



Science, Movement and Health, Vol. XV, ISSUE 2 Supplement, 2015  
September 2015, 15 (2, Supplement): 547-554

*Original article*

## S.RUGBY – THE FIRST STEP TO MINI-RUGBY

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### Abstract

*Aim:* Playing mini-rugby at a very young age (9-10 years) increased in popularity in recent years by organizing international tours. Being a combination of fun and energy it is nowadays the official version of rugby for school groups (6-9ani). The purpose of this writing is to present a set of methods and means of instruction to enable children to discover the charm of the game with the oval ball at a young age and will receive, in graduated steps, those skills required to participate in the mini rugby game.

*Methods:* Sixty youth childrens were divided into two groups: Experimental (n = 30) and Control (n = 30). During the experiment that lasted six months, the subjects of experiment group and the control group have worked on training curriculum developed by the FRR. In addition, the experimental group worked after a schedule developed by us. Each group trained three times a week. Parameters evaluated: three for assessing the specific motor skills / tests: passing on the spot (1 min); passes - sprint; commute; height; weight; scale.

*Results:* The results show that beginners training program shall be conducted on the basis of projects which take into account the peculiarities of age and of the functional possibilities of children's training. During the 6-9 years S.Rugby game, must have a share of at least 50%. Preparing children to focus as much on gaming and relay with specific elements of the rugby game.

*Conclusion:* S.Rugby is a means of training specific to this age because there are no direct contact with the opponent and do not require expensive material base

*Keywords:* S. Rugby, Games; passes – sprint

### Introduction

Nowadays Rugby activity in our country has experienced a period of decline, finding that emerges from the results obtained in the last period of our rugby players. The competitiveness of our rugby is below its real possibilities, as it could not achieve the best conditions making the level of the whole human potential lower than the real potential of our country, Romania.

Rugby is considered one of the most male sports. Force, energy waste, speed, combat, are the elements that stand out during a game, doubling the team spirit, the fighting spirit, the courage and the fortitude which manifests itself in the behavior of every player on the field. Good health, a balanced overall physical development and special physical training is required from those who want to practice this sport with the oval ball.

To help extend the game globally, International Rugby Board has published several books describing the different methods of teaching in schools and rugby clubs. Initially, advanced products

for rugby players and performance, textbooks have proven to be of equal value to teachers and coaches, responsible for introducing rugby to students 7-9 years.

Rugby game in the very young (7-9 years) has grown in popularity in recent years by organizing more international tours. So a new concept was born - 'tag rugby' or S.Rugby.

"S.Rugby" is a fast physical activity without direct contact with the opponent that appeals to both boys and girls, or mixed teams. Being a combination of fun and energy moving date, tag rugby is now the official version of rugby for school groups.

What is the strap tag

The belt worn around the waist of which are attached two colorful scarves material belt caught by the "Hedgehog". Scarves (TAGS) are locked side to side (hips). Belt with two scarves (tags) are wearing over the shirt, which must be brought into shorts or trousers. The teams are distinguished by the color tag.

The purpose is to present a set of methods

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Received 14.03.2015 / Accepted 15.04.2015



and means of instruction to enable children to discover the charm of the game with the oval ball at a young age and will receive, in graduated steps, those skills required to participate in the mini rugby game.

Physiological and psycho-pedagogical bases of modern sports training for children

Since the child is not an "adult in miniature", he should be treated differently in the training process. Each stage of growth and development of the child, age peculiarities specific rules should be familiar to coach.

The process of human growth and development is done in stages, phases and periods that characterizes the entire route of life. While growth is an expression of quantitative phenomena of scale body size, quality development processes means that marks the achievement of higher levels of functionality. During growth and development, the various tangible elements present differences from one age to another.

Correct assessment of the level of development has three main aspects: morphological, physiological and psychological.

So, optimizing sports training to children and youth therefore requires knowledge of the peculiarities of their growth and development at different stages. Only on this basis can develop an age-appropriate sports training process and the level of development, needs and wishes expressed by children and juniors.

