

SPECIFICS OF TRAINING FOR VOLLEYBALL TEAMS IN SECONDARY SCHOOLS WITHIN THE FRAMEWORK OF PHYSICAL EDUCATION ASSEMBLY CLASSES

C. NICULCEA¹ I. TURCU²

Abstract: *Volleyball is a permanence within the physical education classes, beginning with the fifth grade, but also within assembly training, in order to accomplish the objectives of the curriculum, but also to go in for competitions organized by National Olympics of School Sport. Girls prefer this sport because they are more sensitive and delicate, there is no physical contact between opponents (because there is a net and two courts) and there are less technical elements. The school representative has had notable results because highly specific means have been selected during the initiation step, according to the particularities of secondary schoolgirls. During this research stage, the following has been demonstrated: the level the secondary schoolgirls can reach in assuming, practising and applying technical procedures specific to volleyball while playing the game.*

Key words: *volleyball, specific, tests, procedures.*

1. Introduction

Modern volleyball is one of the most popular sports among the sports lovers in the whole world. Volleyball is one of the most widespread games played as a pastime, a means to do some workout, but mainly as a sport.

Volleyball is a sport game invented in 1895 by William G. Morgan, a YMCA physical education director at Holyoke College in Massachusetts, USA. The new game called *Mintonette* was created as a pastime and took some of its characteristics from tennis and handball. It

changed its name into volleyball- its current name, only one year after it was invented [4].

Volleyball came in Romania after the First World War, in 1920, shortly after its appearance in Europe. It spread mainly among students and school pupils, being played in Bucharest and some other cities in the country: Ploieşti, Constanţa, Sibiu, Braşov and Timişoara.

Coaching for volleyball implies the coach to be extremely careful when choosing the initial exercises, especially if the fifth graders have not had any training playing a team game in general and

¹ School no. 27, Braşov.

² Faculty of Physical Education and Mountain Sports, *Transilvania* University of Braşov.

volleyball in special, this lacking can lead to rejection from students, especially because volleyball is not an easy and approachable game as we noticed it is sometimes described in specialty works.

Because of its various forms of practice (technical and strategy elements), it should be a permanence within the physical education classes, in order to accomplish the objectives of the curriculum, but also to discover high- level sportives.

Rule changes make the game more dynamic and satisfactory for players. Through its techniques and strategies, through strong and precise strikes of the ball, volleyball contributes to develop the movement and propellent assets of the players, to improving their basic propellent skills and increasing their overall movement speed [7].

Psychologically, volleyball can be described as a sport game that elicits almost entirely the mental activity of the players. Out of the behavioral and cognitive processes mostly required, we can mention attention (stable visual attention, multitasking and divided attention), cognition (strategic thinking) and imagination. Required affective quality: resistance to emotional experiences; required moral qualities: teamwork, cooperation and responsibility; volition characteristics: initiative, discipline, resoluteness, perseverance, courage, determination [6, 8].

As a sport played both outdoors and indoors, it has a great educational value. Playing volleyball induces children's physical and mental development, it makes them more energetic and handy, stronger and effort resistant [7].

1.1. The Reason for Choosing the Theme

The reason for choosing the theme is consequential to the intention to mark out the fact that volleyball, because of its

various forms of practice (technical and strategy elements), it should be a permanence within the physical education classes, in order to accomplish the objectives of the curriculum, but also to discover high- level sportives.

We work in a school where many children, especially girls love this sport and come to assembly classes for the pleasure of it. Girls prefer this sport because they are more sensitive and delicate, there is no physical contact between opponents (because there is a net and two courts) and there are less technical elements.

Compared to other sports, volleyball requires more technical and strategic knowledge, less technical elements, but because the movements are unnatural, they are more difficult to assume. The rule changes (each error is awarded one point, a player touching the net is no longer considered an error) make the game more dynamic and satisfactory. This sport has a final objective: students participate in competitions organized by the Olympics of School Sport.

1.2. Hypothesis of the Research

- The representative school volleyball team will have notable results if we use methods highly specific to secondary school age players
- Using methods highly specific to secondary school age players during our assembly classes will determine accessibility and active participation of all players.

