

# EVALUATION AND DEVELOPMENT OF ARTISTIC ABILITIES OF 7-8-YEAR-OLD RHYTHMIC GYMNASTS

Giurka Gantcheva<sup>1</sup>, Yulia Borysova<sup>2</sup>, Nina Kovalenko<sup>3</sup>

<sup>1</sup>National Sports Academy Vassil Levski, Sofia, Bulgaria

<sup>2</sup>Prydniprovsk State Academy of Physical Culture and Sport, Department of Gymnastics, Dnipro, Ukraine

<sup>3</sup>Prydniprovsk State Academy of Physical Culture and Sport, Department of Foreign Languages, Dnipro, Ukraine

*Original article*

## **Abstract**

*A competitive composition in rhythmic gymnastics is a small performance that has its own storyline. That is what judges E1 and E2 evaluate. Judges' penalties for unsatisfactory artistry can be up to 5 or 6 points. In the works of scientists, the issues of artistry education for 7-8-year-old gymnasts are hardly ever addressed. To develop a methodology for the development of artistic abilities of 7-8-year-old female gymnasts. Theoretical analysis and synthesis of scientific and methodological literature; questionnaire (survey of coaches); pedagogical observation, experiment, testing; expert assessments; mathematical statistics. The study involved 20 7-8-year-old female gymnasts who have engaged in rhythmic gymnastics for 2 to 3 year and have category 2 qualification. An analysis of scientific and methodological literature shows the need to intensify research into the development of the aesthetic component in the training of female athletes in rhythmic gymnastics. On the basis of our questionnaire, it has been determined that it is necessary to develop artistic abilities of young female gymnasts by using elements of facial gymnastics, performance and improvisation. Introduction of a methodology for shaping the artistic abilities of female gymnasts in the educational and training process of the experimental group subsequently led to an increase in the female gymnasts' marks for their competitive routine by  $1.3 \pm 0.12$  points ( $p < 0.05$ ). The improvement rate in artistry in the experimental group was 18.4%, and in the control group 8% ( $p < 0.05$ ).*

**Keywords:** *rhythmic gymnastics, artistic abilities, 7-8 years.*

## **INTRODUCTION**

Rhythmic gymnastics is a complex young sport; it is a combination of arts and sports and includes gymnastic, acrobatic and dance exercises performed with apparatus to music (Borysova Yu., Yeromina O., 2015; Gantcheva G., 2018). In this sport, female athletes compete in the individual event or in the group event. One of the components that judges

evaluate especially strictly is the artistry of their routine. A competitive gymnastics routine is a short performance with its own storyline. This is exactly what judges E1 and E2 evaluate (FIG, 2016). Penalties for unsatisfactory artistry can be up to 5-6 points (Borysova Yu., Mokhova I., 2017). The modern system of training female athletes in rhythmic gymnastics aims, first

of all, to teach a large volume of complex and extremely complex elements that must be mastered by very young female athletes. As a result, female gymnasts tend to display only technically correct performance of their competitive routine, ignoring the storyline and the imagery of the routine (Averkovich E.P., 1989; Viner-Usmanova I.A., Kryuchek E.S., Medvedeva E.M., Terekhina R.N., 2014). This is why the question of developing a methodology to teach young female gymnasts artistry is relevant and requires detailed studying.

The issue of performing skills and artistry in rhythmic gymnastics was investigated by Borisenko S.I., 2000; Goncharenko L.V., 1987; Gorbacheva ZH.S., 2000; Gorshkova E.V., 2003; Kabaeva A.M., Plekhanova M. E., 2009; Karavackaya N.A., 2002; Karpenko L.A., 1994; Viner-Usmanova IA, 2014. The authors identified the main components of artistry assessment, namely: plasticity, expressiveness, acting, etc. An analysis of literature shows that authors mainly pay attention to the study of how to correctly develop physical qualities, but not enough to the artistry of a composition.

