

Diagram nr.5

Diagram nr.6

CONCLUSION

The combination and therapist methods resources with a proper diet determine weight loss, self-confidence and control over their lives. Another important aspect is to improve exercise capacity without causing side effects fatigue, the mental effort and confidence in performing other physical activities.

Performing daily exercise are released hormones, endorphins, leading to a general feeling of well-being by reducing tension and anxiety so have been combatants (stress, overeating and inactivity), those who favor the emergence of the major issues of twenty-first century: obesity.

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BILATERAL COORDINATION TRAINING IN THE CHEERLEADING TEAM OF THE UNIVERSITY SUCEAVA

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Abstract

This paper focuses on the training of cheerleaders in developing agility and various other skills, through a significant muscular demand that involves both general and specific coordination skills.

Among the objectives there were: training a group of cheerleaders the ability to handle various objects with both hands, in different directions, plans and speeds, developing the individual and group coordination in the execution of various rhythmic movements, selecting operational models and using auxiliary equipment (batons, balls, small circles) for bilateral coordination training.

Key words: bilateral coordination, cheerleaders, rhythm, movement, dance.

INTRODUCTION

"The coordinative abilities are largely genetically determined, and their expression is conditioned by the processes of maturation of the nervous system and the number of motor skills the subject masters." DRAGNEA A., MATE TEODORESCU S. (2002).

Motor coordination is a fundamental element for the performance of complex, precise, fast and under various conditions body movements.

A structured training process systematical and direct - is necessary in order to facilitate the maximum development of motor coordination.

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The cheerleading programs specific skills require a significant muscular demand in the arms, with a broad involvement of a general and specific coordinative ability.

Of all the movement skills, the know-how and the coordination skills are very important in the process of "motor skill acquisition" and in the training and development of motor skills, which constitute key factors of the motor ability. What plays an important part in skill and coordination development is the learning speed and the thorough training process.

The ability to coordinate one's movements implies a correlation and an adjustment of the movements required to perform an action, with positions, trajectories, dynamic components of the body parts involved in the movement, as well as the necessary relations for performing a certain exercise by using various objects, according to some authors.

The motor organization requires a development of relations between the joints of the body segments, based on the so-called symmetry.

The purpose of this study is to evaluate the effectiveness of some bilateral coordination training methods, specific to technical strategies and with the aim of facilitating learning and improvement of object-handling technique of the cheerleaders.

The objective of the present work is to evaluate the effectiveness of some specific coordination training methods that are applied in cheerleading.

With training in mind, the technical strategies used to improve learning and to reduce the time of assimilation were insisted upon.

During training, the subjects performed bilateral movements, both simultaneous and alternative.

The object-handling actions can be performed by working simultaneously, successively and in different directions and plans with various object, with or without displacement and coordinated with body elements.

RESEARCH

The selection of the cheerleaders took place in the first semester of the academic year 2011-2012, and the research was conducted from January 2012 to June 2012. The experiment began by testing the level of training of first year female students from the Faculty of Physical Education and Sport, selected for the cheerleading squad and for the research. The initial tests were conducted on a total of 12 students, aged 18 to 21 years-old.

The selected means, methods and activities considered effective in the basic experiment were carried into effect in the next step. At the end of the research we conducted the final tests, and the data obtained were checked and processed.

The application of the selected means was performed in the weekly practices (two workouts per week), during the six months intended for training the cheerleaders, along with appropriate musical accompaniment.

The test called "The Metaphorical Road" (Drumul figurat) has been applied in standard conditions to the group of cheerleaders, with the aim of finding and then highlighting the evolution of the bilateral coordination training.

The means used in the research were:

a). Cheer baton exercises:

Ex. 1 I.P. Standing

T 1-2 – jumping step on the right foot with displacement on the right, the left foot being moved backwards, bended, and the cheer baton being balanced up and to the front;

T 3-4 – speed front descent of the baton, performing the same movements as in time 1-2.

