

ISSN: 2690-9626 Vol. 4, No. 1, 2023

Development of Agility and Coordination of Schoolchildren through the Sport of Handball

Xolboyeva Gulxayo Xolboyevna, PhD

Docent of the Uzbekistan-Finland, Pedagogical Institute

Safarova Shahlo Abdurasul qizi

Master of the Uzbekistan-Finland, Pedagogical Institute

ABSTRACT: The article examines the features of the formation of agility skills in students of high school age. The conducted studies show that modern students of this age have an average level of development of agility skills. The authors prove that active games such as handball are a necessary condition for the development of a person's agility.

KEYWORD: physical education of secondary school students, agility, pedagogical test, coordination, handball.

Enter. Handball for middle school students is a good time to develop agility skills in sports circles. Together with the development of this physical quality, it stimulates mental processes, braking, mobility and balance abilities. Agility skills are one of the conditions for successful management of movement skills of varying complexity, which requires development as a priority task of physical education in middle school students. It requires looking for tools to develop agility skills in handball circles with students [1,3].

Agility and quickness skills "is the ability to quickly and dexterously get out of any difficult situation, that is, the ability to overcome any movement difficulty that arises:

- A) correct (adequate and clear);
- B) fast (quick and quick);
- C) rational (purposeful and frugal) and resourceful (interesting and proactive)" [1,4,5].

Agility abilities, as researchers have noted, depend on the following factors, the speed and plasticity of mental processes, because agility is an indicator of the speed of reaction of the nervous system to an external stimulus. In agility, the ability to accurately evaluate and perform movement is manifested taking into account its spatial, time and force characteristics. One of the manifestations of agility skills is the ability to move and quickly get out of difficult situations [5,7]. The classification of agility skills includes the distribution of certain types of agility [6,8]:

Agility in actions - abilities of agility and agility, which depend on the plasticity of thinking and are manifested in the speed and accuracy of decision-making during lessons;

agility in games and exercises with objects;

71	ISSN 2690-9626 (online), Published by "Global Research Network LLC" under Volume: 4 Issue: 1 in Jan-2023 https://globalresearchnetwork.us/index.php/ajshr
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

variable agility - manifests itself in the interaction of several students during exercises;

collective agility - it manifests itself in the student when performing actions together with other students, which means that there are already preliminary tactical decisions.

Literature analysis. V.I., Lyakh who made a great contribution to the study of agility skills. [4] distinguished general and special agility skills. to the special motor-coordination abilities of V.I. Lyakh [4] classifies groups of integrated purposeful motor actions that are homogeneous in terms of psychophysiological mechanisms.

At the middle school age, when teaching movements, students should be able to see step by step, feel the individual parts of the muscles, the qualities of the movements (direction, amplitude, pace, rhythm, etc.) and the ability to express them verbally. should be formed.

According to the researchers, when organizing activities for the development of agility skills, first of all, students should complicate the primary situation that activates their mental processes to process incoming information. It can be an unusual starting position at the beginning of the exercise and a sudden change of movement and a change in the way the exercise is performed and joint movements, together with the rapid change and variety of movements. Researchers point to the ideal number of drills to develop agility and ball skills. Middle school students learn different games, but the most difficult among them is handball, which requires good team dynamics, different movements and skills with the ball, requires, they are random in nature and change during the game.

The purpose of the research is to develop methods of developing agility skills through the game of handball.

Learning methods and organization. In accordance with the chosen goal, a study was conducted at the school to determine the agility skills of 12-14-year-old students. In the experimental part of the study, in the 20121/2022 academic year, 15 students in the experimental group (TG) and 15 students in the general physical training group formed a control group (NG).

The indicators of physical development of the participants of the experiment are presented in Table 1. The indicators correspond to the age standards of physical development of students of the specified age.

Indicators	Control group	Experimental group
Height length	$14,3 \pm 0,6$	$123,4 \pm 1,9$
Rody weight	37.6 + 0.8	36.7 + 0.8

Table 1. Indicators of physical development of students.

Comparing the indicators, no significant differences were found in the indicators of physical development of students from NG and TG.

To assess the level of development of agility skills, a pedagogical test was conducted, which included the following test tasks:

Test 1 "Throwing the handball at the target". D.x. - straight in the direction of the throw, left foot (when throwing with the right hand) in front, right back on the toe, right hand in front, ball at head level; then the same test is performed, but with a different hand. The target is placed at a distance of 5-6 m. Each student is given 5 attempts with the right hand and 5 with the left hand - a total of 10 attempts. All shots are counted: boys: out of 10 attempts - 6-5-4 times, girls - 5-4-3 times, which corresponds to the marks 5, 4, 3.

