

<https://doi.org/10.34142/2709-7986.2021.26.2.06>

USE OF ACTIVE GAMES IN PHYSICAL AND TACTICAL TRAINING OF YOUNG HANDBALL PLAYERS AT THE INITIAL STAGE

Received: 27/04/2021

Accepted: 01/06/2021

Ihor HRYNCHENKO¹, Asia TYKHONOVA², Tetiana KARPUNETS³, & Olexandr CHUPRYNA⁴



¹ PhD in Pedagogy, Associate Professor, Department of Olympic and Professional Sports, Sports Games and Tourism, H.S. Skovoroda Kharkiv National Pedagogical University, Valentynivska Str. 2, Kharkiv, 61168, Ukraine.

✉ E-Mail: igorgrincenko1963@gmail.com

🆔 <https://orcid.org/0000-0001-7469-5819>



² Senior Lecturer, Department of Olympic and Professional Sports, Sports Games and Tourism, H.S. Skovoroda Kharkiv National Pedagogical University, Valentynivska Str. 2, Kharkiv, 61168, Ukraine.

✉ E-Mail: tihonovaasya17@gmail.com

🆔 <https://orcid.org/0000-0002-9091-2542>



³ Senior Lecturer, Department of gymnastics, rhythmic education and fitness, H.S. Skovoroda Kharkiv National Pedagogical University, Valentynivska Str. 2, Kharkiv, 61168, Ukraine.

✉ E-Mail: tatyanagimnastka@gmail.com

🆔 <https://orcid.org/0000-0002-9579-1794>



⁴ Senior Lecturer, Department of Olympic and Professional Sports, Sports Games and Tourism, H.S. Skovoroda Kharkiv National Pedagogical University, Valentynivska Str. 2, Kharkiv, 61168, Ukraine.

✉ E-Mail: acupryna19@gmail.com

🆔 <https://orcid.org/0000-0001-8371-0128>

ABSTRACT

The **purpose** of the study is to increase the effectiveness of physical and technical training of young handball players aged 10-11 by means of moving games, game exercises and relays at the stage of initial training during the pedagogical experiment in 2020-2021.

Methodology. The following methods were used in the study: theoretical analysis and generalization of scientific and methodological literature, control and pedagogical checking (tests), pedagogical observations, anthropometry. Statistical processing of experimental data was performed using the statistical processing package STATGRAPHICS Plus for Windows (according to standard methods). The study involved young handball players aged 10-11, the first and second year of training in sport school №3 in Kharkiv during a year. The technique was implemented for 9 months (74 lessons), 3 times a week, and lasting 20 minutes.

Results. We claim that the physical fitness of handball players is closely related to various aspects of training. The selected tests fully characterize the physical development and functional state of the main life support systems of a body and allow determining the effectiveness of the proposed authors' method. The specially selected combinations with the use of moving games, game exercises and relays help to increase the level of technical training of young handball players. Analysis of the final indicators in the experimental group revealed a significant increase corresponding to the 5% level of significance in terms of execution of free throws and movement in the protective rack of the handball player. The average group values of the accuracy of free throws increased by 49.5%, and the average speed of movement in the protective rack of a handball player after the experiment increased by 8.3%. The rate of transfer of the ball to the wall in the experimental group increased by 25.1%, which indicates a significant increase in the result at $P < 0,01$.

Conclusion. The results obtained during the experiment confirmed the effectiveness of our developed methods of training with the purposeful use of moving games, game exercises and relay races at the initial stage of training young handball players.

KEYWORDS: Handball, Young Handball Players, Moving Games, Relays, Experiment, Sport School, Fitness.

INTRODUCTION

The issue of training young handball players aged 10-11 is gaining relevance today (Hapková, 2019). Indeed, the training highly qualified handball player takes at least 6-10 years (Kostiukevych, 2014; Tyshchenko, 2014; Solovei, & Solovei, 2018). To improve the physical and technical fitness of young handball players, it is necessary to choose the right set of techniques that can be mastered in the shortest time possible.