Ex. 2 I.P. standing

T 1-2 – jumping step on the right foot while balancing the baton horizontally, up and to the front, and a slight extension of the trunk;

T 3-4 – jumping step backwards on the left foot, front descent of the baton while performing a slight forward trunk bending;

Ex. 3 I.P. Standing

T 1-2 – balancing two parallel batons to the left while bending the knees and the trunk opposite to the balancing of the two batons;

T 3-4 – the same movements are performed to the right;

Ex. 4 I.P. Standing

T 1-2 – jumping step on the right foot, with a turn of 180 degrees to the right and by balancing the baton horizontally and to the front;

T 3-4 - a 180 degrees turn to the left, with a jumping step on the left foot and with the descent of the baton.

b). Exercises with balls

Ex. 1 I.P. Standing side lateral raise, with a ball in the left hand

T 1-2 - lateral step on the right foot and passing of the ball downwards to the right hand, through balancing in circle;

T 3-4 - lateral step on the left foot and passing of the ball upwards to the left hand, through balancing in circle;

Ex. 2 I.P. Standing side lateral raise, with a ball in the right hand

T 1-2 – polka step on the left foot and balancing of the ball with both hands, in circle and horizontally;

T 3-4 – two lateral gallop steps while bringing the ball to the right hip.

c). Exercises with pom-pons:

Ex. 1 I.P. Standing legs spread, with the pom-pons held to the front, downwards and with both hands

T 1-2 – lifting on tiptoe with the arms raised;

T 3-4 – return to the initial position;

- **Ex. 2** I.P. Standing legs spread, with the pom-pons held to the front, horizontally and by their ends
- T 1-4 descent of the left arm and raise of the right arm, while waving the pom-pons vertically and around
- **Ex. 3** I.P. Standing legs spread, with the pom-pons held to the front and downwards
- T 1-2 raise your arms above your head while moving backwards the left foot, and return to the initial position;
- T 3-4 raise your arms above your head while moving backwards the right foot, and return to the initial position.
- $\mathbf{Ex.}$ 4 $\hat{\mathbf{I}}.P.$ Standing with the pom-pons held to the front and downwards
- T 1-2 jump with the arms in a high V and the legs spread apart and return to the initial position;
- T 3-4 raising the right foot laterally at 90 degrees and raising the arms simultaneously.
- **Ex. 5** I.P. Standing side lateral raise, with the pompons held by their ends
- T 1-2 lunge forward on the right foot while moving the arms backwards, and return to the initial position;
- T 1-2 lunge forward on the left foot while moving the arms to the front, and return to the initial position;
- Ex. 6 I.P. Standing with the pom-pons forward and down
- T 1-2 front hurdle with the left foot while moving the arms up and to the front, and return to the initial position:

- T 3-4 front hurdle with the right foot while moving the arms down and to the front, and return to the initial position;
- d) Exercises for rhythmic training:
- **Ex. 1** Rhythmic themes through percussion are accompanied by songs in 2/4 time, with moderate tempos (moderatto);
- Ex. 2 Rhythmic themes through movement are accompanied by songs in 4/4 time, with moderate tempos (moderatto);
- **Ex. 3** Rhythmic themes through percussion and movement are accompanied by songs in 2/4 and 4/4 time:
- **Ex. 4** Rhythmic themes through percussion and movement are accompanied by songs in 2/4 and 4/4 time;

Testing the ability to coordinate the movements – Metaphorical Road

Materials: timer, pencil.

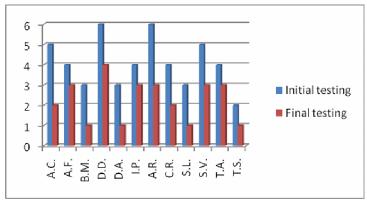
Two parallel lines (5 mm distance between them) are drawn on a sheet of paper, forming a wavy road of 150 cm long. The form of the wavy road is chosen freely. The cheerleader has to cover the road with a pencil, without lifting it and without touching the edges. During execution, the student will sit with her hands suspended. The cheerleader has to finish the exercise in 45 seconds. During the exercise, someone will inform the cheerleader about the time left. The result is determined by the number of mistakes made. Any touch of one of the two lines is considered a mistake.