Test 2 "Throwing and catching a handball ball with a 360° turn of the student." D.x. - basic stance, hands with the ball are lowered (shoulder level). The student throws a ball at his head, jumps, rotates around his axis while jumping and catches the falling ball. Each student is given 5 attempts. A fully completed exercise

72	ISSN 2690-9626 (online), Published by "Global Research Network LLC" under Volume: 4 Issue: 1 in Jan-2023 https://globalresearchnetwork.us/index.php/ajshr
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

AJSHR, Vol. 4, No. 1, Jan 2023

is considered: boys and girls - after 5 attempts corresponding to the marks 5, 4, 3, it is necessary to successfully catch the ball 5-4-3 times.

At the end of the academic year, in order to determine the effect of playing handball on the development of agility, repeated tests were conducted according to the control methods described in the control and experimental groups. The Wilcoxon test was used to assess the significance of differences.

Results and discussion. The results of the initial test of students' agility skills are presented in Figure 1.

In the experimental group, only one student hit the target 6 times, three students hit the target 5 times, six members of the group - 4 times, and three - 4 times. In the control group, similar indicators were distributed slightly differently: one student hit the target 6 times, four students hit the target 5 times, five students hit the target 4 times, and three students hit the target 3 times. The percentage distribution of students according to the number of attempts is shown in the figure.

At the initial stage of the study, it was found that the majority of students in both groups (73.3%) hit the finish line 3-4 times, which indicates an average level of development of agility.

Accordingly, only one-fifth of the surveyed students can perform this exercise to determine the level of development of agility, the rest of the students have moderately developed agility and need to continue to develop it.

The experimental group was engaged in the lesson program of the "Handball" course for 11-15-year-old students for one year, 1 hour 3 times a week, totaling 108 hours.

Research method. In the theoretical part, issues of technique and tactics of playing handball are considered. In the practical part, technical and tactical combinations, as well as special physical training exercises of students are studied. In training with students, it is recommended to focus on combined exercises and educational games, so more hours are allocated to these sections of the program. The form of summarizing the results of the program is students' participation in handball competitions.

The content of the experimental technique was based on the specific principles of sports training: a gradual increase in the training load, a combination of general and special physical training, attention to high achievements, deep specialization, continuity of the training process, load up to "fluctuation and variability, cyclical nature of training of athletes, interdependence of competition and training activities, etc.

During the experiment, exercises with different balls were introduced in two stages in a certain sequence. In the first stage, exercises corresponding to the structure of "handball school" were performed:

first, exercises for throwing balls in the forward direction were mastered (straight up, straight pass, straight forward, straight back (through the top - double is executed as));

then the exercises for throwing balls in an oblique direction were performed: upward and forward at an angle with a rebound from the wall, forward and at an angle to the pass with a rebound from the wall, with the right hand at an angle from the right side, with a rebound from the wall to the left to the wall, with the left hand at an angle from the left to the wall to the right to the wall, in all cases the ball must be caught after the return;

the following exercises for throwing balls along an arc trajectory were performed: throwing the ball up and forward to the wall and catching the ball after bouncing off the wall, throwing the ball from the floor to the wall and catching the ball, throwing, up and forward with the right hand to the left and catching the ball after bouncing off the wall, throwing up and forward with the left hand and catching the ball after bouncing off the wall. All exercises were performed 6-8 times in each session in order to master the exercise without mistakes. The use of different balls also had a certain sequence: first they used inflatable balls, then rubber balls, tennis balls, medium balls (handball, handball, football), worked with stuffed balls.

	ISSN 2690-9626 (online), Published by "Global Research Network LLC" under Volume: 4 Issue: 1 in Jan-2023 https://globalresearchnetwork.us/index.php/ajshr
73	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

In the second stage, exercises with handballs (handballs) were performed:

- ✓ exercises to develop quick reaction skills: imitation of serving, attacking, blocking, passing the ball;
- ✓ exercises to develop qualities in receiving and passing the ball: throwing a fitball ball, passing a basketball ball, passing a handball ball in pairs, over oneself, to a distance against the wall;
- ✓ exercises for the development of the qualities necessary to perform the ball: throw with maximum deviation from the back of the head, throw the ball over the net for the accuracy of the zone;

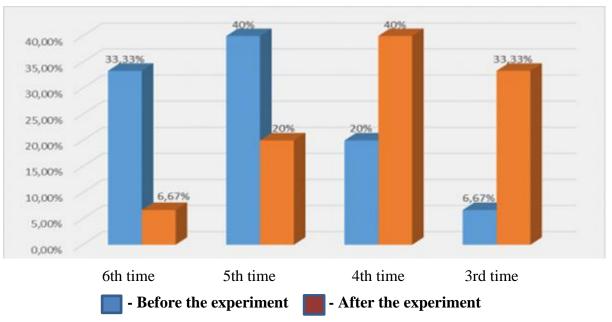
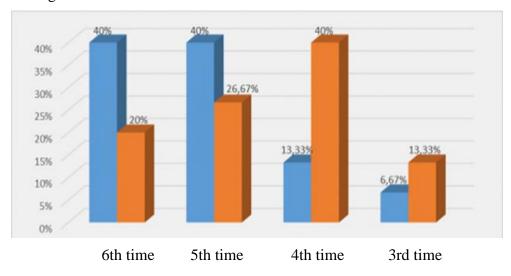


Figure 3. Comparison of the results of the 1st test for students in TG before and after the clarifying experiment.

