

TRAINING MODEL DESIGNED TO STRENGTHEN AND IMPROVE THE PASS FOR JUNIORS 10 – 12 YEARS

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Abstract: *The purpose of this study is represented by the theoretical and methodical elaboration of a material intended for continuous use by coaches and teachers working with groups of juniors aged between 10 and 12 years. We propose an intervention in the training plan, starting with the study of specialized literature in the field of football and aiming to improve the methodology for teaching specific means but also the evaluation process of a model to be used. Also, the intervention in the training plan has as general objective the consolidation of the procedures and technical elements specific to the football game, but also the development of all motor qualities. The study is based on collaboration with coaches in this area who work with children aged 10 to 12 years, the goal being to conduct a theoretical analysis of the content of the passing game, to model the content of the training and to verify the effectiveness of a model intended to strengthen and perfect the passing game at the aforementioned age.*

Key words: *Football, planning, junior groups, training, training model*

1. Introduction

Football is considered by most people the “king sport”, representing a complete sport that harmoniously combines strength, intelligence, courage, boldness, and elegance of movements. Through these strengths, children, from the earliest age, want to practice this sport, to imitate their idols in the arena and who, most of the times, remain ecstatic that they manage to discover the secrets and beauties of the football game [4].

The etymology of the word “football” comes from the English “football”, where “foot” means “picior” and “ball” means “minge” in Romanian language. From this we can deduce the basic characteristic of this sport, namely that it is played by kicking the ball [9].

Starting from M. Rădulescu studies, football is described as a spectacular sports game, based on mastery, biological capacity, and health of practitioners, aiming to score goals in the opponent's goal and avoid receiving them [5].

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For the smooth running of the game, the International Federation of Association Football imposed a series of rules contained in a game regulation [1].

The composition of each team consists of 11 players arranged in compartments and positions as follows:

- A goalkeeper
- A line of defenders, these in turn being central and lateral
- A line of central and lateral midfielders
- A line of forwards who can be wingers or central forwards [7].

Considering the continuous evolution of football over time, M. Rădulescu and E. Cristea in their specialized paper "Football – Current Aspects of Junior Training" present us that the game based mainly on static tendencies aimed at covering the playing surface in attack and defense are no longer topical, the tendency being to be replaced by rules related to the dynamic aspect. Thus, rules such as "good use of players" or "covering the entire field" proved to be outdated by the requirements of the current game. However, we find in the modern game rules that are gaining more and more ground. Among them we can list:

- The continuous movement of players while the ball is in play.
- Maintaining a numerical balance in certain concrete game situations [5].

Another issue of great relevance in the game of football is the rapid transition from attack to defense, but also the interruption time imposed by the regulation [2],[10]. Thus, we notice that over the years the transition of the game from attack to defense has decreased, players being forced to adapt and possess knowledge and tactical actions that are required immediately so that the organization of the game does not suffer [8].

Football is both an ideal training method and a game of pleasure and fun [3],[6]. The most important benefits of football could be:

- Increased aerobic capacity and improvement of the cardiovascular system.
- Decrease body fat and improve tone.
- Increased strength, flexibility, and resistance.
- Increased muscle mass and bone strength.
- Improving health through walking, running and sprinting changes.

2. The Content of the Research

2.1. Hypothesis

Research hypothesis: it is assumed that the specific training of the passing game leads to the optimization of the players' playing efficiency.

The aim of the paper is to carry out a theoretical analysis on the content of the passing game, to model the content of training and to verify the effectiveness of a model intended to strengthen and perfect the passing game.

To study the established hypothesis and solve the given theme, it is considered necessary to solve the following problem:

- Analysis and characterization of the technique specific to the passing game.
- Knowledge of age peculiarities 10 – 12 years.
- Elaboration of a training model aimed at strengthening and perfecting the pass.
- Practical verification of the experimental model.

For the research, a homogeneous sample of 25 athletes aged between 10 and 12 years, playing at a professional club in Braşov County.