Peculiarities of physical effort to children 6-9 years

The need and desire of children movement - their motor activity, are important stimules for the harmonious development of their body. Satisfying the need of movement, must take into account the different morphological and functional apparent at this age; features which require compliance with certain principles regarding dosing effort so that it (exercise) to bring really contributing to the harmonious development of the organism as children. At this age, characteristics of psychophysical are extremely favorable acquisition of motor skills. These features must be used to teach a large number of fundamental techniques, coordinated rudimentary at first, but after being perfected. Multidisciplinary training should be a major concern.

#### Sports training methods

Sports training methods are ways that coaches lead the educational process in order to achieve objectives. In general, "method" is, in Dragnea et al. (2006) view 'linked rational structure operations to achieve the objective.

Training methods in sports games has a number of features, which are given by: motor structure of the game, game components preponderance addressed (technical, tactical, bodily, mental, theoretical) manner of organization of activity, effort dynamics, interval of rest and the objectives and tasks of teaching (learning, improvement, development, education etc).

Manno (1996) argues that is not developing driving skills and motor ability do not learn unless athletes proposed methods are appropriate opportunities and accompanied by all the necessary concrete putting them into practice.

Choosing teaching methods in teaching may depend on several factors among which:

- nature of the content;
- teaching materials available;
- number of athletes on the team;
- venue with characteristics;
- time available;

the assessment being planned

#### Orientation methodical association

Knowing both player performance profile and the child and junior (see National Strategy developed selection of Romanian Rugby Federation), will establish concrete objectives that the organic connection between existing skills and are striving (Mihalache, 1988). In this sense, the timing means and tasks will be performed at a level becoming higher, but always starting from the age-appropriate: 10 to 12 years of age:

- Organic multilateral physical development;
- Developing the habit of pleasure game and technical - tactical elementary.

#### Methods

The sample investigated included a total of 60 children, divided into 2 groups - experiment (N = 30) and control (N = 30).

The experimental group consisted of children aged between 6 and 9 years, students from Middle School Cogealac and Middle School Ghindărești.

The control group was represented by children aged between 6 and 9 years, students from Middle School Săcele and Middle School Limanu.

#### Place and conditions of the research

Type pedagogical experiment was conducted at Middle School Cogealac and Middle School Ghindărești.

The experiment was conducted from May 2014, when initial testing was performed and ended in September 2014 when the final test carried out on



6 indicators: 3 anthropometric parameters and 3 for assessing the specific motor skills / tests and games.

During the experiment the subjects of experiment group and the control group worked on elaborate training program developed by FRR. In addition, the experimental group worked after program developed by us.

Measurements and tests used in research:

- 3 for assessing the anthropometric parameters / measurements:
  - height
  - weight
  - scale
- 3 for assessing the specific motor skills / tests:
  - passing on the spot (1 min);
  - passes - sprint;
  - commute.
- Training programs
- Games of Movement

#### Tests and analysis methods and data processing

Mathematical and statistical tests

Since we used descriptive statistics:

- Arithmetic mean ()
- Standard deviation ()
- Coefficient of variation (CV)

Since we used inferential statistics:

- Meaning the difference between the average t-TEST (STUDENT)
- Linear correlation coefficient Bravais-Pearson (r)

Analysis of statistical and mathematical indicators anthropometric indices

In order to characterize the 2 groups of subjects were collected data relate to the height, weight and dimension.

The height of the subjects of the two groups shows an average of  $141.10 \pm 3.97$ cm in group  $141.00 \pm 4.14$  cm experiment and control group in the cases registered significant differences between the two groups ( $p > 0.05$ ) in testing original. The final test average values obtained are  $141.80 \pm 3.67$  cm to  $141.66 \pm 3.81$ cm experimental group and the control group.

In the group experiment, analyze results between the initial and final test demonstrated a significant difference in favor of the final test ( $t = 6.636$ ,  $p < 0.01$ ). The same result was observed in the control group ( $t = 6.600$ ,  $p < 0.01$ ). The reason for these differences is the fact that, naturally, the children increased in height.

Analyzing the degree of homogeneity of the groups, we see, in both trials, a coefficient of variation of less than 10% which shows that we have two groups with high homogeneity, this meaning that we have a small dispersion.

