WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL
ISSN: 2776-0979, Volume 4, Issue 11, November, 2023

EFFECT OF TABLE TENNIS TRAININGS ON PHYSICAL FITNESS OF MALE STUDENTS

Turkmanov Takhir Zurfilaevich
Tashkent State Agrarian University
Department of Physical Education and Sports Senior Lecturer

Annotation
The research shows that the physical fitness of the mixed group of the male students with different qualification in table tennis, varying from the Third-Class Sportsmen to the Master of sport of Uzbekistan (MS), do not differ substantially of that of the control group and equates to the grades Satisfactory and Good. However, the table tennis players of the higher qualification (from the First-Class Sportsmen to MS) differ significantly from the students being only engaged in table tennis (the Second-Class and Third-Class Sports- men) by higher coordination abilities, namely the accuracy of throwing the ball into the target, as well as the strength level (tested with push-ups and squats) and the speed strength level (tested with speed push- ups).

Keywords: table tennis, male students, physical fitness.

INTRODUCTION

Table tennis is widely used in the system of physical education in our country. Table tennis is used to promote health, improve physical fitness in kindergartens, schools, colleges, universities, enterprises, holiday homes, sanatoriums and other institutions. Table tennis is particularly widespread in schools and students.

As you know, the improvement of the quality of classes with students contributes to the improvement of their physical preparedness and health, the interest in systematic physical education [1]. Table tennis is a game sport for which there is constant change of situations, emotional activity, which is why it is very attractive for students [2, 3].

During the practice of table tennis, the activity of sensory, auditory, motor analyzers is included. Table tennis has a great impact on the central nervous system. Changes under the influence of the practice of table tennis occur in the neuromuscular apparatus. The muscles of the back and lower arms work in stato-dynamic mode, the playing hand is characterised by a dynamic mode. Under the influence of specialized table tennis - increases speed, strength, coordination abilities, increases the level of flexibility and speed-force qualities (http://keeprun.ru/types/normavy-chelnochnogo- bega.html#v-vuzah).

The aim of the research is to identify the impact of table tennis on the physical fitness of young students.

RESEARCH METHODOLOGY AND ORGANIZATION

In order to study the physical fitness of young men playing table tennis, we have used conventional and developed specific pedagogical tests that contribute to the evaluation of both general and specific physical qualities: speed abilities, flexibility, speed-force abilities and coordination abilities.

39 male students aged 19-23 of the Tashkent State Agrarian University took part in the experiment mass discharges, which from September 2022 to May 2023 in the exercise class played table tennis twice a week.

Physical fitness testing took place in March 2023. The complex of control and pedagogical tests included exercises aimed at detecting the level of mobility in the hip and shoulder joints, the mobility of the vertebral column was also investigated.

The level of speed ability was determined by the time of performance of 10 body lifts from the position of «lying on the back», as well as the range of throwing a tennis ball.

For the diagnosis of static equilibrium the «Romberg Pose» test was used. The time of holding the immobility position of the body with an accuracy of 0.1 p. The evaluation of coordination abilities was carried out with the help of tests: «shuttle running 3 10 m» and «throwing the ball to the target». To perform the task, the students occupied the original position at the line at a distance of 5 meters from the target. The target consists of 3 circles. A hit of 60 cm in diameter is estimated at 1 point, 40 cm - 2 points, 20 cm - 3 points.

The level of development of power abilities was assessed by means of tests: retention of the initial position «Emphasis lying on the elbows» for time; «Bending - stretching of the hands in the resting position», «Squats» in this test it was necessary to perform as many squats as possible without disturbing the correct technique.

The test of speed-strength abilities was carried out with the help of exercises: «Jump in length from place», «Lifting legs to an angle of 45 degrees lying on the floor», it was necessary to perform 20 repetitions, recording the initial and final position, the time of the exercise; «Bending-Stretching of Hands In Rest». It was necessary to perform 12 push-ups, the time of the exercise was fixed.

RESULTS AND DISCUSSION OF THE STUDY

In table tennis flexibility is of great importance, its high level of development contributes to the improvement of speed and dexterity, minimizes injuries. With

developed mobility of joints, the technique of striking can be more varied, and the coordination is perfect [2]. The study assessed the mobility of tennis players in the shoulder, hip joints, and measured the flexibility of the spine.

The exercise «tilting forward from the position, standing with straight legs on the gym bench» is a common norm and enters the GTO complex. According to the information received, table tennis students have met the standard set for boys (6-13 cm). However, there is no reliable difference between the groups of highly qualified students and the mass classes in terms of flexibility in all three control and pedagogical tests. Therefore, the average level of flexibility is sufficient to achieve high results in table tennis.