In competitions, female gymnasts are required to perform their competitive routines perfectly: technically, artistically, musically and expressively. This task is very difficult for gymnasts in junior categories. Female gymnasts need to coordinate the simultaneous execution of balance, turns, jumps and work with an apparatus while connecting with the emotional component of their routine and the music. In scientific literature, the issues of artistic education for young female gymnasts are almost non-existent. Purpose of the study is to develop methods to develop artistic abilities in 7-8-year-old female gymnasts.

## METHODS

We analysed 27 sources that addressed the distinctive features of

educational and training process in preliminary basic training in rhythmic gymnastics as well as formation of expressiveness in 7-8-year-old girls with the help of various means of dramatic art. We also looked at scientific articles, dissertation abstracts and educational and methodical aids that focus on the development of expressiveness in sports and ballet.

In order to create methods to develop artistic abilities in 7-8-year-old female gymnasts we used information from coaches – practitioners and data from scientific and methodical literature.

We used a survey to learn more about the specificity of displaying artistic abilities and their control in gymnasts. Another aim of our survey was to learn about the distinctive features of the educational and training process in preliminary basic training.

10 coaches of artistic gymnastics who work in The Specialized Sports School of the Olympic Reserve for Children and Adolescents (SCASSOR), Dnipro City, and in the Sports School for Children and Adolescents (CASS), Kamenskoye City, took part in the questionnaire. The coaches were given a questionnaire with seven multiple choice questions. Their answers provided us with information on how coaches view the process of developing artistry in 7-8-year-old female gymnasts. This information was necessary to devise a methodology for the development of artistic abilities in young female gymnasts by highly qualified coaches.

The object of pedagogical observation were female gymnasts who attend rhythmic gymnastics training at the communal non-compulsory educational institution, The Specialised Sports School of the Olympic Reserve for Children and Adolescents (COSEI SCASSOR), Dnieper City Council (DCC), Dnipro City. 2 groups of 7-8-year-old female gymnasts (10 girls in each) were observed on multiple occasions. When evaluating the results of our observations, we took into account

both the positive and the negative aspects of the coaches' and athletes' activities. When selecting the groups for observation, the following requirements had to be met: 1) all gymnasts had to have about the same level of fitness; 2) the same choreographer worked with them; 3) their parents and trainers had to give their consent for the study.

During the observation, the following aspects were recorded: means and methods of developing artistic abilities that were used in classes; the ratio of the volume and intensity of the load in a class; quality and quantity of tasks that female gymnasts performed during a class. The results of observations during classes and within the period of competitive activity, after a mathematical analysis, showed the effectiveness of classes and disadvantages in their content, forms of organization and methodology.

In the course of the study, a pedagogical experiment was conducted on the basis of the COSEI SCASSOR in rhythmic gymnastics of DCC, Dnipro City, from September 2018 to November 2019. The experiment involved 7-8-year-old girls, engaged in rhythmic gymnastics at the stage of initial basic training at the Sports School for Children and Adolescents (CASS). All gymnasts had almost the same level of preparedness ( $p > 0.05$ ). The girls ( $n = 20$ ) were divided into two groups: control group ( $n = 10$ ) and experimental group ( $n = 10$ ). The exercises for the development of artistry were added to the training program of the gymnasts in the experimental group.

The main objective of the experiment was to test the effectiveness of the methodology by using a set of exercises and music games in order to develop artistic abilities in young female gymnasts.

By using pedagogical testing, we determined the level of artistic abilities in 7-8-year-old female gymnasts. For this, we used Viner-Usmanova's method, 2014, which comprises gymnastic compositions with musical accompaniment. In her

training program for highly qualified athletes Viner-Usmanova highlights the main components of artistic abilities, namely: classical choreography, dancing, plasticity, elements of rhythmic gymnastics, musical rhythm, elements of circus skills and theatrical arts. Female gymnasts should master these components. Control over the artistic components is learned with the help of improvisation to music. Gymnasts need to express the music by their facial expressions, body movements as well as emotions. Pedagogical testing was carried out by marking the improvised performances to children music. The gymnasts in our study had to improvise for 1 minute. Assessment according to the criteria presented in Table 1, in points, was carried out by relevant experts. The members of the experts' group that assessed the level of artistic development were the same at the beginning and at the end of our experiment (Table 1).