However, at the present stage of sports science development (Korahin, 2016) there are often categorical and unfounded calls for universalization of players or, conversely, their early specialization. The problem of universalization or specialization of players, including handball players, certainly, needs a solution. This requires theoretical and practical research.

Therefore, there is a contradiction between the increasing requirements for the level of

physical fitness of young handball players, on the one hand, and the lack of existing author's methods for the development of players' physical qualities, on the other hand. The identified contradiction actualizes the problem of increasing the efficiency of physical and technical training of handball players our authors' method, specially selected moving games, game tasks and relay races.

THEORETICAL FRAMEWORK

Some aspects of the researched problem are covered in the scientists' works (Kornosenko et al, 2012; Bezverkhnya et al, 2014; Karasievych, & Karasievych, 2019). According to researchers O. Kornosenko, V. Bondarenko, P. Khomenko (Kornosenko et al, 2012), educational and training sessions with elements of moving games, game exercises and relay races cause children's game excitement, capture them by its tension and passion, cause additional positive psychological emotions, promote formation of young athletes' opportunities for creative, improvisational actions on the sports ground.

In our previous paper (Hrynchenko et al, 2019b) we stated the introduction of the game method of learning with the use of active and sports games has a clearly directed didactic task, game plan, necessarily has a leader (mentor), clear rules and, most importantly, the result application is the development, expansion, assimilation, consolidation, skills and abilities generalization of playful motor activities.

Some authors (Karasevych, & Karasevych, 2019) believe that active games should be selected to organize warm-up, to develop strength, quality speed and speed of movement, to train dexterity, endurance and flexibility, as well as to organize active recover after intense and intense training. With the help of active games it is possible to

effectively cultivate discipline, collectivism and develop complex interaction of all team players.

When planning moving games, it is emphasized (Bezverkhnya et al, 2014) that the general load in a separate lesson should be taken into account and, accordingly, their main purpose and place among other exercises and tasks should be determined. The variety of combinations used in training active games on physical activity and coordination complexity of participants' interaction should be accessible to children and grow gradually.

The inclusion in the physical education class of active games with elements of handball allows learning quickly the two most important techniques of the game: catching and throwing.

According to some specialists (Levkin et al, 2011; Popovich et al, 2016), the use of active games in handball classes is the most effective means of physical development and versatile education of motor skills of young athletes. The main feature of the active games use in classes with young handball players is that the classes are perceived with great joy, are held with greater impact and at a high emotional level.

However, the study of the author's methods of using active games in classes with young handball players remains insufficiently studied.

The purpose of the paper is to increase the effectiveness of physical and technical training young handball players aged 10-11 by means of moving games, game exercises and relays at the stage of initial training during the pedagogical experiment in 2020-2021.

METHODOLOGY

The following methods were used in the study: theoretical analysis and generalization of scientific and methodological literature,

pedagogical checking (tests), pedagogical observations, and anthropometry.

RESULTS

It is well known, that the game, as a collective activity, is significantly different from those sports in which a person tries to master the perfect form of movement or achieve personal success, “competing” with meters, kilograms, and seconds.

We believe that a modern sports game is a multifaceted activity that, in addition to high ball technique, requires endurance, willpower and the ability to think. Without training these components, you cannot raise an athlete who can compete.

Training should be like a game, even when it's without balls. No matter how interesting and varied the workouts are, in the end they get bored, tiring. And that's why there's nothing better than a game, these words belong to the famous football player Pele.

In educational and training work on sports games, along with special exercises, moving games are used, which contribute to solving the problems of physical, technical and tactical training of athletes. Many coaches in the process of training offer subordinates a form of ball exercises.

Gradually complicating moving games, they add elements of confrontation to them, accustoming students to independent decision-making. Such actions allow to strengthen the necessary skill and to improve it in the conditions close to competitions.

Different sports games have many similar components in the construction of technical and tactical actions. Therefore, games with the selection of the ball, movement, interaction of partners can be used equally successfully in basketball and handball (for example, counter-relays).