1.3. The Objectives of the Research

The current research has objectives related to:

- Using the most appropriate methods for efficient assumption of technical

procedures and applying them in the game

- Adapted game development according to the players' particularities
- Reducing the time allocated to initiation as a result of specific procedures and methods
- Practice adapted to school resources and conditions

1.4. The Tasks of the Research

- Theoretical documentation and study of specialty work
- Choosing the appropriate methods of research
- Applying the system of operation to the practice
- Annotations about the game during the training or assembly classes
- Measurements, tests
- Data analysis and interpretation
- Reaching the conclusion of the research

1.5. The Purpose of the Research

The purpose of the research is to mark out the level the secondary school students reach while attempting to assume the technical procedures of the volleyball game within the classes of sport assembly and to apply them to their game.

2. Organizing the Research

The experiment took place in September 2013 to June 2014 and September 2014 to April 2015 applied to a selection of students in grades 5A,B, C, D (a total of 10 students) at School no. 27 in Braşov.

Observation was one of the methods and techniques of the research. Observation worksheets were filled in and they allowed us to fulfill a quantitative and qualitative

analysis of the data thus obtained. These worksheets contained entries intended to register the following tests [3, 4], [9]:

A. Physical tests:

Standard fitness tests:

- Running speed over 50m upright posture
- Long jumps/ short approach jumps
- Endurance running over 600m
- Throwing the rounders ball
- Push ups with bent arms
- Sit ups – number of executions in 30 seconds
- Dexterity and speed exercise
- Coxo-femoral mobility in flexion - hamstring extensions

B. Specific tests

- jumping jacks
- lateral walking 3m (10x3m)
- jump serve -whole execution
- forearm pass- indicative exercise
- setting drills- hitting the ball with two hands against the wall

To accomplish this experiment some series of tests were applied twice: once at the beginning and the second time at the end of this experiment.

The aim was the reaction of the group at the specific and non specific volleyball drills used during the sport assembly classes. After the initial test was applied and analysed, the serve receive system was chosen- Formations included designated player positions with skill specialization. The students level, the timetable configuration (1 class/ week), the setting conditions- the classes took place outdoors not indoors, all these did not allow a different, more advanced serve receive system. The main particularity of this system is that the practice is versatile.

Priorities:

- improvement of the technical level by means of developing the basic technical procedures
- designation of player positions with skill specialization- implies a foreground approach of some technical procedures
- strategy improvement within the chosen system for beginners- with two formations, the offensive system and defensive system.

Offensive systems - the formations include designated player positions with skill specialization and also several different attacking schemes.

- the positions of the players during the fixed schemes
- to rotate and cover the whole surface of the court
- to divide the court in equal area
- to be able to have permanent visual contact with the player who serves

Defensive systems -the formations used by the defense to protect against the ball being grounded into their court by the opposing team. There are also several different blocking schemes teams can employ to disrupt the opposing teams offense.

- To establish which players are responsible for which areas of the court depending on where the opposing team is attacking from.
- The best placement in the court, in the first area or second area, back row or front row.

Themes:

- Adaptation to the ball, the court and facilities necessary to a volleyball game.

- Learning the basic positions, movements and stops specific to passes or spikes, offense or defense.
- Learning the overhand pass, where the ball is handled with the fingertips above the head, in order to pass it.
- Learning the bump set, when the ball is hit with both hands in an attempt to take possession of the ball.
- Using the procedures of hitting the ball during dynamic training games, specific to volleyball.
- Learning the games: 1×1 on the 3 / 3m court and 2×2 on the 3 / 4 m court, with serves, pass and set.
- Learning the rules and applying them to the game: winning the points, winning the set and winning the match
- Learning the positions and respecting them: Setter, Hitter and Defensive Specialist.

To have accurate results that reflected the students' evolution, the same tests were applied in the end. For a facile comprehension and a clear illustration and comparison of the data, the results were placed in a table and in a chart.

The final tests lasted three days just like the initial ones in order to avoid students' extreme tiredness and thus inconclusive results. No other tests were taken the days of these tests so that the students were rested.

3. Data Processing

Data display, processing and analysis after the experiment were attained mathematically and statistically, using the average. The average was calculated after the initial and final tests. The values of the pointers are displayed in the table below:

3.1 .General Tests

Results after initial and final tests – general tasks

Table 1

No. issue	Pointers	Initial tests	Final tests	Δ Ft-It
1	50 m flat (sec.)	8,7	8,21	-0.49
2	Forward jumping (cm)	170.5	190.2	19.7
3	Throwing the rounders ball (m)	20.3	27.8	7.5
4	Pushups (sec)	60	71.7	11.7
5	Crunches (no.executions)	23.2	26.1	2.9
6	Dexterityandspeedexercise (sec.)	11.82	11.42	-0.4
7	Mobility (cm)	61.0	66.3	5.3
8	Endurance (sec)	146.2	136.1	-10.1

We will mark out below the graphic representation of two general tasks: push ups and dexterity and speed exercise. The average values for *push ups with bent arms* indicate 60.0 seconds initially and 71.7

seconds in the end. The values increase with more than 11.7 seconds between the initial and final tests, which represents a significant improvement.