Out of 15 students in the experimental group, four students completed the task 6 times, six students 5 times, three students 4 times, and two students 3 times completed the task with excellent marks. received (see Fig. 3). The results did not change in the control group. The results of

Test 2 are shown in Figure 3-4.



ISSN 2690-9626 (online), Published by "Global Research Network LLC" under Volume: 4 Issue: 1 in Jan-2023 https://globalresearchnetwork.us/index.php/ajshr

The comparison of movement precision development indicators showed that the students of the experimental group had higher coordination skills compared to the students of the control group (p <0.01), which was confirmed by the Wilcoxon test.

- Before the experiment - After the experiment

4- picture Comparison of the results of the 2nd test for students in TG before and after the experiment.

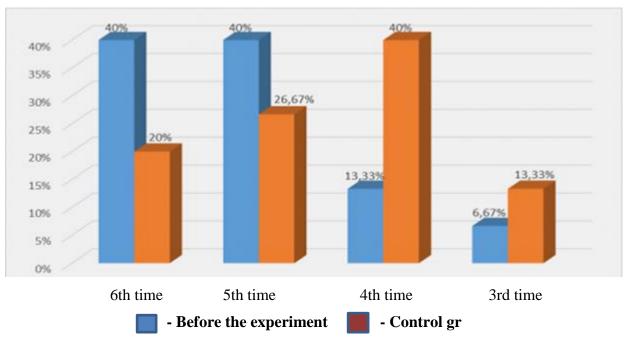


Figure 5 Number of successful attempts to catch the ball after the turn in test 2 for NG and TG pupils.

Results and discussion. As it turned out, out of 15 students in the experimental group, six students caught the ball 5 times, six students 4 times, two students 3 times, and one student was able to complete the task with excellent marks. caught 'p 2 times (Fig. 5). The results did not change in the control group. The obtained empirical value of Temp according to Wilcoxon's criterion was in the zone of significance, so handball lessons have a positive effect on the development of agility skills (p<0.01).

Thus, we can say that the technique of using handball exercises helps to develop agility skills, this experience is confirmed by a significant increase in the indicators of agility skills among students of the group. With the students of the control group, training according to the usual program remained at the same level and almost did not lead to a change in agility.

CONCLUSIONS

- 1. Agility abilities, as the researchers noted, depend on the speed and plasticity of mental processes, because agility is an indicator of the reaction of the nervous system to an external stimulus, and ball games among schoolchildren activate their mental activity.
- 2. Handball has a positive effect on the development of agility, in particular, hitting the ball at the target (p < 0.01) after performing additional movements (p < 0.01) in the boys of the experimental group. The catch rates are improved.
- 3. In the group of primary school students, additional handball training helps to develop general agility skills.

	ISSN 2690-9626 (online), Published by "Global Research Network LLC" under Volume: 4 Issue: 1 in Jan-2023 https://globalresearchnetwork.us/index.php/ajshr
75	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

REFERENCES

- 1. Azizova R.I. Gandobolchining texnik tayyorgarligi. 'Namangan, 2006.
- 2. Гамезо М.В., Петрова Е.А., Орлова Л.М. Возрастная и педагогическая психология: Учеб. пособие для студентов всех специальностей педагогических вузов. М.: Педагогическое общество России, 2009.
- 3. Pavlov SH, A bduraxm anov F., A zizova R. Gandbol. Toshkent, 2007.
- 4. Ториев А.Ш. Игровые методы в физическом воспитании // Педагогика: традиции и инновации: Материалы III международной научной конференции, Челябинск, апрель 2013 г. Челябинск: Два комсомольца, 2013. С. 102–103.
- 5. Pavlov SH, F.Abduraxm anov, J.Akram ov. Gandbol. Toshkent, 2005.
- 6. Kholboyeva GX, Khaydarov BT, Tojieva XB Methodology of the improvement of preliminary gimnstic disciplines in increasing activity of preschool age children (case of Uzbekistan). // International Journal of Psychosocial Rehabilitation. 2020-№6 ISSN:1475-7192 Scopus. *DOI*: 2009-2011, 2013-2020.B 4562-4569.
- 7. Kholboyeva GX, Mechanisms of improving the initial gymnastics classes in increasing the motor activity of preschoolers, Scientific Bulletin of the Samarqand State University, № 6, 2091-5446, 2019; 140-144.
- 8. Kholboyeva GX, Nazarova D, Mechanisms of increasing the motor activity of children aged 5-6 years on the basis of initial gymnastic training, Scientific and theoretical magazine "Fan sportga". № 6, ISSN.2181-7804, 2020; 72-75.