Along with this, each sports game has its own specific techniques and tactics. Handball, for

example, is characterized by driving, throwing, fighting for the ball, in volleyball the ability to put a block near the net, to bounce the ball is important; in football – to play with the head, to kick.

The selection of preparatory exercises here is related to the specifics of specific sports games (Naumchuk, 2014). It is believed that in sports practice, the game method is used to educate and improve motor skills.

But heavy physical exertion and repeated repetitions, which are necessary to create strong skills, often cause a kind of psychological “stagnation”, fatigue, loss of interest, even in the most conscientious and hard-working athletes. This is a normal reaction of the body to the monotony of work performed.

Games activate the attention of athletes, raise the emotional state, and have a positive effect on recovery. The “active rest effect” comes into play, associated with the phenomena of mutual induction, excitation and inhibition of different muscle groups, with inductive inhibition of nerve cells, which serves to further increase their functional state.

The effectiveness and expediency of the use of active games in sports training is confirmed by modern sports practice, has a scientific and theoretical justification. Interest in play activities not only children but also adults is natural. Because the desire to play (sports, mobility) is intuitively related to a person's need to train the body, as well as to obtain external information.

We believe (Hrynchenko et al, 2019b) that the game method due to its features is a method of comprehensive improvement of motor activity.

Most of all, it allows you to improve such qualities as agility, speed, orientation, independence, initiative, without which

sports activities are impossible. But despite the fact that games include actions that are selectively aimed at improving one of the motor skills, they should be considered as exercises of general physical action. No active game can serve as a means of developing any one quality. In games with elements of power struggle, as a rule, endurance and dexterity develop. Without this, martial arts are impossible.

As it is noted (Kulakov, Verteletsky, & Bogatyr, 2016), in some games specific to the development of strength, success is determined not so much by the strength of the players, but by physical endurance and the will to win.

The latter should be especially emphasized, justifying the use of games for physical training, because the level of development of physical qualities is determined not only by the functional capabilities of man, but also by volitional qualities. For their development, the game – as an activity – provides great opportunities.

For special physical training in each sport, you can select or come up with games that are aimed at the development of a particular quality.

Given the above, it is important for the coach to choose games that affect those muscle groups that develop slowly without special exercises.

In games that promote the development of strength, children who engage, overcome their weight, the weight of objects, and the resistance of the enemy. Such games use items (stuffed balls, dumbbells, benches, etc.) or a training partner. To conduct games with overcoming their own weight using a gymnastic wall, bars, vertical rope.

Often, such games do not require the appropriate equipment and are associated with moving around the site lying down,

standing behind, jumping, and so on. It is useful to play games and relays with running on sand, water, deep snow.

Many of these games (relays with pull-ups, push-ups, throwing a stuffed ball) can be performed in the form of control exercises (tests), which characterize the shift in strength training. Emotional mood during such exams forces the participants of the game to make every effort to achieve both personal and team victory.

It is especially important in children and adolescents to include in games more exercises that are aimed at increasing the strength of the flexors and extensors of those limbs that are less developed. For example, in jumping games, the focus should be on the right foot, and in drag games, the left hand should be focused.

Speed, as a physical quality, is especially well developed in games that combine such basic indicators of speed as response to a signal and the speed of muscle contractions; the number of movements performed per unit time and the speed of movement of the body or its parts in space.

Speed training successfully uses games that require a reaction to a moving object, which is important in sports games.

Exercises to develop speed in games are very versatile in nature. The actions in the exercises that include the game or in the selected ready-made games in the form of movements of the speed of muscle contractions should be as close as possible to the motor actions corresponding to the chosen sport.

Strength exercises are widely used to develop speed, so games with speed and strength exercises will help solve this problem. Because speed stimuli are more effective with optimal nervous system excitability, games that promote the development of speed

qualities are recommended at the beginning of a training lesson before fatigue.

It is important to warm up a little before the games, mainly for speed development, and to take minute intervals for rest during games and relay races.

We fully agree with the scientists (Karasievych, & Karasievych, 2019), who note that the prerequisite for the development of dexterity are already learned movements, and their coordination combinations. A variety of moving games on the speed and accuracy of action, balance and coordination provide a good basis for the education of special dexterity, which determines the achievements in the chosen sport.