We note that body weight index averages the two lots close experimental group showing a mean of  $32.51 \pm 3.19$  kg and the control group with an average weight of  $33.03 \pm 3.35$  kg ( $p > 0.05$ ), testing original. The final test average values of this parameter are  $32.63 \pm 2.85$ kg in the experimental group and  $33.28 \pm 3.25$  kg in the control ( $p > 0.05$ ). Statistical analysis of media between initial and final test showed no significant differences either in the experiment group ( $t = 0.215$ ,  $p > 0.05$ ), nor in the control group ( $t = 0.312$ ,  $p > 0.05$ ).

Analyzing the values of the coefficient of variability we observe that, in this case, two groups with high homogeneity of the subjects in this indicator somatic ( $< 10\%$ ), which means that there is a small dispersion.

Wingspan subjects of two lots, initial testing, an average of  $140.33 \pm 3.50$  cm in the experimental group and  $140.03 \pm 4.46$  cm in the control group not registered significant differences between the two groups ( $p > 0.05$ ). The final testing, mean  $140.53 \pm 3.54$  cm are in the experimental group  $140.40 \pm 4.09$  cm and in the control group. Also in this case were not significant differences between the two groups ( $p > 0.05$ ).

In the group experiment, analyze results between the initial and final test demonstrated a significant difference in favor of the final test ( $t = 2.222$ ,  $p < 0.05$ ). The same result was observed in the control group ( $t = 3.000$ ,  $p < 0.01$ ).

Analyzing the degree of homogeneity of the group, we observe a coefficient of variation of less than 10% which shows that we have two groups with high homogeneity of the subjects in this indicator somatic, low dispersion.

In conclusion, analyzing the 3 indicators somatic we can say with certainty that between the experimental and control group no statistically significant differences from this criterion.

Develop training programs

Objectives and operational structure for general physical preparation

Training Objectives :

- improving the functioning of all body systems ;
- muscle analytical development of limbs, upper abdomen and back ;

Operational structures to develop general strength



- Alternations walk with jogging tempo 50 % ;
- Runs on varied terrain , 50 % -75 % in tempo ;
- Running time period in tempo 50 % ;
- Uniform tempo runs : 150m, 400m, 50 % -75 % in tempo .

Operational structures to develop general strength : abdomen and back , upper torso states :

- From supine : lifting the torso ;
- Supine : lifting legs 45 degrees and their shear ;
- Prone with his hands under his chin : arching torso back , with lateral carrying arms , return to starting position ;
- Trellis hung on lifting knees to the chest and lowering them ;
- Hung on trellis , leading trunk extension feet as far back ;
- 2-4 players standing reference medicinal ball throw from chest and then overhead from each other .
- Hung on the stand fixed : maintaining the position ;

Objectives and operational structure for specific physical training

Training Objectives:

- development and execution speed of response to various stimuli;
- travel speed development with departures from different positions;
- development of resistance in speed mode.

Operational structures for the development of reaction rate

- Supine or ventral: the signal pickup in standing;
- Of standing: the signal passage lying or sitting, squatting or support in arms;
- Exercises carefully, starts from different position, rapid movements or auditory beeps.

Operational structure for developing travel speed

- Running game ankles on distances of 5-10 m, in tempo 75%;
- Running with knees up on distances of 5-10 m, in tempo 75%;
- Running launched on distances: 10, 20, 30m, in tempo 100%;
- To start standing on running distances: 5-10 m, 100% tempo;
- Running low on-start distances: 5-10 m, 100% tempo;
- Downhill runs, the distances: 5-10 m, 100% tempo;

Operational structure for developing execution speed

- Throwing and catching up with her hand speed ;
- Fast Running with knees up ;
- Running speed over distances of 5, 8, 10 meters ;
- Starting off in speed.

Operational structure for developing and improving agility

1. Bypassing (cones) by various processes from running and jumping school
2. Running in high speed through agility staircase .
3. Move agility ladder through various processes of running and jumping school :

Games of Movement

1. " Scoring a try " - individuale- running and defense technology development
2. "Follow the leader " - Develop individual technique - pass and support
3. "Four against one " - Consolidation - run, pass and decision
4. " Chain Reaction " - Develop individual technique - pass, support and grip
5. " Change location " - Develop individual technique - pass, moving in the field
6. "Game four assists" - Develop individual technique - pass
7. " Relay rugby player " - Develop individual technique - assists, feint of pass, changing direction of running

1. " Scoring a try " - individuale- running and defense technology development

Description of the exercise:

- field 7 / 7-10 / 10 m.
- Groups of 5 players
- All players will wear tags
- A balloon every group.

