

Condition of esthetic component of motive activity in aerobic gymnastics

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Purpose: to prove condition of esthetic component of motive activity of sportsmen in aerobic gymnastics at various stages of sports preparation.

Material & Methods: analysis of video records, method of expert assessment, methods of mathematical statistics.

Results: the level of criteria of esthetic component ("musicality", "dancing", "illustrative expressiveness", and "emotional expressiveness") with use of the offered rating scale is determined.

Conclusions: indicators of motive activities of sportsmen for aerobic gymnastics are defined at various stages of sports preparation.

Keywords: aerobic gymnastics, esthetic component, assessment, criteria, preparation stages, motive activity.

Introduction

The formation of an esthetic component in aerobic gymnastics is associated with the purposeful development of a complex of motor-coordination, intellectual, moral-willed qualities, contributes to the versatile harmonious development of athletes. In the works of P. N. Kizim [3], T. S. Lisitska [5], A. Y. Mullagildinova [6], T. T. Roters [9] the improvement of the creative activity of athletes through the organization of various types of musical rhythmic activity. In the studies of O. S. Beke-tov [2], O. A. Omelyanchik-Zyurkalova [7], V. Y. Sosin [11] it is noted that the emotional expressiveness of motor actions, the unity of music and composition, "artistic performance" that are brought up in process of training exercises, positively affect the performing skills of gymnasts. The authors assume that the esthetic component of the motor activity is subjected to pedagogical influence and can change at different stages of the development of sportsmanship. Specialists in aerobics B. V. Kokarev [4], O. O. Pozdeev and G. M. Pshen-ichnikova [8], O. A. Somkinim [10] described in some detail the content and structure of training sessions. However, at the present time the rapid development of this type of gymnastics is characterized by the appearance of new, more complex programs that require greater emotionality, artistry, grace, which makes the control of the development of the esthetic component of athletes' [12; 14]. Development of an estimation of an esthetic component of motor activity of gymnasts to promote motivation to formation of individual style and skills of esthetic performance of impellent actions.

Communication of the research with scientific programs, plans, subjects

The work was performed in accordance with the theme of the research work "Theoretical and methodological bases of managing the training process and competitive activities in the Olympic, professional and adaptive sport" in accordance with the LSUPC plan for 2016–2020. (Number of state registration: 0116U003167).

The purpose of the research

to prove condition of esthetic component of motive activity of sportsmen in aerobic gymnastics at various stages of sports preparation.

Objectives of the study:

1. Create a quantitative and qualitative scale for assessing the esthetic component of the motor activity of athletes in aerobic gymnastics.
2. Determine the indicators that have a significant impact on the state of the esthetic component of the motor activity of athletes in aerobic gymnastics at different stages of sports training.

Material and Methods of the research

181 gymnasts from different age groups of the city Odessa and Odessa region were examined, of which – 59 girls at the age of 6–10 years; were in the initial training stage – 61 girls aged 11–14 years; were in the preliminary basic training stage – 61 gymnasts at the age 15–17 years. Examination was carried out on the basis of the Federation of Aerobic Gymnastics, School № 81, School № 111, Sports Schools № 10, № 1, № 3 (city Odessa).

For qualitative and quantitative analysis of the esthetic component, video recordings of competitive programs of athletes-aerobists of different age groups. To determine the level of the esthetic component of the motor activity of athletes, the method of expert evaluations. During the statistical processing of the results of the study, statistical characteristics were calculated: arithmetic mean (M) standard deviation (\pm SD) concordance coefficient. Also, the individual formation ratio (k) was determined, which indicated the ratio of the sum of the estimates of the indicators relative to their number for a single criterion and was calculated from the formula:

$$k = \frac{\sum O}{N},$$

where k – individual coefficient of formation; Σ – sum; O – rating; N – number of indicators.

The optimal level of the formation of individual criteria was determined for values of k in the range 2,5–1,8 points, sufficient – 1,7–1,3 points, low 1–1,2 points.