It is believed that a high level of dexterity is especially necessary in those sports where the movements are acyclic in nature, and the conditions of the exercise are constantly changing. Game – as an activity – is characterized by these characteristics.

That's why most active games involve dexterity. Such games improve the “sense of muscular effort”, “sense of space”, “sense of time”; in the process of such games the functions of various analyzers are improved, on which the correct, accurate and timely execution of movements depends.

The use of active games in sports training allows to create a motor basis for the long-term improvement of coordination capabilities needed for the formation of sports equipment.

Systematic holding of various games allows to create at sportsmen (especially at beginners) a certain stock of movements. On this basis, new skills are easier to develop. It should be emphasized that the skill that is formed in sports is realized, as a rule, without play, without the participation of emotions.

Moreover, emotions can only disrupt skills and make it difficult to achieve a goal. The

game will come to the aid of the coach only when the movement is automated and the attention is focused not so much on the motor act, but on the result of the action, conditions and situations in which it is performed. etc., then these elements are included in the game). Here the game is a means of improving skills. The skills used in the game become not only stable and stable, but also flexible, variable.

This can lead to the emergence of a new, more perfect, skill. The athlete gets the opportunity to use the skills he has mastered in a holistic activity, to choose the best options for each action. That is why the leader should first give the game the task “who will perform the task more correctly, more accurately”, and then - “who is faster, more”, etc.

But, it is important to remember that games act only as a kind of auxiliary, additional exercise in the system of tools used in the training process. Their importance for solving pedagogical problems at different stages of sports training should not be overestimated or underestimated.

Regarding our pedagogical experiment during 2020-2021, at the beginning of the experiment according to standard methods the testing of indicators of physical development and the level of general physical and technical readiness of the subjects was carried out.

The data obtained as a result of the study were processed using the methods of mathematical statistics. Statistical processing of experimental data was performed using the statistical processing package STATGRAPHICS Plus for Windows (according to standard methods). The results at $p < 0.05$ were considered statistically significant.

The study involved young handball players aged 10-11, the first and second year of

training sport school №3 in Kharkiv, which we divided into two groups: experimental and control. The study lasted for a year.

The author's method provided for the introduction into the training process of young handball players aged 10-11, a group of initial training (experimental group), moving games, relay races and game tasks. The technique was implemented for 9 months (74 lessons), 3 times a week, and lasting 20 minutes.

During all training sessions there was a change of combinations of use of active games. Only the selected element of handball technique, which corresponded to the goals and objectives of the relevant stage of training, remained unchanged.

Based on the general recommendations for the use of active games and game exercises in physical education of school-age children, the peculiarity of the authors' method was that we divided these games into two groups: the first group – active games for the development of basic physical qualities of young handball players; the second group – active games to practice technical and tactical skills of the game.

This distribution, of course, was conditional, because each game allows the coach to solve multifaceted problems aimed at educating the wards and physical and personal qualities, the formation of both techniques and tactics of behavior on the handball court.

The first group included games for the development of motor-coordination qualities (“Throw first”, “Hit the target”, “Two captains”, “Who’s first”, “Ball to the one who leads”, “Who's next”, “Hit the basket”, “Balls in the basket”, “The best sniper”).

Games for strength development (“Ball behind the wall”, “Rooster attack”, “Sea battle”, “Break into the zone”, “Throw on”,

“Intercept the ball”, “Stay in the circle”, “Close circle”, “Battle of the Roosters”).

Endurance games (Leader in a Circle), “Ball Lands”, “Biathlon with Reflection”, “Rugby Football”, “You Give Points”, “We Dance”.

We played endurance games at the end of the main part of the classes in the second half of the week on Thursday-Friday.

Games for the development of agility (“Catch up with gears”, “Catch up”, “Hold the ball”, “Duelists”, “Fastest”, “Who is faster”, “Fast in places”, “Call numbers”, “Combined relay”, “Chain”, “Black and White”, “Day and Night”, “Third Extra”).