Speed abilities in table tennis are manifested primarily in the speed of movement, the speed of response to a moving object and the speed of impact action. It should be noted that speed is manifested specifically in those motor actions that are necessary for the athlete and not transferred to other exercises. In our study, we analyzed the speed level of students in two regulations: the lifting of the torso from the position of «lying on the back», for 10 seconds and throwing the ball at a distance. According to the received data, in the test «the lifting of the torso from the position «lying on the back», there are no reliable differences between groups of highly qualified tennis players and athletes of mass discharges. However, in the test for the speed of the hands in the study of boys of different levels of fitness and experience, the difference between the groups was 5.38%, which is statistically reliable ($P < 0.05$).

Coordination in table tennis is manifested in the presence of a specialized perception of the «sense of the ball», which is developed during the process of many years of training. The main difference in the manifestation of this quality among highly qualified athletes in table tennis is the developed ability to unexpected complex movements and motor improvisation, the ability to quickly process the ball. Features of table tennis are manifested in coordination exercises «eye-hand» [2]. This includes throwing a tennis ball at the target. It is in this exercise that statistically significant ($P < 0.05$) differences in the level of preparedness of athletes of the II-III ranks and high qualification. The coordination abilities of the strongest athletes of young men are higher and differ by 71.87% from the players of mass ranks. In the test of static equilibrium in young mass discharges were found to be lower (8.19 seconds) than in athletes (9.73 seconds). A similar situation was found in young men engaged in table tennis in the indicators for testing the shuttle race 3 10 m. Tennis players II-III ranks the result was lower and was 8.18 seconds, and athletes I ranks - masters of sports - 8.05 seconds, reliably higher. According to the developed GTO

standards for students, the performance of the shuttle race for high-class tennis players and for athletes of the II-III ranks are at the level of «satisfactory».

To explore the strength of young men engaged in table tennis, three exercises were proposed: retention of the torso in the forearms, bending-stretching of the arms in the rest lying and squatting.

In the first exercise, the mass disc tennis players showed better results, but these differences do not have a reliable difference (P>0.05). Credible differences have been found between mass-discharge tennis players and highly qualified athletes in the practice of bending and stretching hands in resting (P <0.05). In boys, the group of athletes I ranks - MS showed a higher result by 46.76% than tennis players II-III ranks. This shows that systematic table tennis exercises have a reliable impact on the improvement of speed-force and strength.

During the testing of the strength abilities of the lower limbs in the test «squat to failure» also in the sample of high-class athletes were obtained reliably higher results (P <0.05) in comparison with the tennis massive raids. It was found that highly qualified young tennis players performed more squats than mass discharge athletes by 68.08%.

Speed and strength are important for table tennis players and determine an athlete's ability to move, as well as the need to perform fast and strong blows. In our research, male tennis players had to perform 20 leg lifts from a back position to a 45-degree angle, 12 time push-ups and a long jump to determine the level of development of speed-force qualities.

In the first exercise on speed and strength indicators of abdominal muscles, we did not find any reliable differences between the massive tennis players and highly qualified tennis players. When testing the speed-strength abilities of the hands in the bend-extend test for a while, it was revealed that athletes qualifying the 1st degree - MC reliably (P <0.05) differ from the group of tennis players II-III-series by 30.63%. According to the data received, all tested tennis players have coped with the norm of jumping in length from place, which corresponds to the bronze badge of the GTO and the corresponding average level of development of speed and strength qualities in this exercise. At the same time, reliable differences between groups of high-class athletes and mass discharges in this standard has not been revealed, which in our opinion indicates that the speed-force qualities of the lower limbs are well developed as high-qualified tennis players, and tennis players of mass discharges, which is enough for a successful game of table tennis.

CONCLUSIONS

As a result of the study, it was revealed that young students engaged in table tennis have an average level of general physical preparation. At the same time, most of the control standards tennis players perform on assessment «good» and «satisfactory». Students of high sports qualification (I category - MS) reliably differ from the tennis players of mass sports ranks (II - III times - series) higher performance in testing coordination abilities, namely the accuracy of the ball to the target, as well as strength and speedstrength of power.

Therefore, to achieve good results in table tennis requires a basic level of development of all physical qualities, as well as specific abilities that are characteristic of the game activity and are improved in approximate competitive exercises.

REFERENCES

1. Barchukova, G.V. and Mizin, A.N. (2012), “Improving orientation of table tennis for students of universities in the discipline of "Physical Culture"”, *Problems of improving the physical education of student: materials of the International Scientific and Methodological Conference February 2-3, 2012*, Mos- cow, pp.126-127.

2. Barchukova, G.V. and Mizin, A.N. (2015), “Innovative approaches in the organization of phys- ical culture and sports in the student environment”, *Materials of the All-Russian Scientific and Practical Conference with International Participation Kazan, November 6-8, 2015 "Physical Education and Student Sport with Eyes students"*, Publishing house KNITU-KIA, Kazan, pp. 194-196.

3. Barchukova, G.V. and Mizin, A.N. (2017), “Application of the competitive method in the class- room with table tennis in the framework of physical culture with students of non-physical higher education institutions”, *Actual problems of physical culture, sport and tourism: materials of the XI International Sci- entific and Practical Conference*, RIC UGATU, Ufa, pp. 40-45.