methods and means of physical education [4, 5].

Under the influence of physical education classes among students at the individual level, it is necessary to form a stereotype of a healthy lifestyle. But the solution to this problem is complicated by the fact that the majority of school graduates have a decrease in interest in physical education classes, which is associated with a low level of knowledge in this subject, and, first of all, with the imperfection of the physical education system in school. forms of classes that would take into account the interests, physical condition, gender and age of students. The study was carried out according to the plan of scientific research work of the department of "interfaculty physical culture and sports" Bukhara State University, Faculty of Physical Education

### **Purpose, tasks of work, material and methods**

The purpose of the research is to determine the main factors of optimization of health related physical culture and education on the basis of the educational software for basketball. During the experiment, we solved the following tasks:

- the priority motives for basketball lessons were studied among students of the first and second courses of the Faculty of Physical Education, who are engaged in this department
- the features of the health-improving effect of various basketball means were investigated;
- the rational orientation of classes was determined and practical recommendations were developed for drawing up training programs.

### **Research methods and organization**

- study and analysis of scientific, methodological and special literature;
- questionnaire survey, anthropometry (measurement of body length and weight, shoulder girth, waist, calculation of Quetelet weight and height index, proportionality index);
- physiological methods (determination of heart rate (HR), blood pressure
- systolic (BP - mean value), adaptive potential (AP);
- pedagogical methods (pedagogical observation and - pedagogical testing);
- methods of mathematical statistics. 60 students of the 1st and 2nd year of the Faculty of Physical Education, who, due to their health status, belong to the main and preparatory groups and are engaged in the basketball department, took part in the study. Physical education at the basketball department was carried out in the following forms:
  - training sessions according to the schedule of the educational part of the institute
  - 2 hours a week;
  - independent studies with methodological and organizational assistance from the teaching staff of

the basketball department

- 4 hours a week;

- conducting recreational and physical sports events - master classes in basketball, streetball competitions, sports days of the Faculty of Physical Education in basketball, competitions in throwing a ball into the basket from different points of distance.

Basketball is a sport that is characterized by high emotionality, staginess, variety of manifestation of physical qualities and motor actions, intellectual abilities and mental capabilities. Basketball consists of natural actions (walking, running, jumping) and specific motor actions without the ball (stops, turns, movements with side steps and cross steps). In addition, in basketball, various actions with the ball are used (catching, passing, dribbling, throwing the ball into the basket). The confrontation, the purpose of which is the effective attack of the opponent's ring and the protection of one's own, causes the manifestation of all physical qualities vital for a person - speed, speed-power and coordination abilities, strength, flexibility and endurance. During the game of basketball, practically all functional systems of the human body are involved and the main mechanisms of energy supply are turned on [3,6,8].

Achievement of a positive sports result also leads to the manifestation of such mental capabilities as purposefulness, perseverance, determination, courage, self-confidence, a sense of collectivism.

The preparatory part of the lesson (20-25 min.) Included general developmental exercises from athletics, gymnastics, outdoor games.

The main part (50-55 min.) - exercises aimed at mastering the technique and tactics of playing basketball, as well as exercises with the implementation of game techniques in general and in parts, depending on the training program. Also, exercises were used in light conditions, on the spot, at a slow pace and exercises of a conjugate nature. There were outdoor games adapted to basketball, preparatory, educational and control games depending on the period of preparation.

The final part (5-10 min.) Included exercises for the development of flexibility, mobility of the joints, relaxation and breathing exercises. In order to optimize the educational process, the health-promoting effectiveness of basketball training programs was assessed. During the sessions, the heart rate was recorded, at the same time their timing was carried out, before and after the sessions, blood pressure was measured.

### **Research results**

The study of indicators of well-being, morphological and functional state, physical fitness, characterizing the physical condition of students, revealed their compliance with the average group values of physiological standards.

Self-assessment of health analysis showed that excellent health status is

- 34% of students, good

- 38%, satisfactory

- 25%, unsatisfactory

- 3%. The study of the results of blood pressure measurements showed that in 4% of students systolic blood pressure exceeds the norm by 10 mm Hg. Art. Evaluation of proportionality indices proved that 68% of students are in the range of the appropriate level. The analysis of the results of

motor tests fulfillment showed that before the start of the research the indicators of flexibility, speed-strength and speed endurance of students were below the standard values.

As a result of the study of the UFS (level of physical condition) of male students 17-20 years old according to the method of I.I.Burnashev, it was found that 8% have a low level of UFS, 26% - below the average, 48% - average, 18% - above the average level of physical. The study of students' motivation to engage in basketball has revealed that among a wide range of motives, the most significant are:

- in the first place is interest in classes;
- on the second, strengthening of the state of health;
- on the third, self-improvement;
- on the fourth, the motive for the development of physical qualities;
- on the fifth, a pleasant pastime;
- on the sixth, removal of psychoemotional stress;
- on the seventh receiving positive emotions.

Thus, the leading motives of the students involved in basketball are interest in classes, the desire to improve health, self-improvement, which, in fact, determines the focus and content of the training program. Among the main incentives for students to continue their studies, the following were identified in the future.

- enjoyment of the training program
- 37%, maintenance of muscle tone
- 28%, good health
- 20%, increased self-esteem
- 15%. This ensured a stable composition of groups and almost one hundred percent attendance of classes.

In addition, all the students expressed their desire to continue to study at the basketball department in the next academic year, although they have the right to choose any kind of sport from those proposed by the department of interfaculty physical culture and sports. Comparative analysis of training sessions of various predominant orientation has shown that classes aimed at developing endurance are distinguished by a significant rate of movement performance, including the simultaneous work of significant muscle groups of the legs, arms, trunk; the absence of long rest pauses between the series of exercises. They are characterized by a high heart rate (HR) during the whole lesson ( $146 \pm 10$ ). Today there are several approaches to the construction of basketball lessons [3,7].