In the practical part of our research, we used the method of expert assessments. Namely, processes or actions (phenomena) were evaluated by qualified experts and competent coaches (10 experts who are children or youth coaches at the Specialised Sports School of the Olympic Reserve), who evaluated gymnasts' performances. Then we calculated the degree of agreement among their opinions. The experts evaluated the quality of gymnasts' competitive program performances, giving marks to each gymnast from 0 to 10 points, with a step of 0.5 points for each composition. It was necessary to determine the degree of agreement of expert opinions on the criteria of artistry for each composition. In our study, the Kendall coefficient of concordance was used to process the experts' results and their consistency. It is a certain number from 0 to 1 that characterizes the degree of consistency of expert opinions (in the form of ranks) according to a set of criteria. The concordance coefficient range is  $0 < W < 1$ ,

with 0 for complete inconsistency and 1 for complete unanimity.

Empirical data were processed with generally accepted methods of mathematical statistics: average value, average error, average quadratic deviation, Student's criterion, coefficient of concordance.

The study was conducted at the Higher Educational Institution of Specialized Children and Adolescents Sports School of the Olympic Reserve for Rhythmic Gymnastics, Children's Sports School of Dnipro in the period from

September 2018 to November 2019. The study involved 20 gymnasts aged 7-8 years, who had been engaged in rhythmic gymnastics for 2-3 years and had category 2 qualification. The athletes were divided into a control group (n = 10) and an experimental group (n = 10). Classes were held 5 times a week for 90 minutes. The research methods were in accordance with the ethical standards of the Helsinki Declaration. Before and after the experiment, we conducted control tests with gymnasts to assess their progress in the development of artistic abilities.

Table 1  
*Criteria for scoring artistry (Viner-Usmanova I.A.).*

№	Criteria	Score in points
1	Complete expression of the image corresponding to the nature of the given musical composition	9.5-10.0
2	Expression of the image for most of the dance	8.5-9.0
	Facial expressions partially do not correspond to the image set by the nature of the music	7,5-8,0
	Stiffness in some movements	6.5-7.0
3	Episodic expression of the image while performing the dance	5.5-6.0
	Unnatural facial expressions in several parts of the dance so that the artistic image is distorted	4.5-5.0
	Stiffness of movement in several parts of the dance	3.5-4.0
4	Stiffness of body movements when recreating an image in accordance with the nature of the musical composition	2.5-3.0
	Facial expressions do not correspond to the image of the given musical composition	1.5-2.0
	Movement partially or completely fails to corresponds to the given character of the music	0.5-1.0

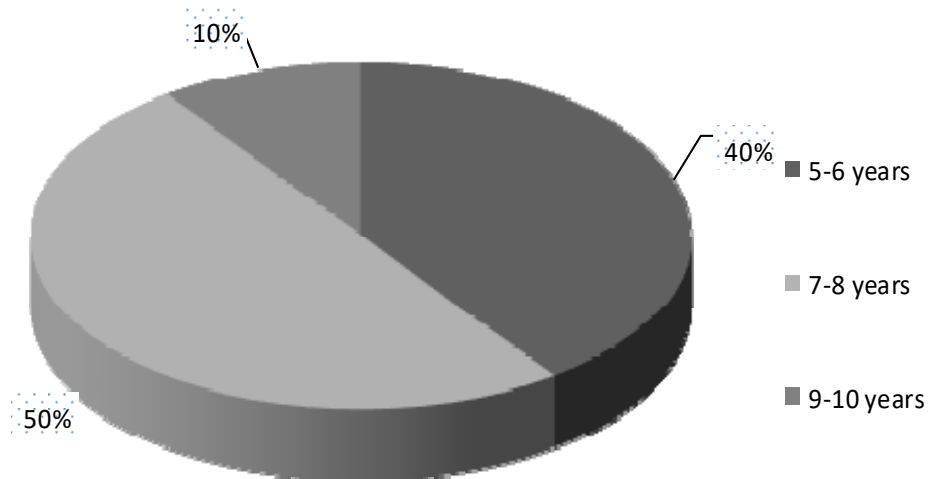


Figure 1. Answers to the question “From what age do you think it is necessary to train gymnasts to perform the composition expressively?”