It is mentioned that a qualitative and not quantitative research was carried out, the training model being implemented at training between August 2023 and October 2023, and the monitoring of the results obtained being centralized and

functionally analyzed after each stage.

In implementing this model, the morphological, functional, physiological, and mental peculiarities of athletes aged between 10 and 12 years were mainly considered.

Anthropometric data for children 10 to 12 years old

Table 1

| Age (years) | Weight (kg) | Height (cm) | Chest perimeter (cm) |
|-------------|-------------|-------------|----------------------|
| 10 | 28.9 ±4.5 | 133.8±6.1 | 63.4±3.9 |
| 11 | 31.5±5.0 | 138.2±6.6 | 65.3±4.0 |
| 12 | 34.3±5.5 | 143.1±7.0 | 67.4±4.3 |

The objective of the experiment was to verify the effectiveness of a training model for specific passing plays.

1. Strengthening and perfecting the pass
2. Consolidation and refinement of pass-specific technical elements

To consolidate and refine the content of the passing game, the model shown below was used:

**TRAINING MODEL FOR SPECIFIC PASSING
GAME TRAINING**

Exercises to strengthen and refine the pass:

- Two-way passes from away across the pitch without taking over.
- Two-way passes from away across the field without taking over, exercise executed at speed.
- Two-way passes along the length of the court combined with taking over and driving the ball.

Passes in two: a player is in a delimited area and passes to the other in different directions forcing him to move quickly and pass precisely on the move.

Two players, placed 10m apart, execute away passes, along the length or width of the pitch as follows: player "a" passes diagonally, player "b" passes forward - on the return, the roles change.

Two players run one in front, the other

behind the first at 10m, player "a" sends the ball forward and on foot, player "b" sends it back to "a", and he launches it again.

Spool with passing the ball between 2 strings at different distances (direct passing or combined with takeovers and leads) the same exercise as planting between rows 2 milestones or a loophole for pass accuracy.

Several 4 – 5 players are in string formation. The first passes sideways at 15m to a partner, runs, receives the ball he hits from the return to the next and passes to the tail of the string.

The players are arranged in 2 parallel rows 20m apart from each other. In front of the strings, at 15m, a partner is placed who sends the ball between the two strings. The first of the string runs, passes directly to the first of the other row, and this to the player in front. After execution, the players each move to the tail of the opposite row and the exercise continues.

Two-way passes from away with two balls

Four players are seated at the corners of a rectangle marked by four players with large sides of 20m and small sides of 15m. The ball travels through direct passes from one to the other, and the one who passes

goes instead of the one to whom he passed.

Three players "a", "b", "c" stands in line 10m from each other. "B" passes "A" and runs in its place, and "C" leads to where the exercise began.

Two-way passes with takeover, sends the ball to the partner in future position.

Two players at a long distance perform takeover, lead, clear, up to the teammate (emphasis on precision).

Two or more players execute clearances by hitting directly, without taking over the ball.

The same exercise with the obligation to release the ball in different predetermined areas.

Contest between two or more players "who clears more precisely".

Special ball clearance exercises are performed by the 4 defenders.

Play at a goal with the obligation for defenders, after recovering the ball, to clear in a predetermined area.

Bilateral games with the obligation of defenders clear towards certain strikers of their own team.

Players individually execute picking up

the ball in speed, driving and centering.

Players individually execute leading, overtaking an opponent and centering in front of goal.

Individually, players execute direct crosses from the ball coming from a backward pass.

At a goal the two extremes, with a ball, perform long crosses and recenters.

2:1 game, a midfielder opens the winger over a defender in between, and the winger pursued by a defender, executes takeover, lead, precise crossing.

One on one game finished with centering from the fall.

Bilateral game with theme, a precise centering is scored with 2 points.

Game with theme, goal valid only from crossing; [3]

2.2. Research results

Table number two shows the data collected during the initial testing for three games played during the competition period.

