The importants of stretching in the handball training to teenage players (17 to 18 years)

Petronela-Emilia Naum [1], Simona Ionescu [2]

Abstract

The purpose of this paper is to improve the training system of the handball players of 17 to 18 years by using the trainin facilities of stretching in sports. To achieve the basic objectives of the research was supported in terms of theoretical and experimental efficiency of stretching resources during sports training. Results provided by subjects in the experimental group were compared with control group results. Means of stretching applied in training subjects of the experimental group were selected and classified in order to be able to select them and apply them effectively in sports training. Results obtained from experimental and control groups on enhancing their sports training, which is expressed by physical training improvement, shows clearly the effectiveness of the methodology applied in the training sessions of the players of the experimental group.

Keywords*: handball, sports training, stretching, peculiarities of age, physical training.*

Rezumat

Scopul acestei lucrări îl constituie perfecționarea sistemului de pregătire al handbalistelor junioare de 17- 18 ani, prin folosirea mijloacelor de stretching în cadrul antrenamentului sportiv. Pentru realizarea obiectivelor de bază ale cercetării a fost argumentată din punct de vedere teoretic şi experimental eficiența aplicării mijloacelor de stretching în perioada de pregătire sportivă. Rezultatele furnizate de către subiecții din grupa experimentală au fost comparate cu rezultatele grupei martor. Mijloacele de stretching aplicate în antrenamentele subiecților din grupa experimentală au fost selectate şi clasificate pentru a avea posibilitatea de a le selecta şi aplica mai eficient în antrenamentele sportive. Rezultatele obținute de grupele experimentală şi martor privind creşterea nivelului pregătirii sportive ale acestora, care se exprimă prin îmbunătățirea pregătirii fizice, arată în mod cert eficiența metodicii aplicate în şedințele de antrenament ale handbalistelor din grupa experimentală.

Cuvinte cheie*: handbal, antrenament sportiv, stretching, particularități de vârstă, pregătire fizică.*

[1] **Master student, Physical Education and Sport Faculty, West University of Timişoara, e-mail:** ***petronela_naum@yahoo.com***

[2] **Lecturer, PhD, Physical Education and Sport Faculty, West University of Timişoara**

Introduction

Improving the educational process at teenage players(17-18 years) has been an important concern for many authors (1,2).

Given the intense effort, physical and psychic of training and games, working to develop specific driving qualities, strength in the regime of speed, strength in a mode of resistance, resistance rate regime, and the application exercise stretching is studied and published quite superficial.

The entire period of training requires attention in developing (3) a specific speed breaking pace, acceleration and deceleration over short distances, jumps and landings, the technical execution speed, speed driving and tactical thinking done by the expression of these spontaneous reaction to unforeseen intervention of enemies.

All these actions require swift mobility and muscle joints therefore say preparing and developing the muscles of the lower limbs in particular, ensure the handball players higher efficiency and spares them from any muscle injuries (4,5).

The accident risk like muscle rupture and muscle streching is higher when the muscles are tense, inflexible and lacking in elasticity (6). Mobility training stimulates muscle and tendon metabolism, increasing the capacity of effort this way.

Mobility can be developed through the agency of stretching, these having a positive influence on strength, speed accuracy of the movements. The need for stretching resources reside in almost all movements in handball with the ball and without the ball, adds contraction and relaxation of muscle groups, in order to be well prepared for training (7,8).

Expert studies (9,10) show that there is a controversy regarding the techniques used when applying stretching means, especially when is about the training of performance athletes. The importance of developing capacity falls contraction, relaxation, tension of muscles, especially the legs, support the development of mobility and suppleness of muscle in preparation teenage players (17 to 18 years) as a necessity to answer the modern game, intense and so aggressive in attack and defense, there is player power to manifest in the struggle for winning the ball, to resist physical and psychological demands of today's game.

All this shows that the issue is quite present and requires a scientific and methodological approach argued, where the entire training period required a growing concern for the increasing speed of play, an essential requirement of the game of handball, which implies a constant concern for the increasing force game.

Bibliographic study allow us to interfere with their investigations in an efficient period of training equipment and stretching that means adding useful in the preparation and development of lower limbs muscular apparatus and at the top. Tasks and research objectives formulated to achieve the purpose of the work are: analysis and generalization of training literature teenage player (17 to 18 years) in the specialized units;

Qualitative assessment side of physical training teenage player (17 to 18 years);

Determination demonstration program focused on the stretching means, the teenage player (17 to 18 years);

Theoretical arguments and experimental methods of applying stretching means the teenage player (17 to 18 years) in the School Sports Clubs.