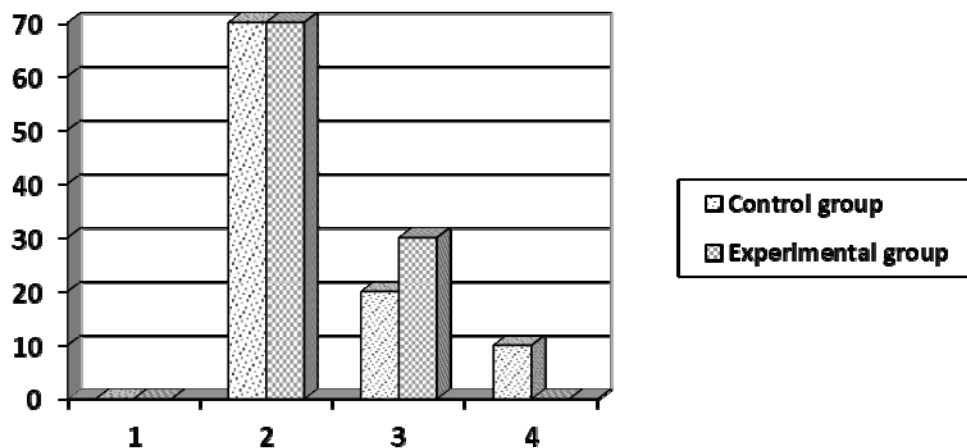


Figure 2. The distribution of gymnasts in the control and the experimental group according to the level of artistic abilities at the initial stage of the study. Notes: 1 - low level, 2 - medium level, 3 – upper medium level, 4 – high level.

Table 2

Methods to develop artistic abilities in young female gymnasts.

Training class	Control group	Experimental group
Before the class	-	facial gymnastics
Choreography	+	+
Main part	+	+
Exercises for general and special physical training	+	+ plus an outdoor action-oriented game according to the schedule
Final part	+	+ plus a music game according to the schedule

Note. + is the fulfillment of tasks in accordance with the schedule of sports training for preliminary basic training.

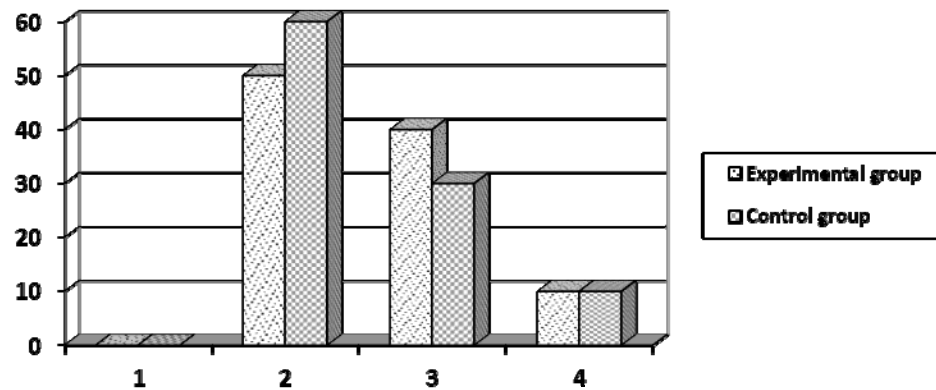


Figure 3. Distribution of female gymnasts in the control and the experimental group according to the level of development of artistic abilities after the pedagogical experiment. Notes: 1 - low level, 2 - medium level, 3 – upper medium level, 4 – high level.