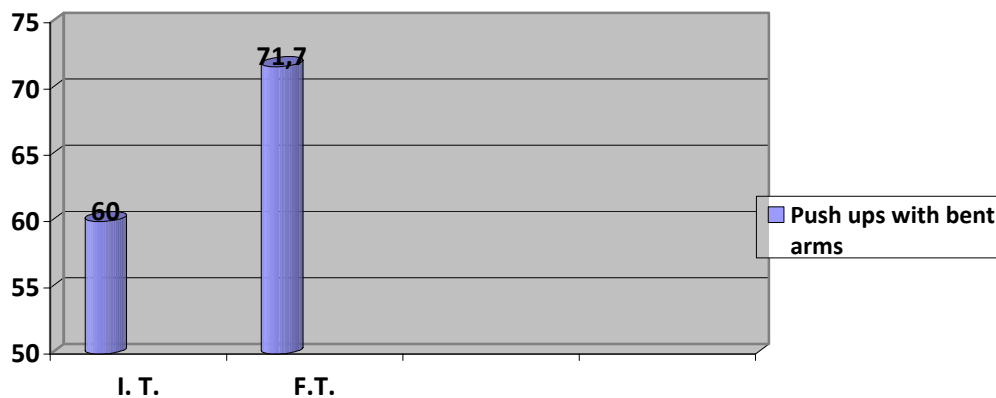


Chart 1. *Results after initial and final tests– Push ups with bent arms*

The dexterity and speed exercise which was timed assays mainly the speed of execution speed and specific movement patterns but also coordination ability imposed by often stops, changes of direction, touching the markings, etc.

Initial tests indicate average values of 11.82 seconds and the final tests have values of 11.42 seconds. The values increase with 0.4 seconds between the initial and final tests.

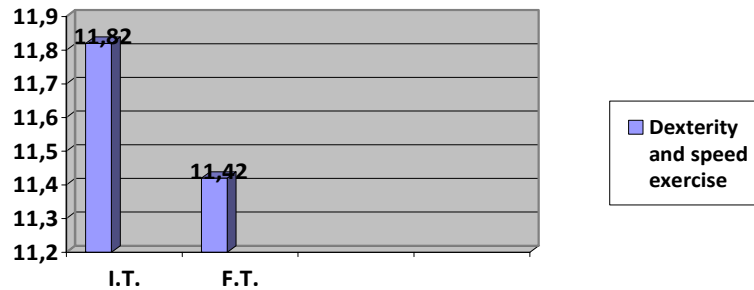


Chart 2. Results after initial and final tests– Dexterity and speed exercise

3.2. Specific Tests

Results of initial and final tests – specific tests

Table 2

No. issue	Pointers	Initial tests	Final tests	Δ Ft-It
1	Jumping Jacks (no.executions)	32.5	35.6	3.1
2	Lateral walking 3m (10x3m)	12.9	12.4	-0.5
3	Jump serves –out of 10 executions	6.22	8.5	2.28
4	Setting drills- hitting the ball with two hands against the wall- in 30 seconds (no.executions)	28.3	36	7.7

Out of the four specific tests, we chose to illustrate in a chart only two. The average values for *Jump serves –out of 10 executions* indicate an average of 6.22 executions initially and 8.5 executions in the end. The values increase with more

than 2.28 executions between the initial and final tests, which indicate that students have improved their initial number of execution with at least two correct executions.