Research hypothesis

It was assumed that the stretching means in training teenage players (17 to 18 years) will help to increase the level of their sports training, which is expressed by the improvement of physical training.

Research Methods and Techniques

The research methods used in this study were: the graphic method and the testing method. The tests were those for assessing the physical training:

T.1. running speed on 50 m with standing start;
T.2. jump on the spot;
T.3. lifting of lying dorsal trunk;
4R. dribbling through the poles a distance of 30 m;
T.5. throwing balls at a distance;
T.6. Cooper test.

Research results

Evaluation of results obtained through the application stretching means is reflected in the competitive ability of teenage player (17 to 18 years) in power to resist physically, technically and mentally especially in game relations.

On the physical ability of muscle fibre contraction and stretching the legs and at the top should be at maximum level and in terms of technical support and transmitting any movement of the ball is made by a relaxation and then contraction of the muscle fiber. In handball, every move is the result of one or more muscle contractions. So an analysis and evaluation is necessary to first home competitive capacity.

This analysis will be possible by interpreting the data contained in graphs that contain values of results obtained from crossing rules of evidence initial and final inspection by both groups under research, the experimental group and control group.

Table I. Samples and standards initial and final physical assessment of the experimental group

Tests	Initial evaluation		Final evaluation		T Test (p)
		S		S	
Running speed on 50 m with standing start	7”84	0.35	7”77	0.36	0.02
Long jump from place	2.01	0.08	2.03	0.08	0.01
Lifting of lying dorsal trunk	38	3.89	32	2.69	0.02
Dribbling through the poles a distance of 30 m	5”04	0.10	5”02	0.06	0.02
Throwing balls at a distance	33.5	3.37	35.5	3.30	0.01
Cooper test	2210	73.68	2340	69.92	0.03

Table II. Samples and standards initial and final physical assessment of the control group (n= 10)

Tests	Initial evaluation		Final evaluation		T Test (p)
		S		S	
Running speed on 50 m with standing start	7”98	0.05	7”97	0.5	0.06
Long jump from place	201	0.07	2.01	0.07	0.7
Lifting of lying dorsal trunk	32	2.93	32	2.76	0.2
Dribbling through the poles a distance of 30 m	5”09	0.8	5”09	0.09	0.1
Throwing balls at a distance	32	2.99	32	2.91	0.1
Cooper test	2230	82.32	2230	82.32	1