Games to develop dexterity and flexibility (“Fishermen and fish”, “Balling”, “Sparrows and a cat”, “Catch up”, “Relay”, “Competitions in a circle”, “Jumping column”, “Centipede”, “Bridge and Cat”).

We used game exercises for dexterity and flexibility in all classes without exception. Most often they were included in the preparatory part of classes.

The second group included moving games and relay races aimed at developing technical and tactical skills in handball (“Flank Defense”, “Pass the Defender”, “Fight for the Ball”, “Two Camps”, “Against Each Other”, “One against two”, “Handball with a limit”, “Ball from four sides”, “Catch up and ball”, “Interception of the ball”, “Protection of the fortress”, “Throwing the ball under the rope”, “Throwing the ball over the rope”).

The organization of classes with young handball players of the control group, as well as the choice of forms, means and methods of training, dosing load was carried out in accordance with the guidelines set out in the curriculum for children and youth sports schools, specialized children and youth schools of the Olympic reserve, schools of higher sportsmanship.

Thus, we offer a methodological justification for the use of moving games in the author's training method.

The active games offered by us are developed and included in an author's technique. They are designed to master the software material for handball and are aimed primarily at educating the basic physical qualities, development of creative abilities, as well as to practice the most important techniques of the game (movements, passes, catching, throwing the ball, etc.).

Another important feature used in the study of moving games and game exercises is that they motivate children to fight for victory, and the desire to win necessitates improvements in both technique and tactics of the game. In addition, participation in the games requires some physical training from young handball players.

By skillfully combining moving games with other exercises and tasks, the coach achieves

a more conscious attitude of the wards to the handball game.

The experimental results of their own research are the following. We claim that the physical fitness of a handball player is closely related to various aspects of training. The selected tests fully characterize the physical development and functional state of the main life support systems of the body and allow determining the effectiveness of the proposed method. In the course of our study, no significant differences from the whole set of morphological parameters used in the experiment were found.

However, a comparative analysis of the increase in results over the period of the experiment showed that a significant improvement and change in condition occurred in the children of the experimental group. The results obtained from the study of indicators of physical fitness are presented in table. 1.

Table 1.

Increase of Physical Shape of Young Handball Players after the Second Stage of the Experiment

Test	Control group (n = 11)				Experimental group (n = 11)			
	Before the experiment	After the experiment	t	P	Before the experiment	After the experiment	t	P
1. Long jump from a place, cm	164,17±3,52	171,51±4,40	1,30	>0,05	163,04±3,74	177,71±4,07	2,65	<0,05
2. Upward jump,	35,51±1,92	39,07±2,11	1,25	>0,05	35,11±1,71	41,78±1,14	2,63	<0,05
3. Jogging 3x10, cm	8,86±1,48	70,0±1,41	0,60	>0,05	8,89±0,22	8,32±0,09	2,31	<0,05
4. 6 minute running, meters	1006±62,17	1120±109,54	0,91	>0,05	1000±26,53	1310,93±64,39	4,46	<0,01
5. Lean forward, cm	2,31±1,16	3,24±1,21	0,55	>0,05	2,71±1,19	2,71±1,19	3,37	<0,01
6. «Ruler»	19,95±2,25	16,92±4,28	0,63	>0,05	20,79±2,37	11,36±2,79	2,58	<0,05

The analysis of the values showed that modern sports training of handball players is a multicomponent system. According to the predominant focus, it is common to distinguish two groups of types of training: analytical and integrated (Naumchuk, & Rusaniuk, 2018). Analytical training includes physical, technical, tactical, psychological,

theoretical training; to the integral – game, situational and competitive.

It was found that players at the stage of initial training should have a specific handball (appropriate, sufficient), and not the absolute level of development of physical abilities. Priority at the stage of initial

specialization should be given to the development of general endurance, speed and strength abilities, coordination and flexibility of players. These thoughts complement the ideas of our previous studies (Hrynchenko, Shihimaha, & Kravchenko, 2019a).