## RESULTS

In the first stage, interviews were conducted with specialists who had practical experience with basic training. The survey helped to determine the relevance of the research, potential problems and ways to solve them. 10 coaches, teachers of rhythmic gymnastics, were included in the survey. The questionnaire was used to obtain the following information: 1) to identify their level of education and work experience, and determining their main goals in each stage of the preparation; 2) to identify the optimal means and methods for the development of artistic abilities in gymnasts.

First of all, we identified the professional level of coaches: 6 coaches were first category coaches which means that they had experience with athletes participating in the national championships and above; and 4 coaches were second category, i.e., they had experience in training athletes participating in regional championships. Most of them (90%) had direct experience working with 7-8-year-old female gymnasts. Most of them (60%) had trained gymnasts for more than 20 years.

When determining the optimal means and methods for developing artistic abilities in female gymnasts, the opinions

diverged on the question: “From what age do you think it is necessary to train gymnasts to perform the composition expressively?” 50% said that from the age of 5-6, 40% of coaches believed that these skills should be developed from the age of 7 - 8 and only 10% from the age of 9-10 (Figure 1). The information obtained will be helpful in devising a method for the development of artistry in both 5-6 year-old girls as well as those over the age of 10 in the future.

An article by Eliana de Toledo and Kizzy Antualpa clearly shows that there is a tendency toward a greater role of the aesthetic component. The aesthetic principle of rhythmic gymnastics in competition rules is considered not only an additional element, but also a basic element of the discipline’s structure that directly affects the sports results. Sport technique and its improvements contribute greatly to the realisation of the aesthetic program.

It brings rhythmic gymnastics back to the origins of this sport. Unfortunately, from the very beginning, the training system promoted mastering the technical elements with less emphasis on the aesthetic component. It is thus necessary to pay attention to this component when training gymnasts aged 7-8 in order to

further correct the imbalance between the technical and the aesthetic components.

Unambiguously, respondents believed that it was necessary to use improvisation to develop artistry, but their opinions differed on how much time should be spent on it. 60% believed that 5-7 minutes in each class is enough time to teach the expressiveness of the exercise, 30% thought that it was necessary to devote at least 10-20 minutes, and only 10% believed that the whole class should be dedicated to this.

The question of how to develop artistry was open-ended. The respondents listed their own means that they used to develop artistry in athletes: improvisation, outdoor games, listening and discussing musical compositions, visiting opera and a ballet theatre.

On the basis of our survey, we concluded that the development of artistic abilities needs to be paid a lot of attention and that special sets of exercises, games, improvisations and other means should be used.

In rhythmic gymnastics, artistry is characterized as a meaningfully expedient and emotionally rich performance of competitive compositions and the ability of female gymnasts to perform gymnastic exercises in this way. All indicators of artistic abilities, that is, expressing the image in a large part of the exercise; the correspondence of facial expressions and movements to the image and the given character of the music, were evaluated while female athletes performed an arbitrary competitive composition without an object. Compositions were evaluated by judges. The control and the experimental group were compared at the beginning and at the end of this experiment. The reliability of differences in the results was evaluated using Student's t-test. The control group followed the standard program for sports schools for rhythmic gymnastics and the experimental group followed the program for sports schools for

rhythmic gymnastics with the addition of the newly developed methodology.

We found that gymnasts from both groups displayed their emotions in order to attract the attention of spectators and judges. The judges, however, saw such performances as primitively artistic and made large deductions from 3.0 to 6.0 points accordingly. A partial mismatch in the mimic, inability to maintain the given rhythm and the nature of music as well as insufficient number of correct body movements to express the music of the composition were also considered as deficiencies in their performances (Fig. 2).

In the initial stage of the study, not all gymnasts in the control and the experimental group were able to perform the prescribed composition at a fairly high level. The average score in both groups ranged from  $6.6 \pm 0.056$  to  $6.85 \pm 0.06$ . Such a fitness level will not be sufficient to perform at a higher-level competitions in the future. Therefore, it is necessary to develop a methodology to develop artistic abilities in these young girls.

Thus, in order to improve the artistry in the experimental group, we developed our own methods for teaching artistic abilities. The methods were introduced in the training process according to the schedule below (Table 2).