To characterize the group level of formation of individual criteria, the group coefficient of formation (k_{gr}), was calculated, which was defined as the average arithmetic value k .

Results of the research and their discussion

According to the literature, the esthetic component of the motor activity of athletes reflects the “artistic performance” of exercises that characterize the ability of athletes to convey feelings and moods, through expressiveness, musicality, create artistic imagery [8; 11; 13]. In the composition of the esthetic component we included criteria with the following orientation: “musicality”, “dancing”, “illustrative expressiveness”, “emotional expressiveness”, does not contradict the research of specialists in sports with high esthetic requirements [5; 7; 8; 9 etc.].

“Musicality” – estimated by the degree of coordination of movements with tempo, rhythm, accents of music and the general nature (genre) of music.

“Dancing” – defined as the correspondence of the movements of a certain genre of the nature of music.

“Expressiveness” – in this work, we divided expressiveness into an illustrative and emotional:

“Illustrative” (or motive) – harmonious coordination of the movements of the hands, head, trunk, legs in postures, movements that most appropriately emphasize the direction and nature of the posture, gesture, fragment of the composition;

“Emotional expressiveness” – estimated by the ability to convey the nature of the musical accompaniment, the way, expressive facial expressions.

We proposed a two-point rating scale, which greatly simplified the testing procedure for the experts (tabl. 1).

In our opinion, such a scale is more concretized in assessing any degree of formation. Objective assessment in sports with a visual way to assess decreased significantly due to the primary confusion judges too complex rating scale and the need to integrate three or more levels of formation resulted in a non-specific evaluation. Taking into account the human factor, as much as possible, we have simplified the assessment scale.

For a more creative assessment, a score of 0,5 was allowed, which made it possible to get an estimate of “0,5” to “2,5”. These criteria and indicators served as the basis for distinguishing the levels of the esthetic component of the motor activity of athletes in aerobic gymnastics.

Low level (<1–1,2 points) was characterized by the lack of: consistency of movements with the tempo and rhythm of music; according to predetermined dance motions dance genre and musical accompaniment; coordination of movements of hands, head, torso, legs that highlight the direction and nature of the posture; gesture in the presence of manifestations of emotions and feelings (facial expression), dictated by the nature of the music.

At a sufficient level (1,3–1,7) of the formation of the esthetic component: the movements are not always consistent with the tempo and rhythm of the music; not always correspond to a given genre of dance and music; movements of the arms, head, torso, legs that highlight the direction and nature of the poses are not always consistent; gestures are performed in the absence of manifestations of emotions and feelings (facial expression), dictated by the nature of the musical accompaniment.

The optimal level (1,8<2) was noted with: the consistency of movements with the tempo and rhythm of the music; according to predetermined dance motions dance genre and the musical accompaniment; coordination of movements of hands, head, torso, legs that highlight the direction and nature of the posture; there is a gesture at the manifestation of emotions and feelings (facial expression), dictated by the nature of the musical accompaniment.

For the purpose of determining the level of the esthetic component of motor activity, the average score for each athlete was calculated according to all criteria (k) according to the sum of the evaluations of the five experts. Table 2 shows the data of individual levels of the formation of criteria for choreographic preparedness.

Table 1
Criteria for the esthetic component of motor activity in aerobic gymnastics

Criteria	Indicators	Quantitative and qualitative assessment	
		2,5 points	1 point
Musicality	Coordination of movements with tempo, rhythm of music	Coherence presence	Lack of coherence
Dancing	Compliance with dance movements given dance genres and musical accompaniment	Coherence	Disparity
«Illustrative expressiveness»	Consistency of movements of the hands, head, trunk, legs, which emphasize the direction and nature of the posture, gesture	Coherence presence	Lack of coherence
«Emotional expressiveness»	A vivid manifestation of emotions and feelings (facial expressions), dictated by the nature of the musical accompaniment	Presence of the emotions that manifest	Lack of appropriate emotions, which manifest

Table 2
The level of the formation of criteria for the esthetic component at various stages of long-term sports training (%)

Criteria	Initial training stage			Previous base preparation stage			Specialized base preparation stage		
	I	II	III	I	II	III	I	II	III
Musicality	15	25	60	33	32	35	13	28	58
Dancing	3	22	75	0	38	62	3	28	68
«Illustrative expressiveness»	2	50	48	0	10	90	0	27	73
«Emotional expressiveness»	18	72	10	0	10	90	0	25	75

Note. I – optimal level, II – sufficient level; III – low level.