A statistically significant increase in the level of physical fitness according to the results of the experiment was recorded only in subjects who were engaged in the author's method. The percentage increase was calculated by the well-known formula $(B-A) / A * 100$, where A is the initial test results before the experiment; B – the final test results after the experiment.

Indicators in the long jump after the experiment increased by 8.9%, jumping up – by 19%. Indicators of coordination abilities,

which are manifested by the results of the shuttle run and the test “ruler” significantly increased only in the experimental group, the increase was 6.4% and 45.3%, respectively. A significant increase in physical fitness occurred in the experimental group in the test task: 6-minute run – more than 31.1%.

In our experiment, in addition to determining the indicators of physical fitness of handball players based on the test results, an analysis of the technical readiness of the subjects was performed.

The results of this study are presented in table. 2, where the final indicators of technical readiness of the experimental group showed a significant increase corresponding to the 5% level of significance in terms of free throws and movement in the protective rack of the handball player.

Table 2.

Indicators of Technical Preparedness of Young Handball Players after the Second Stage of the Experiment

Test	Control group (n = 11)				Experimental group (n = 11)			
	Before the experiment	After the experiment	t	P	Before the experiment	After the experiment	t	P
1. Leading the ball, m.	11,62±0,22	11,34±0,35	0,67	>0,05	11,65±0,24	10,38 ±0,18	4,23	<0,001
2. Passing the ball to the wall, 30 c. (overall amount)	27,04±2,48	30,40 ±2,27	0,10	>0,05	27,33±1,76	34,19±1,35	3,09	<0,01
3. Free throws (overall amount)	4,20±0,70	5,30±0,56	1,22	>0,05	4,29±0,74	6,41±0,59	2,23	<0,05

Thus, specially selected combinations with the use of moving games, game exercises and relays help to increase the level of technical training of young handball players. Analysis of the final indicators in the experimental group revealed a significant increase corresponding to the 5% level of significance in terms of execution of free throws and movement in the protective rack of the handball player.

The average group values of the accuracy of free throws increased by 49.5%, and the average speed of movement in the protective

rack of a handball player after the experiment increased by 8.3%. The rate of transfer of the ball to the wall in the experimental group increased by 25.1%, which indicates a significant increase in the result at $P < 0,01$.

DISCUSSION

The researchers all over the world confirm the effectiveness of using games in handball players training. The researchers M. Vukadinović Jurišić, D. Jakšić, N. Trajković, D. Rakonjac, J. Peulić, & J. Obradović, stated about the “Effects of small-sided games and high-intensity

interval training on physical performance in young female handball players” (Vukadinović Jurišić et al, 2021).

The authors P. Peráček, and J. Peráčková showed the main techniques of “Tactical Preparation in Sport Games and Motivational Teaching of Sport Games Tactics in Physical Education Lessons and Training Units” (Peráček, & Peráčková, 2018).

The researcher M. Cardinale described the experience of offered strength training programs in Doha, Qatar in “Strength Training in Handball” (Cardinale, 2014). So, the researchers’ results and conclusions are correlated in general with ours.

CONCLUSIONS

Thus, as a result of the comparative analysis the following conclusions are made.

1. The handball players of the experimental group had a higher level of technical training than their peers from the control group.
2. In the control group there were also positive changes in indicators of technical readiness, but they were not statistically significant.
3. The results obtained during the experiment confirmed the effectiveness of our developed methods of training with the purposeful use of moving games, game exercises and relay races at the initial stage of training young handball players.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

FUNDING

The authors declare that this study received no specific financial support.

