Divo Ban, prof., mr.sc. Aleksandar Selmanović, University of Dubrovnik (Department of Physical Education) Ivica Glavan, prof., Gymnasium of Dinko Šimunović in Sinj

AN INFLUENCE OF THE PROGRAM OF THE UNIVERSAL SPORTS SCHOOL DUBROVNIK ON THE MOTOR ABILITIES DEVELOPMENT OF SIXTH YEAR CHILDREN

1. Introduction and objective

Universal sports school is intended for preschool children and younger school age (6-10 years) who have an affinity for particular sports and they aren't involved in systematic training club.

Expressing the need for physical activity of boys and girls by their parents "neutralize" involvement in club sports schools, which have been based on premature perfecting specific philosophic and skills, rather than building a solid foundation for basic motor and functional abilities and learning a large range of motor skills. Therefore, the universal sports school is recommended rather than club's systematic training because the accent is focused on the development of elementary technical structure, with the engagement of large muscle groups, which is the basis for future high-quality specialist activity.

The program should be carried out mostly through the game, and such approach can differentiate the interests of children for each group of sports. Achievement of objectives achieved through natural game, ball games, martial games, practice of designing, athletics, acrobatics, swimming, skiing, motor structure of free movement (running, walking), jumping, throwing, etc. So, the children are very important to ensure the development of basic skills that will help them when they switch to training a certain sport. That sets a multiple development and represents the most important principle of training for children. Children of this age find competition games very interesting, which is the result of the need for mutual comparing and around the age of eighth each child is directed towards those sports that have shown the greatest interest and ability. At the end of universal school sports is to be made final selection, which is implemented through specific battery of tests and then actually starts the right school sports "motor superior children" in the ninth and tenth year - initial stage of preparation (Mikić, Biberović, Mačković, 2001.).

Besides the statements mentioned above, this type of work would introduce preschool children to sports activities could provide important guidelines for the further course of the training process and framework selection youngest athlete. It also creates the possibility for the early establishment of an effective contact with environmental factors: sports club, coach, athlete family, school, social environment (Sindik, 2001.).

Heads of universal school sports, kinesiology professors, write daily work, where its recorded conception of teaching, the results of motor-functional testing, achieved the level of learned sport's techniques and general observations on the development and ta-

lent for the sport. Health status of children monitored during the year, together with the medical service and their teachers. To implement the planned external influences is an extremely important way in which adult professionally regulated process, because their behavior may improve, to keep, and remove mental and motor disposition of the child. Our interest in professional person at any time be aware of their actions, and that alone and with the help of other evaluates and assesses their actions. In this sence are important: verbal and non-verbal incentives and demonstrations. (Mikić et al. 2001.).

The main of the research was to determine the effects of impact of the kinesiology program of the Universal Sports School Dubrovnik on the motor abilities development, over a period of eight months.

2. Methods of work

Research was conducted on random sample of unselected population of 34 attendants of the Universal Sports School Dubrovnik, male and female sex, of sixth years old.

Children are the last complete kinesiology program for a period of eight months (three times a week for a period of 60 minutes) that emphasizes natural forms of movement. There is taken into account the specific requirements of the work with children (game, variety, imagination, individuality, dosing loads, the gradual, vacation, friendship, rivalry, etc.). Form of teaching methods in experimental program included oral exposure method, the practical explanation's method and placing and solving motor tasks method.

Sample variables for assessing motor abilities consisted of eight tests: the test for assessing the coordination of movement (polygon backward), the test for assessing repetitive strength (raising trunk for a period of 60 seconds), the test for assessing the flexibility (to make a bow on the bench), the test for assessing frequency of movement (taping hand lasting 15 seconds), the test for assessing the speed (running at 20 meters), the test for assessing static strength (standing in the knuckle position) and tests for the evaluation of explosive power (throwing ball weight 200 grams and long jump with a place).

Table 1: Global Program of Universal Sports School Dubrovnik

Fund weekly hours: 3

Annual Fund hours: 114

The total number of entities: 11

Total number of topics: 38

Total number of frequency: 347

O.N.	Teaching units	Frequency	
1		Cyclic movement of the different pace	12
2	Running	Running short of shares	9
3		The long run shares	6
4		Running in the taskbar	12
5		Run the relay race	12

			1			
6		Jumps using sea scale	7			
7		Hops with one foot	8			
8	Jumps	High jumps	6			
9		Long jumps (with two feet)	6			
10		Jumps with the rhythm (music)	4			
11		Throw the ball over the head and throw in the breast	15			
	Throwing	broken with two hands				
12		Shooting facilities on the floor and the wall with one	12			
		hand				
13	The position of	Walking at low beam	9			
14	equilibrium	The balance on balance-boards and on the trampoline	3			
15		Walking on a small bench with tasks	6			
16		School running: compliance hands and feet	8			
17	Athletics	Practice running: forward, backward and sideways	14			
18		High, low, medium skip	12			
19		Swimming checking knowledge	2			
20	Swimming	Exercises with equipment (boards)	16			
21		Breathing exercises	8			
22		Training techniques	10			
23		Ring forward	12			
24	Gymnastics	Ring back	12			
25		Cartwheel on the side	6			
26		Gymnastic 'bridge'	9			
27		Conduct in place, kneeling, sitting	6			
28	Basketball	Dribbling in the movement of the left and right hand	9			
29		Shot from the vicinity of the lower rim	6			
30		Defensive position	3			
31		Shooting	12			
32	Football	Adding in pairs	12			
33		Dribbling around cones	12			
34		Adding in pairs	15			
35	Handball	Dribbling the ball with better hand	8			
36		Shooting	10			
37	Volleyball					
38	,	Rejecting a balloon with forearms	9			
		, , , , , , , , , , , , , , , , , , , ,				

3. Results and discussion

Examining the results of initial and final measurements of Universal Sports School Dubrovnik is visible growth of arithmetic means of all variables (taking into account the vice variables on scale).