Table 1 Metaphorical Road Test

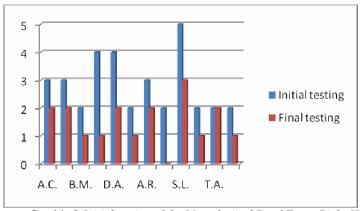
No.	Name	I.T.		F.T.	
		Number of mistakes in 45		Number of mistakes in 45	
		seconds		seconds	
		Left hand	Right hand	Left hand	Right hand
1	A.C.	5	3	2	2
2	A.F.	4	3	3	2
3	B.M.	3	2	1	1
4	D.D.	6	4	4	1
5	D.A.	3	4	1	2
6	I.P.	4	2	3	1
7	A.R.	6	3	3	2
8	C.R.	4	2	2	0
9	S.L.	3	5	1	3
10	S.V.	5	2	3	1
11	T.A.	4	2	3	2
12	T.S.	2	2	1	1

The initial testing (I.T.) was conducted in January 2012, and the final testing (F.T.) - in June 2012. Checking the level of the ability to handle various objects with both hands, in different directions, plans and speeds, in the training of a group of cheerleaders, as suggested in the research, consisted of testing the ability to coordinate the movements.

After initial and final evaluation I could make a comparison regarding the progress of cheerleading squad girls. Thus, following the metaphorical Road-test, we found an improvement of coordination in both upper members, by decreasing the number of mistakes during the test.



Graphic 1 Initial testing of the Metaphorical Road Test – Left Hand

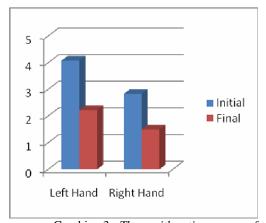


Graphic 2 Initial testing of the Metaphorical Road Test – Right Hand

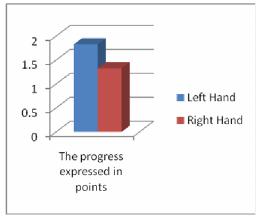
The table below shows the test results in the form of arithmetic mean:

Table 2 Arithmetic mean of the number of mistakes in Metaphorical Road Test

Arithmetic mean of the number of mistakes for left hand			Arithmetic mean of the number of mistakes for right hand		
Initial	Final	The difference	Initial	Final	The difference
4,08	2,25	1,83	2,83	1,5	1,33



Graphic 3 The arithmetic mean of the number of mistakes in Metaphorical Road Test

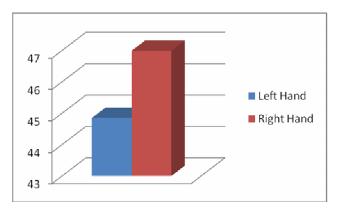


Graphic 4 The progress expressed in points for both hands

In graphic 3 we can see the progress made by the girls with both left and right member. Also graphic 4 highlights the fact that with the left member, at the final testing, the girls have made fewer mistakes than the initial test, compared with the right hand. However, since the initial number of mistakes on the left side was much higher than the right, as a percentage progress is higher in the right hand to the left hand.

The progress express	The progress expressed in percentage		
Left Hand	Right Hand		
44,85%	46,99%		

Table 3 The progress expressed in percentage



Graphic 5 The progress expressed in percentage

CONCLUSIONS

In order to obtain very good results, you need a lot of workload during the training sessions of the group of cheerleaders, the key-words being perseverance and earnestness.

The proposed models were learned gradually, based on their level of complexity, starting with simple exercises and ending with difficult and complex ones.

All the cheerleaders performed an equal number of training sessions, in the same conditions (identical tasks, identical pauses). The results were recorded at the beginning and the end of the research.

The elements of the proposed exercises were performed with more difficulty at first, then it became easier, allowing a more specific demand of the coordination abilities, without the intervention of a technical and physical excess.

The data recorded at the end of the experiment showed signs of improvement, this

confirming the effectiveness of the means applied during the study.

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