A player will be nominated as a defender in the middle of the field. One by one, the attackers tried to pass the defender and attempt to score beyond the other line, not to be ripped tag. If the defender still manage to wrest tag will receive one point. If the striker will be able to score a try without defender to snatch tag, will receive one point.

They will work all four strikers and after the defender will be changed.

Points of trained - forwards:

- Slot search
- Avoiding defenders
- Players must always keep two hands on the ball
- Easier - defender will leave the corner
- Harder - reducing the size of the field

Points of trained - defenders:

- Look at hip striker - Focus on the tag.

2. "Follow the leader " - Develop individual technique - pass and support

Description of the exercise:



- Field 20/20 m .
- Groups of 5 players
- A balloon every group

The leader - carrying the ball can run in either direction. The remaining group should follow in string ("Snake") . When the teacher shouts " pass " the ball carrier stops and stretching hands, pulling the ball sideways so the next player can come to take him after that run and became the leader of string.

Former carrying the ball is placed at the end of the string.

Things to train :

- Follow the leader, but have referred a distance between players
- Will try to catch the ball without falling .
- Harder - changing the transfer of the ball , placing the ball on the ground.

### 3. "Four against one " - Consolidation - run, pass and decision

Description of the exercise:

- Field 10/30 m
- Groups of 5 players
- Three groups each field
- All players will wear tags

The ball carrier try to score a try moving defender. Support players trying to fit the wearer . If the ball carrier is snatched his tag , it must pass a support player . The defender must give back the tag to striker and could re-enter the game and try to stop new striker.

Points of trained - forwards : ball carrier :

- Slot search
- Avoiding defenders
- Passing the ball if he is snatched tag.

Points of trained- the player support :

- Must position themselves behind the ball carrier in order to receive the ball.

Points of trained - defenders :

- Look at hip striker - focus on tag

### 4. " Chain Reaction " - Develop individual technique - pass, support and grip

Description of the exercise:

- Dividing the space 20/20 m into two
- 3 groups of 5 players will work in the area of 10/10 m
- A balloon for each group of 5 players

The exercise will run as follows:

- First player leaves standing position
- Second players leaves sitting on one knee
- Third player leaves sitting on both knees
- Fourth player leaves lying facial

- Fifth players leaves sitting cross-legged

When teacher sign, the players start to run forward as quickly and passing the ball to the right. The start position will facilitate backward pass. The exercise will continue with left pass. Players will change starting position after each execution.

Points of trained:

- The ball carrier must have both hands on the ball
- Easy pass, to the future position
- Asks ball player support
- Player support arms outstretched, ready to receive the ball
- Every time you try to keep the ball carrier return position
- Players must communicate among themselves
- Harder: No.1 player runs to the end of May skill group and achieve it touches the ball

### 5. " Change location " - Develop individual technique - pass, moving in the field

The game is played on a field of 30/30 m. The players is divided into groups of five players. Players are placed in parallel lines at a distance of 3-4 steps between them. The interval between the players of the same group will be at 2-3 meters, each place is marked by cones, and further each group will mark five points on the field, keeping the same distance.

The first player in each group receives a rugby ball. The teacher sign to start passing to the right up to the last player and he will resume with the passing to the left until the first player returns the ball. It starts again to pass to the right, but as soon after he pass the ball, he will move to behind the formation in the direction of the pass and so he became the last player. The same will be executed and the next four players. The pass will stop when you reach the starting position.

Variation:

- Can run forward on the distance of 30-40 meters. This game is suitable for beginners within the pass assimilate and sprint entrainment.