The schedule was devised on the basis of the Rhythmic Gymnastics Program for Children and Adolescents Sports School.

Our methods for the development of artistic abilities dictated the use of facial gymnastics before choreography lessons and mobile and music games in the final part of each lesson. Thus, each training session (120 min.) began with mimic gymnastics that led to the activation of facial muscles. Coaches were given mimic gymnastics exercises to teach since they develop not only the facial muscles but also teach athletes how to appropriately express their emotions. All variations in the movements of arms, legs, head, eyes and even eyebrows characterize nine basic moods that a female gymnast should be

able to skilfully express by means of facial expressions. These nine moods include love, joy, sadness, heroism, anger, surprise, fear, disgust and calmness.

Our study used several sets of exercises, such as a set of exercises for the development of facial muscles (lower jaw movement from side to side; forward, back and slow down; inflate the cheeks, first one then the other; eyebrow movements up and down, and other exercises) and a set of exercises called "Masks". This exercise requires that athletes depict masks expressing joy, fear, delight and other emotions. During one musical phrase, they hold the mask, during the next they rest. Gradually the rate of occurrence and disappearance of masks increases. The ultimate goal is a quick transition from one mask to another.

Mimic gymnastics was performed before each training class and was followed by a lesson in choreography in accordance with the lesson plan.

Next, young athletes performed tasks that were part of their special technical training and solved problems set for each specific training session. In the final part, the young gymnasts engaged in outdoor games, music games and exercises for recovery and flexibility. They understood the reasons for most of the musical and motor exercises, that is, that they increased, refined and deepened their perceptions of music. Also, the gymnasts were asked to communicate with gestures, imagining that they were separated from each other by glass through which sounds could not penetrate. For example, they were offered a sentence: "You have forgotten to put on a hat, and it's very cold outside," or "Bring me a glass of water, I want to drink," or the gymnast herself invented her own message for the others.

At the end of our experiment, we adjusted the indicators of female gymnasts' artistic abilities. The results of show positive changes in these indicators (Fig. 3).

In the experimental group at the beginning of our study, artistic abilities of our gymnasts were rated  $6.66 \pm 0.05$  points, and at the end of the study  $7.88 \pm 0.20$ . In the control group, however, there was no significant increase: in the first stage of the study, the indicator was  $6.85 \pm 0.06$ , and in the second stage  $7.40 \pm 0.07$  points. The improvement rate in the artistry of the experimental group was 18.4%, and of the control group only 8%, which is significantly lower ( $p < 0.01$ ). In the control group, there is some natural increase, though, due to the regular choreographic training.

Comparing the average indicators of artistry in the studied groups before and after our pedagogical experiment, we found that artistic abilities of female gymnasts in the experimental group, where the newly developed methodology for developing artistic abilities in young gymnasts was introduced, is effective and can be used in the educational process of 7-8-year-old female gymnasts.

We observed a competition before and after the experiment. We analysed the E1 and E2 team grades that reflect the artistry in competitive compositions. It was determined that before the experiment, the reductions for artistry in the control group were  $3.2 \pm 0.42$  points, and in the experimental group  $3.4 \pm 0.37$  points.

After the experiment, the reductions in the control and the experimental group decreased to the level of  $3.0 \pm 0.38$  points and  $2.1 \pm 0.19$  points respectively. This helped the female gymnasts in the experimental group to perform better at the Ukrainian competition in rhythmic gymnastics "Kroha" in Nikopol and become the champions and the prize winners.

Thus, the introduction of facial exercises, music games and special sets of exercises positively affected the development of artistic abilities and can be recommended for implementation in the educational process of training children and adolescents in rhythmic gymnastics.



## DISCUSSION

In many aesthetic sports, the artistic component of athletes' performances is evaluated. Studies by Maja Bučar Pajek, Marjeta Kovač, Jernej Pajek and Bojan Leskošek, 2014, showed that in women's gymnastics, artistry is evaluated on the basis of such components as inappropriate gesture and facial expressions, insufficient artistry of performance, low confidence and insufficient variation in rhythm. Reductions range from 0.1 to 0.3 points, and the final artistic deduction is included in the final grade E. Thus, to create the required impression, coaches need to move away from their personal concept of beauty and follow the definition in the Code of Points or study the main components of beauty, which have a long tradition in the arts. For this purpose, our methodology provides choreographic exercises and musical games.