Degree of skewness and curvature (Skewness and Kurtosis) show a relatively normal distribution of results.

Relatively high homogeneity of results is visible only in the final motor test for assessing static strengh (standing in the knuckle position).

Table 2: Descriptive parameters of the initial and final measurements

	Initial measurement						Final measurement						
Tests	N	Mean	SD	Min	Max	Skew	Kurt	Mean	SD	Min	Max	Skew	Kurt
MT20	34	5,2	0,6	3,8	6,4	-0,2	1,3	4,5	0,4	3,5	5,1	-0,9	0,6
MSDM	34	116,1	20,6	74,0	159,0	-0,1	1,1	129,9	21,5	108,0	175,5	0,9	-0,1
MIVZ	34	22,5	18,6	0,0	70,6	1,3	2,0	19,4	16,5	0,0	67,1	1,7	4,4
MTAP	34	20,3	3,9	11,0	27,0	-0,5	1,4	23,2	3,9	17,0	30,0	0,1	-0,7
MBL	34	8,6	3,1	4,6	15,0	0,6	-0,4	9,3	4,2	3,0	16,1	0,2	-1,0
MDTR	34	21,1	9,8	0,0	39,0	-0,1	0,8	27,7	8,8	15,0	47,0	0,9	0,5
MPRK	34	-0,3	7,2	-15,0	11,0	-0,6	0,4	0,1	5,4	-9,0	11,0	0,1	-0,3
MPOL	34	23,2	5,6	14,1	33,5	0,1	0,0	20,6	5,4	9,9	29,5	-0,2	-0,3

The results of t-test for dependent samples showed statistically significant differences in all variables. Development of explosive power is primarily a result of the high frequency of exercises, as part of teaching wholes (Jumps, Running and Throwing). Exercises for general preparation, which are often used as part of the preparation of training, have a positive impact on development of repetitive strength of trunk, while the positive quantitative changes of coordination and frequency of movement should note the interaction of several teaching units.

Significant differences aren't visible only in the test for assessing static strength (standing in the knuckle position) and flexibility (to make a bow on the bench).

Unlike static strength, it is known that in this age children can significantly affect the improvement of flexibility. Therefore, the targeted exercises in the future special attention should devote to this segment.

Table 3: The results of t-test

EXPLANATION:

MT20 = running at 20 metres

MSDM = long jump with a place

MIVZ = standing in the knuckle position

MTAP = taping hand lasting 15 seconds

MBL = throwing ball weight 200 grams

MDTR = raising trunk for a period of 60 sec.

MPRK = to make a bow on the bench

MPOL = polygon backward

TESTS	T	P
MT20	6,03	0,000
MSDM	-3,51	0,005
MIVZ	1,41	0,185
MTAP	-4,84	0,001
MBL	-2,32	0,041
MDTR	-3,44	0,006
MPRK	-0,96	0,366
MPOL	3,49	0,008

4. Conclusion

The results of research on this sample of respondents confirmed the fact that Universal Sports School Dubrovnik program favorably affect the development of numerous motor abilities of six-year old children (coordination, the frequency of the movement hand, repetitive and explosive strength), in interaction with the action of growth factors and development. In addition, the work of the universal sports school creates a great foundation for children of preschool and younger school age for future selection and guidance in the sport, which enable them to optimal sports development and the achievement of full sporting potential.

Given the results of research, in the future drafting of program content more attention should be given to exercises that affect the development of strength and flexibility.

5. Literature

- 1. Bompa, O., Tudor, (2000.), *Total training of young champions*, Human Kinetics.
- 2. Gallahue, D.L., (2001.), *Understanding Motor Development in Children*, J. Wiley and Sons, New York.
- 3. Haubenstricker, J.L., Seefeldt, V.D., (1986.), *Acquisition of Motor Skills During Childhood*, *Physical Activity and Well Being*, American Alliance for Health, Physical Education, Recreation and Dance, Reston.
- 4. Mikić, B., Biberović, A., Mačković, S. (2001.), *Universal Sports School*, Public Institution the University of Tuzla, Faculty of Philosophy.
- 5. Sindik, J. (2001.), "Djelomični pregled poželjnih mogućih implikacija sudjelovanja djece predškolske dobi", Kineziologija, 33 (2): 216-225.

AN INFLUENCE OF THE PROGRAM OF THE UNIVERSAL SPORTS SCHOOL DUBROVNIK ON THE MOTOR ABILITIES DEVELOPMENT OF SIX-YEAR OLD CHILDREN

The aim of the research was to establish the effects of the diverse kinesiology program on the motor abilities development on a random sample of an unselected population of six-year old boys and girls, i.e. 34 regular attendants of the Universal Sports School Dubrovnik, within the period of 8 months (initial and final state). The variable sample consisted of 8 motor ability evaluation tests. Seriously changes positively established of tests of explosive and repetitive strength, coordination and frequency of movement hand.

Keywords: universal sports school, motor abilities development