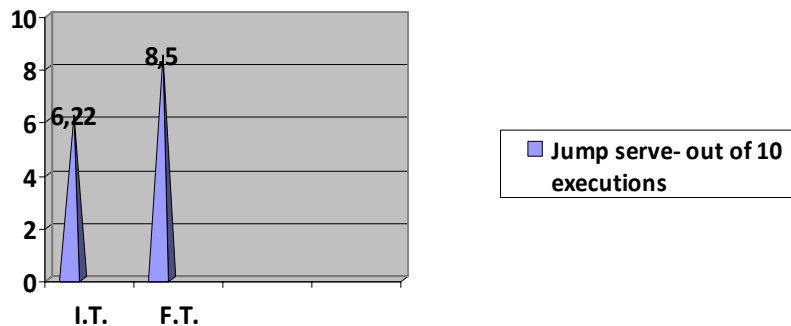


Chart 3. Results after initial and final tests– Jump serve- out of 10 executions

The average values for *Setting drills- hitting the ball with two hands against the wall- in 30 seconds* indicate an average of 28.3 executions initially and 36 executions in the end. The values increase with more

than 7.7 executions between the initial and final tests, which indicates that students have improved their initial number of execution with at least 7 correct executions.



Chart 4. Results after initial and final tests- *Setting drills- hitting the ball with two hands against the wall- in 30 seconds*

4. Conclusions and Recommendations

4.1. Conclusions

4.1.1. Because we chose means with a high degree of specificity and using them in agreement with the particularities of secondary school students, we achieved the following results:

All the values at general tests done have improved. For example, at *Speed Running over 50m flat* the improvement was of 0.49 seconds, at *Sit ups – number of executions in 30 seconds* -3 more correct executions than at initial tests.

Specific tests: The average values for *Jump serves –out of 10 executions* the values increase with more than 2.28 executions between the initial and final tests, for *Setting drills- hitting the ball with two hands against the wall- in 30 seconds* the initial number of execution has improved with at least 7 correct executions.

The results at Competitions organized by National Olympics of School Sport have

improved remarkably: we obtained the qualification to participate at the county phase of this competition, the second place at this phase of the National Olympics.

4.1.2 After using means with a high degree of specificity while training and after a thorough analyse of this use in observation worksheets, we obtained:

- a greater accessibility for secondary school students to participate at assembly classes and thus their participation increased with 80 %.
- a 70% increase of effective training time within assembly classes.

4.1.3. After using means with a high degree of specificity while volleyball training, we noticed improvements in both general and specific movement abilities of the students in the school representative volleyball team; and thus a better timing at fulfilling the objectives of the curriculum.

4.1.4. After the training, the school representative volleyball team became more homogeneous and the group cooperation improved.

4.2. Recommendations:

- 4.2.1. For better and faster results as far as school volleyball is concerned, we suggest using means with a high degree of specificity within assembly classes;
- 4.2.2. For a greater accessibility for secondary school students to participate at assembly classes, we suggest using means with a high degree of specificity while initiating the training, corresponding to the particularities of secondary school students
- 4.2.3. During the training, further volleyball practice besides the programme of school assembly classes must be taken into account because thus we continue the process of assuming, applying and mastering the new elements and procedures and therefore movement abilities are improved on every account.

References

1. Balint, L.: *Didactica generală a educației fizice și sportului (General Didactics in Teaching Physical Education and Sport)*. Braşov. Editura Universității Transilvania din Braşov, 2002.
2. Balint, L.: *Teoria Educației Fizice și Sportului (Theoretical Approach on Physical Education and Sport)*. Braşov. Editura Universității Transilvania din Braşov, 2002.
3. Dragnea, A., Bota, A.: *Teoria activităților motrice (Theoretical Approach on Locomotion Activities)*. București. Editura Didactică și Pedagogică, 1999.
4. Grapa, F., Mârza, D.: *Volei în învățământ (Volleyball in Education)*. Bacău. Editura Plumb, 1998.
5. M.E.C.: *Ghid metodologic de aplicare a programei de educație fizică și sport în învățământul gimnazial (Methodologic Guide for Applying the Curriculum in Physical Education and Sport in Secondary School Teaching)*. București, 2001.
6. Prescorniță, A.: *Antrenamentul sportiv-O viziune integrativă (Sport Training- Integrative Aspects)*. Braşov. Editura Universității Transilvania din Braşov, 2006.
7. Prescorniță, A.: *Cartea antrenorului de volei (The Volleyball Coach Book)*. Braşov. Editura Universității Transilvania din Braşov, 2008.
8. Tohănean, D.I., Chicomban, M.: *Personality and performance sport*. In: Ovidius University Annals, Series Physical Education & Sport/Science, Movement & Health, 2010 Supplement, Vol. 10 Issue 2, p.609-613.
9. Turcu, I.: *Metodologia cercetării în educație fizică și sport (Methodology of Research in Physical Education and Sport)*. Braşov. Editura Universității Transilvania din Braşov, 2007.