At the time of the birth of rhythmic gymnastics, French teacher Francois Delsarte developed a doctrine latter called Delsarte System of Expression. He devoted his life to discovering the laws that govern the human body movement when it expresses a particular feeling. He can be called the founder of the science of body expressiveness. F. Delsarte declared: "Art is the knowledge of those external methods by which life, soul and mind are revealed to a man — the ability to control them and freely guide them. Art is finding a sign corresponding to the essence." (S. Volkonsky, 2012). Facial gymnastics used in our technique, aims precisely to do this, that is, help gymnasts learn how to control their face.

A spectator accurately reads the energy, the purity of the lines and the emotional performance of a female gymnast. This was proved in scientific research by I. Čuk, 2015, which found that despite the fact that each spectator had their own criteria, points increased or decreased in accordance with the quality of gymnasts' performances. The experiment

with the audience as a judge showed sufficient reliability of such refereeing and its compliance with the results of official judges. It once again confirms that artistry, comprehensibility and conformity of actions are an important component of gymnast's performance, and that this component must be developed from the initial stage of training female athletes. Exercises for facial expressions that are trained using mimic gymnastics and narrative outdoor games, help gymnasts form the appropriate expressive representations.

Music, and therefore its interpretation by a female gymnast, is a very important element in the gymnast's performance (FIG, 2016). At the same time, strict harmony between the character and rhythm of the music, the nature of the exercise and its movements is necessary. By displaying this harmony with their body language, the athletes convey their thoughts and feelings to the audience (Eliana Toledo, Mateus Oliveira, Maria Letícia Scarabelim, Bianca Assumpção, 2018). Music is so important in the composition that changes associated with it in the rules of the competition occur every four years at the end of each Olympic cycle and make significant changes to the discipline. Therefore, during the training period, it is necessary to teach young athletes to hear and feel music. They need to know the basics of musical literacy (Viner-Usmanova, I.A., 2014). Our methodology uses musical and outdoor games to achieve this.

In her research, Rumba O., 2006, 2013, proved that certain aesthetic requirements are imposed on athletes in rhythmic gymnastics, namely, the culture of movement, musicality, expressiveness and artistry of performance. The author proved the effectiveness of choreographic training to improve performing skills and increasing the "aesthetic" component. That is why our methods included a full lesson in choreography, and each lesson corresponded to the tasks that were set.

Thus, the developed methodology includes the most effective mechanisms to date for the development of artistic abilities of 7-8-year-old female gymnasts and can be used in any training program for female gymnasts.

## CONCLUSIONS

Our analysis of the scientific and methodological literature shows that there is a need to intensify research on how to further develop the aesthetic component in the training of female athletes in rhythmic gymnastics.

On the basis of our questionnaire, it was determined that it is necessary to pay a lot of attention to the artistic abilities of female gymnasts starting from age 7-8, and using specific clusters of exercises, games and improvisation.

The introduction of these methods in the educational and training process of the experimental group helped gymnasts gain additional  $1.3 \pm 0.12$  ( $p < 0.05$ ) points for their competitive composition. Moreover, the improvement rate in the artistry in the experimental group was 18.4%, and in the control group only 8% ( $p < 0.05$ ).