Methodic:

- Head up, eyes to the ball carrier
- Both hands on the ball

### 6. "Game four assists" - Develop individual technique - pass

Defining a space in the field -20/20 meters divided by a central line. On both sides of the central line is an area of 5 meters which marks the "central area". Each half of field is occupied by a team of 5 players. Rugby ball shall be awarded by assigned by



lot. A player from the team that won the ball, throw the ball into the opponent's court, in such a way that it can fall into the "middle space". Pass runs outside the "central area". Opponents must catch the ball in flight and execute four pass assists on the place backwards, moving players to form the necessary device.

First team, as soon as the ball went into opposition field, sent a player who has the task of reaching the ball or who is in his possession. The player who receives fourth pass launches the ball in the opponent field. Players sent to the opponent's field after it no longer can intercept the ball and return with speed to their own field and the device is held four assists pass. For mistakes in the execution, the team is penalized. The game ends when one team, totaling some penalty points is declared the loser.

Rules:

- Mistakes penalized:
- Throwing a ball outside the "central area";
- Fall ball in his own land;
- Touching the opponent of the player who is on the ball possession or intercepting the ball ;
- Moving with the ball in one hand ;
- pass forward.
- After each mistake the ball it is brought into play from opponent team.

This game is recommended for beginners, with some technical skills formed in the learning and drive the basics of tactics .

7. "Relay rugby player" - Develop individual technique - assists, feint of pass, changing direction of running

The field defines a circle with a diameter of 5-6m, which is placed a team components (A), six players. Around the circle is marked by cones a running route to the other team (B) equal in number to the first. Players Team (B) aligns with one wing at the beginning of the route. The teacher's signal, players from A team began passing the ball on circle and counting passes which is made. Meanwhile, in turn, form the relay, team B players go through the route that includes running with ball in hand and change direction, etc. When the last player of Team B finished the route, team A stop the pass and communicate the number of passes. Then the teams switch roles between them. Winner team who will perform the highest number of assists.

Rules:

- Whether during the passing ball is out of hand and touches the ground, that pass shall not be counted;

- Each failure route brings 5 points to the team who pass which are finally added to the number of passes.

In the sample "passes on the spot", the calculation did not show statistically significant difference between the two groups in the initial test ( $t = 1.234$ ,  $p > 0.05$ ). Instead, the final testing difference between means was significant in favor of experiment group ( $t = 7.352$ ;  $p < 0.01$ ). Also, the group experiment, analyze results between the initial and final test demonstrated a significant difference in favor of the final test ( $t = 3.006$ ,  $p < 0.01$ ). The same result was observed in the control group ( $t = 2.666$ ,  $p < 0.05$ ). In this case, we can say that the training carried out have led to significantly improved values obtained from the testing end to the original in both groups. The fact that the experimental group showed significantly better values than the control, can be blamed on specially designed exercises and training applied in the experiment group who were chosen according to age peculiarities of children.

The values of the coefficient of variation of less than 10% indicates a high homogeneity both the experimental group and the control group. In this case we can say that the dispersion is small.

In proof " passes - sprint ", the calculation did not show statistically significant difference between the two groups either in the initial testing ( $t = 0.013$ ,  $p > 0.05$ ), nor in the final ( $t = 1.400$ ;  $p > 0.05$ ).

Also, the group experiment, analyze results between the initial and final test demonstrated a significant difference in favor of the final test ( $t = 2.600$ ,  $p < 0.05$ ). In the control group, however, the difference between the two tests is not significant ( $t = 1.500$ ,  $p > 0.05$ ). This can be explained by the fact that the exercises used to improve technical element "care", used in training the experimental group, yielded better performance.

The values of the coefficient of variation of less than 10% indicates a high homogeneity both the experimental group and the control group, so a small dispersion.

In proof "commute", statistical calculation did not show a significant difference between the two groups either in the initial testing ( $t = 0.017$ ,  $p > 0.05$ ) in the experimental group gained an average of  $12.89 \pm 1.09$ , and the  $12.90 \pm 0.82$  control nor in the final ( $t = 1.754$ ;  $p > 0.05$ ), where the average values were  $1.04 \pm 12.63$  and  $12.73 \pm$  experimental group  $0.81$  at the controls.

The experiment group analysis results between the initial and final test demonstrated a significant difference in favor of the final test ( $t = 2.800$ ,  $p < 0.05$ ). In the control group instead, the



difference between the two tests is not significant ( $t = 1.700, p > 0.05$ ).