The analysis of the health-improving effect of programs of different focus has proved that the most effective is the use of mixed programs (when several tasks are solved in one lesson - the development or increase of endurance, coordination and speed-strength capabilities ...). The introduction of such programs helps to maintain the intensity of training at the high level necessary to strengthen the cardiovascular system. Such programs will contribute to teaching students to realize their physical abilities when performing technical and tactical techniques in the game, to effectively perform game actions, which consist of several techniques, to use their technical arsenal in accordance with changing game situations, to adequately reproduce the combination of tactical actions.

That is, the improvement of the components of game activity will occur in close interaction

between them. But the formation of interaction between the components of technical and physical training among students playing basketball should be started only after the preliminary stage of appropriate training, when the level of basic physical abilities and the level of mastering the rational structure of techniques will be at a sufficient level.

The results of the main stage of the study make it possible to assert that the application of the developed program for eight months contributes to significant positive changes in all the studied indicators ( $P < 0.05$ ). Under the influence of systematic basketball practice, there is a significant improvement in well-being. The number of students who rated their health as good increased to 57%, excellent - up to 40%, with a corresponding decrease in the number of satisfactory grades to 3% and the elimination of unsatisfactory ones. As a result of repeated testing, 58% of students who go in for basketball passed to a new level. functional state (UFS). The number of students with low RFS decreased to 2%, below the average - decreased to 7%. The number of students with an average level of UFS increased to 65%, the number of students with a level above the average - up to 33%, and 3% of students reached a high level of UFS.

Already after three months of training, there is an improvement in the state of health and well-being, positive changes in the functional state and physical fitness. However, the greatest changes occur after six months of training. During the entire study, there was a gradual improvement in the indicators of the physical condition of students. Also, there was an increase in interest in classes and an increase in the level of performance of technical techniques.

### **Conclusion**

1. A steady decrease in high blood pressure was established in students who regularly attended basketball classes.

2. It was revealed that the leading motives for playing basketball among students of 17-20 years old are interest in these activities, a desire to strengthen their health and self-improvement, which, in fact, determines the focus and content of the training program as a whole.

3. The main factors of optimization of health related classes with students is to determine the motivation and the ultimate goal of classes, take into account the initial level of physical condition and physical fitness of students, the choice of a rational orientation of classes, as well as the nature and size of training loads.

4. In order to form a healthy lifestyle for students, it is necessary to introduce new forms of physical education outside school hours, such as conducting master classes, conversations and various basketball tournaments.

5. Compulsory physical education classes should be supplemented by independent studies with methodological and advisory help from the basketball department teaching staff. It is also advisable to conduct additional anthropometric and functional studies in order to further optimize the educational process.

## References

1. Мирзиёев.Ш.М.Постановлению Президента Республики Узбекистан «О мерах по дальнейшему развитию физической культуры и массового спорта»г. Ташкент,3 июня 2017 г.,№ПП-3031
2. Белов С. Баскетбол. Броски по кольцу // Физкультура в школе. – 1990. – № 6, 7. – С. 17-18.
3. Гомельский А. Я. Баскетбол. Секреты мастерства. 1000 баскетбольных упражнений. – М., 1997. – 224 с.
4. И.И Бурнашев “Методика обучения спорта и подвижной игры” (баскетбол) для ВУЗ и для академик лицея- издатель//Дурдона-2020, Ст-86
5. Фаманов.У.А. “Методика обучения спорта и подвижной игры” (баскетбол) для ВУЗ-издатель//Бухара-2019, Ст-28
6. Нестеровский Д. И. Баскетбол. Теория и методика обучения– Москва. Academia, 2006. - 336с.
7. Симонюк Ю. Г. основы физического воспитания. – Харьков,РИО ХДЕУ, 1999. - 104с.
8. Сортел Н. Баскетбол: первые шаги. / Пер. с англ. - М., 2002
9. Холодов Ж. К., Кузнецов В. С. Теория и методика физического воспитания и спорта. Обучение. пособие для студ. высш. учеб. заведений. - М., 2002
10. Фаманов.У.А. “Методика обучения спорта и подвижной игры” (баскетбол) для ВУЗ-издатель//Бухара-2019, Ст-28
11. S.S.Abdueva,Sh.Kadirov,M.Fatullaeva,Sh.Khurbonov. Using of innovation terms in physical education and sport lessons and their social and educational features. Journal of Critical Reviews ISSN-2394-5125 Vol 7,Issue 6,2020
12. S.S.Abdueva, Sh.Khurbonov,N.Sabirova. Evolution of physical performance and techniques of handball girls aged 11-12. International Journal of Advanced Research in Science, Engineering and Technology (IJARSET). 2019 december
13. S.S.Abdueva. Activities that increase children's interest in the sport of handball. Innovatsionnoe razvitie nauki I obrozovanie mejdunarodnaya nauchno-prakticheskaya konferensiya 2020
14. Abdueva Sitorabonu Savriddin qizi. “Determining the speed and strength of 14-15 year old handball players in jumping”. ACADEMICIA An International Multidisciplinary Research Journal (Double Blind Refereed & Peer Reviewed Journal) ISSN: 2249-7137 Vol. 10 Issue 11, November 2020 DOI: 10.5958/2249-7137.2020.01417.2
15. U.A.Farmonov The system of training young basketball players at the initial stage of training at school. Asian Journal of Multimedimensional Research (AJMR) 2020. Vol 9,Issue 11, DOI: 10.5958/2278-4853.2020.00279.7