At the stage of initial preparation, the best indicators were defined in the criterion of “emotional expressiveness”. Among the athletes who were studied, the optimal level of “emotional expressiveness” was registered in 11 people, which is 18%). Athletes in the stages of preliminary basic training and specialized basic training are much inferior to younger athletes. In these stages the optimal level absent. A sufficient level of emotional expressiveness was identified in 72% of cases (43 people) during the stage. This is the best indicator for this stage, but by the next stage the amount of low level can reach 90% (fig. 1).

Comparative analysis of musicality indicators showed (fig. 2), at the stages of initial and specialized basic training, athletes significantly reduced the level of correspondence of dance movements with a given dance genre and musical accompaniment (60% and 58% respectively).

It is interesting that at the stage of preliminary basic training athletes on the criterion of “musicality” were distributed according to certain levels almost evenly (33% – optimal level, 32% – sufficient level, 35% – low level).

The data shown in figure 3 indicate a discrepancy between dance movements given dance genre and musical accompaniment at all stages of sportsmanship. A low level of dance is 75% (45 people) in the initial training stage, 62% (37 people) – in the preliminary basic training, 68% (41 people) in the specialized basic training.

A low percentage of the optimal level or complete absence

of it characterizes “illustrative expressiveness” at all stages of sports training (fig. 4).

The lack of coordination of movements of the hands, head, trunk, legs, which emphasize the direction and nature of the posture, gesture, is defined in 90% (54 people) in the preliminary basic training stage. This is the worst indicator for this stage. Only slightly improved the results at the stage of specialized basic training (44 people have a low level, corresponding to 73%). It should be noted that at the stage of initial training in 50% of cases (31 people) a sufficient level of indicators was determined by the above criteria.

Conclusions

A quantitative and qualitative scale for assessing the esthetic component is created, which takes into account the criteria of «musicality», «dancing», «illustrative expressiveness», «emotional expressiveness».

These data define the parameters that have a significant impact on reducing the esthetic component in uneven contingent gymnasts. At the stage of initial training, the worst indicators were in the manifestation of “musicality” and “dance”. At the stage of preliminary basic training, as well as at the stage of specialized basic training, “illustrative and emotional expressiveness” suffers significantly.

The prospect of further research is to determine ways to improve the esthetic component at all stages of long-term training of athletes.

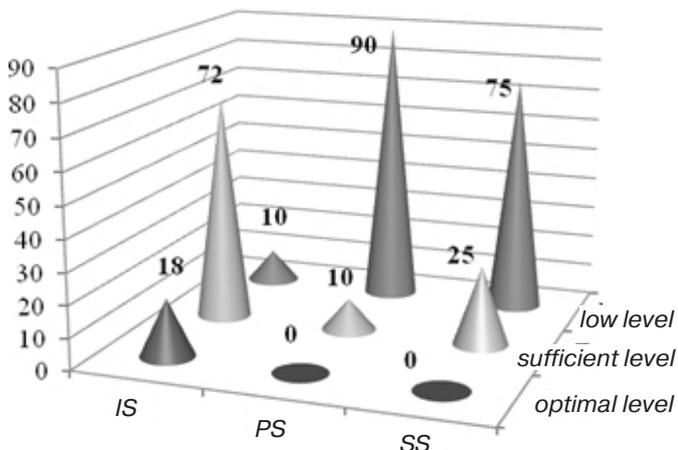


Fig. 1. Formation of the criterion “emotional expressiveness” of athletes at various stages of sports training (%): IS – Initial training stage; PS – Previous base preparation stage; SS – Specialized base preparation stage.