REFERENCES

- Bezverkhnya, H. V., Semenov, A. A., Kylymystyi, M. M., & Masliuk, R.V. (2014). *Rukhlyvi ihry z metodykoiu vykladannia* [Active Games with Teaching Methods]. Uman: VPTs «Vizavi» [in Ukrainian].
- Cardinale, M. (2014). Strength Training In Handball. *Aspetar Sports Medicine Journal*, 130-134. https://www.aspetar.com/journal/viewarticle.aspx?id=134#.YTc3v_kzaUk
- Hapková, I. (2019). Teaching Handball. Police Press, Al-Moror-Str. Al-Darasa, Cairo, Egypt https://www.ihf.info/sites/default/files/2020-03/H@S_booklet_o.pdf
- Hrynchenko, I.B., Polishchuk, S.B., Siryi, O.V., Tikhonova, A.O., & Chupryna, O.I. (2019). Vykorystannia ihrovoho metodu navchannia u haluzi fizychnoho vykhovannia [Use of Game Teaching Method in the Field of Physical Education]. *Pedahohika ta psykholohiia*, 61, 43-50. <https://doi.org/10.34142/2312-2471.2019.61.05> [in Ukrainian].
- Hrynchenko, I.B., Shihimaha, V.S., & Kravchenko, O.S. (2019). Vplyv zaniat handbolom na pokaznyky rozvytku fizychnoi i tekhnichnoi pidhotovlenosti ditei 9-10 rokiv [The Influence of Handball on the Development of Physical and Technical Preparedness of Children 9-10 Years]. *Health-saving, rehabilitation and physical therapy. Collection of articles of the XII International Scientific Conference, November 07, Kharkiv – Torun, 2019*, 55-59.

- Karasievych, S.A., & Karasievych, M.P. (2019). *Rukhlyvi ihry ta ihrovi vpravy* [Active Games and Game Exercises]. Uman: Vydavets «Sochinskyi M.M.» [in Ukrainian].
- Korahin, V. (2016). Do pytannia individualizatsii navchannia yunykhn sportsmeniv-ihrovykiv [On the Issue of Individualization of Training of Young Athletes-Players]. *Physical Education, Sport and Health Culture in Modern Society*, 3(27), 129-135. <https://sport.eenu.edu.ua/index.php/sport/article/view/311> [in Ukrainian].
- Kornosenko, O.K., Bondarenko, V.V., & Khomenko, P.V. (2012). *Teoriia i metodyka vykladannia rukhlyvykh ihor i zabav* [Theory and Methods of Teaching Active Games]. Poltava. [in Ukrainian].
- Kostiukevych, V.M. (2014). «Teoriia i metodyka sportyvnoi pidhotovky» (na prykladi komandnykh ihorovykh vydiv sportu) [“Theory and methods of sports training” (on the example of team games)]. Vinnytsia: Planer [in Ukrainian].
- Kulakov, Yu.Ye., Verteletskyi, O.I., & Bohatyр, V.H. (2016). *Rukhlyvi ihry z elementamy sportyvnykh ihor dlia uchniv 1-8 klasiv: navchalno-metodychnyi posibnyk* [Moving Games with Elements of Sports Games for Students of Grades 1-8: a textbook]. Mykolaiv: MNU [in Ukrainian].
- Levkin, V.I., Kudrina, N.V., & Zghoba, V.L. (2011). *Teoriia i metodyka vykladannia handbolu* [Theory and Methods of Teaching Handball]. Lviv: LDUFK [in Ukrainian].
- Naumchuk, V.I. (2014). *Teoretyko-metodychni osnovy navchannia sportyvnykh ihor* [Theoretical and Methodological Bases of Teaching Sports Games]. Ternopil: Aston [in Ukrainian].
- Naumchuk, V.I., & Rusaniuk, V. M. (2018). *Udoskonalennia tekhniko-taktychnykh dii v handboli* [Improving Technical and Tactical Actions in Handball]. Ternopil: TNPU [in Ukrainian].
- Peráček, P., & Peráčková, J. (2018). Tactical Preparation in Sport Games and Motivational Teaching of Sport Games Tactics in Physical Education Lessons and Training Units. In *Sport Pedagogy - Recent Approach to Technical-Tactical Alphabetization* (pp. 4-31). Jaime Serra-Olivares, IntechOpen. <http://dx.doi.org/10.5772/intechopen.75204>
- Popovich, A.P., Mekhovich, G.I., Kolomiichuk, T.A., Kunysheva, S.D., & Goncharova, E.A. (2016). *Metodika podgotovki gandbolistov na osnove ikh anatomo-fiziologicheskikh i individualnykh osobennosti* [Methodology for Training Handball Players Based on Their Anatomical, Physiological and Individual Characteristics]. Yekaterinburg: Izd-vo Ural. un-ta [in Russian].
- Solovei, O.M., & Solovei, D.O. (2018). *Osnovy navchannia taktyky hry v handbol* [Basics of Learning Handball Tactics]. Dnipro [in Ukrainian].
- Tyshchenko, V.O. (2014). Metodolohichni osnovy suchasnoi systemy pidhotovky handbolistiv vyshchoi kvalifikatsii [Methodological Bases of Modern System of Training of Handball Players of the Highest Qualification]. *Pedahohika, psykholohiia ta medyko-biolohichni problemy fizychnoho vykhovannia i sportu*, 1, 76-79.
- Vukadinović Jurišić, M., Jakšić, D., Trajković, N., Rakonjac, D., Peulić, J., & Obradović, J. (2021). Effects of small-sided games and high-intensity interval training on physical performance in young female handball players. *Biology of Sport*, 38(3), 359-366. <https://doi.org/10.5114/biolsport.2021.99327>

АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

ВИКОРИСТАННЯ АКТИВНИХ ІГР У ФІЗИЧНО-ТАКТИЧНІЙ ПІДГОТОВЦІ МОЛОДИХ ГАНДБОЛІСТІВ НА ПОЧАТКОВОМУ ЕТАПІ

Метою дослідження є підвищення ефективності фізичної та технічної підготовки юних гандболістів віком 10-11 років за допомогою рухливих ігор, ігрових вправ та естафет на етапі початкової підготовки під час педагогічного експерименту у 2020-2021 роках.

Методологія. У дослідженні були використані такі методи: теоретичний аналіз та узагальнення науково-методичної літератури, контрольньо-педагогічні заміри (тести), педагогічні спостереження, антропометрія. Статистичну обробку експериментальних даних проводили за допомогою пакета статистичної обробки STATGRAPHICS Plus для Windows (за стандартними методами). У дослідженні брали участь юні гандболісти віком 10-11 років, перший та другого року навчання спортивної школи №3 у місті Харкові протягом року. Авторська методика впроваджувалася протягом 9 місяців (74 уроки), 3 рази на тиждень і тривала 20 хвилин.

Результати. Ми стверджуємо, що фізична підготовленість гандболістів тісно пов'язана з різними аспектами тренувань. Відібрані тести повністю характеризують фізичний розвиток та функціональний стан основних систем життєзабезпечення організму та дозволяють визначити ефективність запропонованого авторами методу. Спеціально підібрані комбінації з використанням рухливих ігор, ігрових вправ та естафет допомагають підвищити рівень технічної підготовки юних гандболістів. Аналіз підсумкових показників в експериментальній групі виявив значне збільшення, що відповідає 5% рівню значущості з погляду виконання штрафних кидків та переміщення в захисній стійці гандболіста. Середні групові значення точності виконання штрафних кидків зросли на 49,5%, а середня швидкість руху в захисній стійці гандболіста після експерименту зросла на 8,3%. Швидкість перенесення м'яча до стінки в експериментальній групі зросла на 25,1%, що свідчить про значне збільшення результату при $P < 0,01$.

Висновок. Отримані під час експерименту результати підтвердили ефективність розроблених нами авторських методик тренувань із цілеспрямованим використанням рухливих ігор, ігрових вправ та естафет на початковому етапі навчання юних гандболістів.

КЛЮЧОВІ СЛОВА: гандбол, юні гандболісти, рухливі ігри, естафети, експеримент, спортивна школа.

CITE THIS ARTICLE AS (APA style):

Hrynchenko, I., Tykhonova, A., Karpunets, T., & Chupryna, O. (2021). Use of Active Games in Physical and Tactical Training of Young Handball Players at the Initial Stage. *Educational Challenges*, 26(2), 63-74. <https://doi.org/10.34142/2709-7986.2021.26.2.05>