## REFERENCES

- Averkovich, E. P. (1989). Composition of rhythmic gymnastics exercises: method. recommendations - Moscow: VNIIFK publishing house, 17.
- Borisenko, S. I. (2000). Increasing the performance skills of gymnasts based on improving choreographic training: author. dis. cand. ped. sciences: specialty: 13.00.04 / Borisenko, Svetlana Ivanovna; SPb GAFK P.F. Lesgaft. - SPb, 21.
- Borysova, Y., Mokhova, I. (2017). Artistic abilities as a component of athletes' training in rhythmic gymnastics. Bulletin of Zaporizhia National University: digest of scientific articles. Physical education and sports - Zaporozhye. Zaporizhia National University, 192-198.
- Borysova, Yu., Eremina, O. (2015). Increasing the level of technical readiness of 6-7-years-old gymnasts with the help of choreography lessons / Physical culture, sports and health of the nation: a digest of scientific papers. Issue 19 (Volume 2) Vinnytsia State Pedagogical University Mykhailo Kotsyubynsky; editor-in-chief VM Kostyukevich. - Vinnytsia: LLC "Planer", 139-144.
- Čuk, I. (2015) Can audience replace execution judges in male gymnastics? Science of Gymnastics Journal, 7(1), 61-68.
- Eliana, T., Mateus, O., Scarabelim, M.L., & Assumpção, O. (2018) The impact of the change in the musical attributes of the code of points (2013-2016) on the routines in rhythmic gymnastics of the Rio 2016 Olympic games Science of Gymnastics Journal, 10(3), 421-435.
- FIG. (2016). R.G. Code of Points. Lausanne: FIG.
- Gantcheva, G. (2018). Rhythmic gymnastics – historical aspects. Monograph. Sofia. BOLID INS. ISBN 978-954-394-234-3.
- Goncharenko, L. V. (1987). On the importance of expressive movements in rhythmic gymnastics [Text] Physical education of youth. - Rostov-on-Don, 125-128.
- Gorbacheva, Zh. S. (2000). Formation of plastic expressiveness in rhythmic gymnastics [Text]: author. dis. ... cand. ped. sciences: specialty: 13.00.04 / Gorbacheva Zhanna Sergeevna. – SPb, 21.
- Gorshkova, E. V. (2003). Motor-plastic expressiveness and its development in preschool childhood [Text]. Abstracts of the V All-Russian Congress of Psychologists. – SPb, 14 p.
- Kabaeva, A. M., Plekhanova, M. E. (2009). Aesthetic component of gymnasts' competitive programs [Text]. Scholarly notes. No. 4 (50). – 54-57.
- Karavatskaya, N. A. (2002). Methodology for the formation of motor expressiveness skills in rhythmic

gymnastics: abstract dis. ... cand. ped. sciences: specialty: 13.00.04 / Karavatskaya Natalya Aleksandrovna; Velikie Luki, 21 p.

Karpenko, L. A. (1994). Methodology of composing of random combinations, the formation of creative skills and musical-motor training in rhythmic gymnastics: method. recommendation. - SPb .: Publishing house of SPbGAFK, 30 p.

Bučar Pajek, M., Kovač, M., Pajek J., & Leskošek B. (2014). The judging of artistry components in female gymnastics: a cause for concern? *Science of Gymnastics Journal*, 6(3), 5-12.

Rumba, O. (2006). Traditional folk choreography in the system of specialists' training in gymnastics and dance on the floor: abstract dis. ... candidate of pedagogical sciences: 13.00.04 / Rumba Olga Gennadievna St. Petersburg. State Acad. Physical Culture P.F. Lesgaft. - St. Petersburg, 22.

Rumba, O. (2013). Improving the quality of the rhythmic female gymnasts' feet performance by the means of traditional choreography. *Science of Gymnastics Journal*, 5(3), 19-29.

Viner-Usmanova, I. A., Kryuchek, E. S., Medvedeva, E. M., Terekhina, R. N. (2014). Theory and methodology of rhythmic gymnastics Artistry and ways of its formation - M.: Man, 120.

Volkonsky S. M. (2012). Artistic responses: articles about theater, music, pantomime, M., "Librokom", 163.

### **Corresponding author:**

Giurka Gantcheva  
National Sports Academy Vassil Levski –  
Gymnastics  
Academ. Stefan Mladenov str. 21  
Sofia 1700  
Bulgaria  
Tel +35988811106  
Email: giurka@abv.bg

Article received: 22.5.2020

Article accepted: 26.10.2020