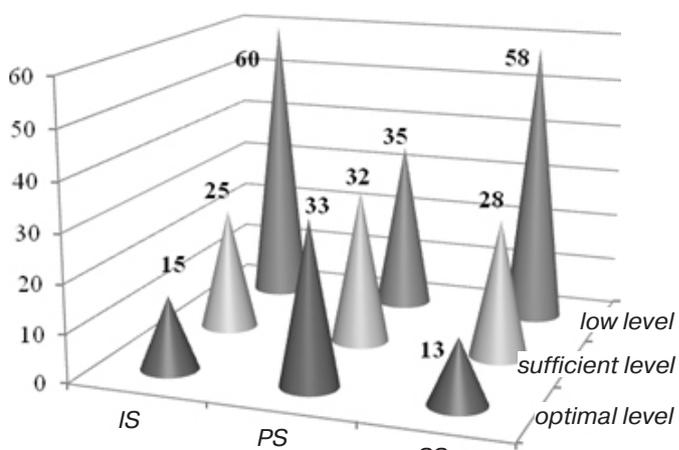


Fig. 2. Formation of the criterion “musicality” of athletes at various stages of sports training (%): IS – Initial training stage; PS – Previous base preparation stage; SS – Specialized base preparation stage.

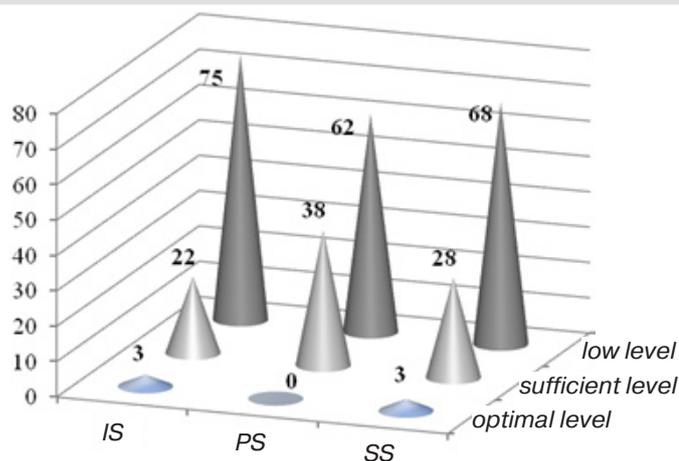


Fig. 3. Formation of the criterion “dancing “ of athletes at various stages of sports training (%): IS – Initial training stage; PS – Previous base preparation stage; SS – Specialized base preparation stage.

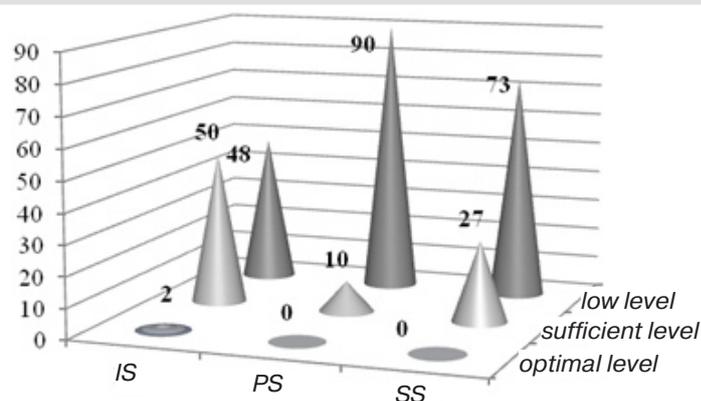


Fig. 4. Formation of the criterion “illustrative expressiveness” of athletes at various stages of sports training (%): IS – Initial training stage; PS – Previous base preparation stage; SS – Specialized base preparation stage.

Conflict of interests. The authors declare that no conflict of interest.

Financing sources. This article didn't get the financial support from the state, public or commercial organization.

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Received: 03.01.2017.

Published: 28.02.2017.

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