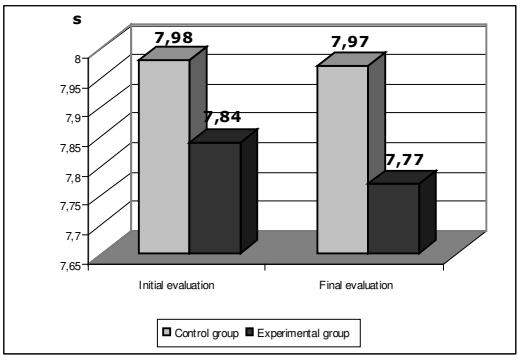

Figure 1. Running speed

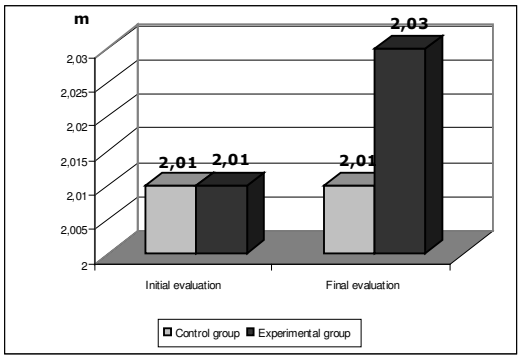

Figure 2. Long jump from place

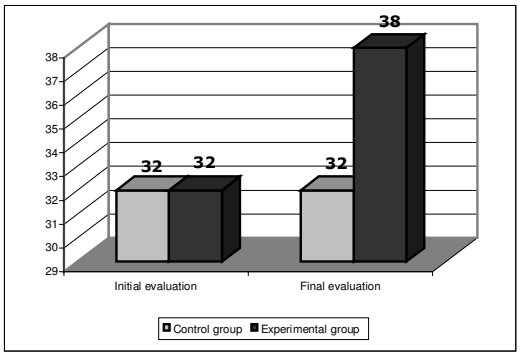

Figure 3. Lifting the trunk on lying dorsal

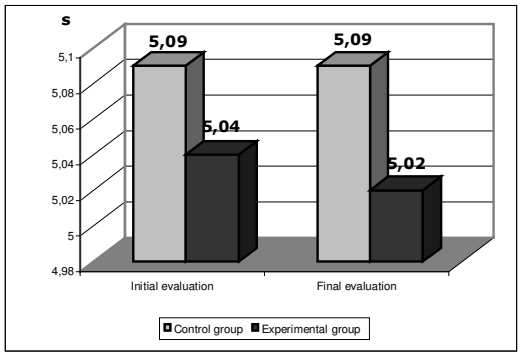

Figure 4. Dribbling through milestones

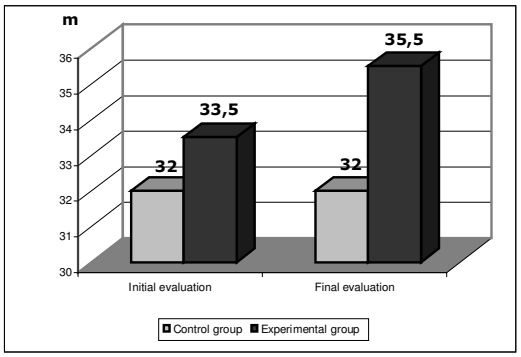

Figure 5. Throwing balls at a distance

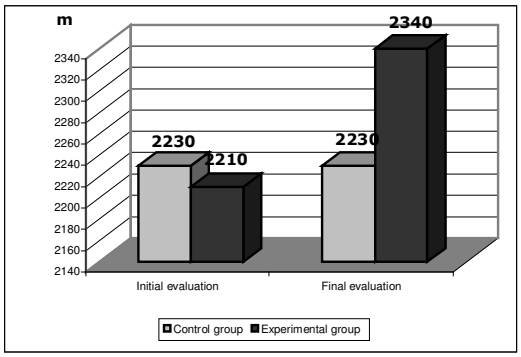

Figure 6. Cooper test

The analysis of the results

Value analysis of comparative results between the experimental group and control group on each physical sample preparation, show the following findings:

- The analysis of the results, on the physical, tests of initial and final values of the experimental group and calculating the significance test results showes that the majority of tests were obtained significant differences ($p<0.05$), which demonstrates the efficiency of the whole process of preparation, which means the applicability of systems used in the educational experiment.
- The most significant progress has been made to the following evidence: the place long jump ($p <0.01$), throwing ball oina ($p <0.01$).This progress is obvious because the increased capacity of

muscle contraction and from here the greater power in the legs but also the capacity for coordination between contraction and relaxation.

- Note that defining the mean value analysis to initial and final testing in the experimental group we find that in most samples and control rules are significant differences ($p<0.01$), demonstra-ting 80%, the progress made is due to the experimental program implemented.
- The best results from the experimental group were recorded to test the ability of expressing fast contraction of the muscle groups: the place long jump ($p<0.01$), throwing balls oina ($p<0.01$).

The analysis of the results, on the physical tests, show that the control group in any of the final tests, compared with initial tests were not significant differences.

This progress less obvious is the fact that in the control group was only insisted on general physical training and not a muscle preparation that will ensure continuity in training athletes and not just shift control samples.

Note that we can say that the defining drive systems for the experimental group and have proven effective, it demonstrated the fact that the results of the samples and control rules, in the experiment showed significant differences compared to control group ($p<0.01$).

Conclusions

Study literature pays attention to the issue of training teenage players general physical preparation and relatively few that specifically, emphasized in existing programs are put on physical training, especially on the tempo runs, while developing specific handball force the legs and the upper bears a character occasionally require new interventions and methodical nature.

Study and experiment results allow us to determine average values inferior. We believe that the means stretching may have beneficial effects on driving performance of teenage players (17 to 18 years).

Certifying results of the experiment have demonstrated poor performance in the experimental group on physical training, which served as a starting point to develop training program that means stretching occupies a special place for muscle training device specifically trained to work hanbalistic training period.

Application means stretching in the training program in formative experimental approach showed that the final test, compared to initial test, that the subjects in experimental group are progressing most physical evidence at a significance threshold of 3.1% ($p<0.03$ - 0.01).

The methodology applied has proved successful in the situation of pedagogical experiment conducted, the results of the experimental group physical training conducted, the results of the experimental group physical training had reached record high values.

To highlight the evolutionary process of qualitative indicators, the results recorded for the experimental group compared with control group data, highlight the application of stretch means that a direct and positive influence at the muscle preparation.

We believe that the experimental methodology and results of program implementation investment approach has enabled us to achieve our goals before, confirming our hypothesis about why the application of stretching resources in training teenage players (17-18 years), will help increase their level of physical training.

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