This can be explained by the fact that the exercises used in training the experimental group, yielded better performance in this test.

The values of the coefficient of variation of less than 10% indicates a high homogeneity both the

experimental group and the group control. These CV values indicate a low dispersion.

Calculation of the Pearson correlation coefficient (r)

Table. : Correlation between the " passing on the spot (1 min) and passes - sprint

| Group<br>(N = 30) | Parameters                  |                    | Descriptor                                 |
|-------------------|-----------------------------|--------------------|--|
|                   | passing on<br>the spot      | passes -<br>sprint |  |
|                   | Correlation coefficient (r) |                    |  |
| Experiment        | 0.819                       |                    | Correlation<br>close, high,<br>significant |
| Control           | 0.663                       |                    | Correlation<br>moderate                    |

In the experimental group there is a significant correlation ( $r = 0.819, p < 0.05$ ), which means that there is a causal link between those two

parameters. In the control group, the value calculated for r is 0.663, which is a moderate correlation.

Table. : Correlation between "passes - sprint" and "commute"

| Group<br>(N = 30) | Parameters                  |         | Descriptor                                 |
|-------------------|-----------------------------|---------|--|
|                   | passing on<br>the spot      | commute |  |
|                   | Correlation coefficient (r) |         |  |
| Experiment        | 0.852                       |         | Correlation<br>close, high,<br>significant |
| Control           | 0.591                       |         | Correlation<br>moderate                    |

In the experimental group there is a significant correlation ( $r = 0.852, p < 0.05$ ), which means that there is a causal link between those two parameters - the more will train one of them, the

other values will increase. And in the control group value calculated for r is 0.591, which is a moderate correlation.

**Discussions**

In the selection of children for Rugby coaches must take into account the existence and degree of manifestation of hereditary skills, skills that still exists in a state early age.

Adopt an attitude by coaches to rigorous selection process and training of children who want to practice the game of rugby.

A training program for beginners should be conducted on the basis of projects which take into

account the peculiarities of age and driving and functional possibilities of children.

In training athletes 6-9 years, play tag rugby, must have a share of at least 50% as a means of training that does not involve contact with the opponent.

Preparing a child to focus as much on gaming and couriers with elements specific to the game of rugby.

In this context we consider that the old system of selection and training requires some



changes within the organization, which supports educational and economic performance in rugby.

We consider that the current system of selection and training has some outdated components, which leads us to believe that the combined application of the criteria would create positive effects on performance in rugby in the coming years. (Badea, Mitrea, 2009; Badea, 2004)

In rugby, players need to be very mobile in the field. This mobility is the movement forward, backward, sideways, jumping, sprinting, stopping, turning, etc.

The training program should aim at developing skill and power to execute these moves at the highest level.

Following implementation of this program has significantly increased the number of children who came to rugby. The program also applied from A.J. Rugby. The clubs in the region of Constanta has shown that the level of training children has increased significantly and they passed without major problems by practicing mini-rugby.

This program was presented to Romanian Rugby Federation who recently organized several competitions of S. Rugby in Romania. The program has been improved with FRR specialists and Faculty of Physical Education and Sport Constanta and National University of Physical Education and Sport in Bucharest.

Director of Development of F.R.R. Ciprian Popa and Moldova region, Balan Surmei Gabriela, rated this program and currently applies in the Muntenia region and Moldova, before being extended to the whole country.

### Conclusions

Based on studies of the literature found that there are very few materials that can guide the work of teachers in the selection and training of children 6-9 years for rugby.

Innovative elements:

- introducing tag rugby for children 6-9 years selection both in the county of Constanta and at the national level;
- significant improvement of the Romanian Rugby Federation program in the preparation of children 6-9 years;
- group of children to be composed of a maximum of 15 athletes, and duration of training sessions do not exceed 70 minutes.
- main component of training in rugby at this level is the physical training followed by technical training;
- play tag rugby training is a means indicated at this age because there are no direct contact with the opponent and do not require expensive material basis;

### Acknowledgements

For all of our participants from my study I want to say thank you.

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