Game parameter value data on initial testing games

Table 2

| Game parameters | Game 1 | Game 2 | Game 3 | Average |
|---------------------------------------|---------------|---------------|---------------|----------------|
| Total passes | 180 | 168 | 170 | 172.66 |
| Successful passes | 87 | 78 | 72 | 189 |
| Unsuccessful passes | 93 | 95 | 93 | 280 |
| Smooth attack actions | 9 | 10 | 8 | 9 |
| Smooth attack actions with completion | 2 | 4 | 3 | 3 |
| Verticalizations | 6 | 7 | 5 | 6 |
| Goals | 2 | 1 | 0 | 1 |

Table number three centralizes the data collected during the final testing for three

games during the competition period.

Game parameter value data on final testing games

Table 3

| Game parameters | Game 1 | Game 2 | Game 3 | Average |
|---------------------------------------|---------------|---------------|---------------|----------------|
| Total passes | 201 | 196 | 198 | 198.33 |
| Successful passes | 109 | 101 | 105 | 105 |
| Unsuccessful passes | 92 | 90 | 91 | 213.33 |
| Smooth attack actions | 11 | 12 | 10 | 11 |
| Smooth attack actions with completion | 4 | 5 | 5 | 4.66 |
| Verticalizations | 9 | 8 | 5 | 7.33 |
| Goals | 3 | 1 | 2 | 2 |

In table number four are centralized the averages obtained for the parameters tested in the initial test versus the final test

Comparison data between initial and final testing games

Table 4

| Game parameters | Average of initial games | Average of final games |
|---------------------------------------|---------------------------------|-------------------------------|
| Total passes | 172.66 | 198.33 |
| Successful passes | 189 | 105 |
| Unsuccessful passes | 280 | 213.33 |
| Smooth attack actions | 9 | 11 |
| Smooth attack actions with completion | 3 | 4.66 |
| Verticalizations | 6 | 7.33 |
| Goals | 1 | 2 |

In the following we present statistical data on the most important parameters studied in the research. For the statistical analysis the Student Paired Test was used, and the program used was SPSS.

In table number five we have interpreted the centralized data for the total pass parameter statistically as follows:

Levene's test for equality of variances indicates an F-value of 4.105 and significance (Sig.) of 0.113. This suggests that there is no statistically significant difference between the variances of the groups tested, as the p-value is greater than 0.05.

The t-test for equality of means* (assuming equal variances) shows a t-value of -6.439, with 4 degrees of freedom (df) and a significance (2-tailed) of 0.003. This

indicates a statistically significant difference between the group means.

The t-test for equality of means (without assumption of equal variances) has a t-value of -6.439, with 2.599 degrees of freedom (df) and a significance (2-tailed) of 0.012, which also confirms a statistically significant difference.

The mean difference is -25.66667, with a standard error of difference of 3.98609.

The 95% confidence interval for the difference has a lower bound of -36.73382 and an upper bound of -14.59952.

These results suggest that there is a significant difference between the groups compared in the study for total pass parameter.

Statistical analysis for total pass parameter

Table 5

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|-------|-----------------------------|---|-------|------------------------------|-------|-----------------|-----------------|-----------------------|---|-----------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| Score | Equal variances assumed | 4,105 | 0,113 | -6,439 | 4 | 0,003 | -25,66667 | 3,98609 | -36,73382 | -14,59952 |
| | Equal variances not assumed | | | -6,439 | 2,599 | 0,012 | -25,66667 | 3,98609 | -39,53520 | -11,79813 |

In table number six we have interpreted the centralized data for the successful passes parameter statistically as follows:

Levene's test for equality of variances indicates an F-value of 1.085 and significance (Sig.) of 0.356. This suggests that there is no significant difference between the variances of the groups tested, as the p-value is greater than 0.05, which means that we can assume equality of variances for subsequent tests.

The t-test for equality of means (assuming equal variances) shows a t-value of -5.271, with 4 degrees of freedom (df) and a significance (2-tailed) of 0.006. This indicates a statistically significant difference between the group means with a 99.4% confidence level.

The t-test for equality of means (without the assumption of equal variances) has a t-value of -5.271, with 3.041 degrees of freedom (df) and a significance (2-tailed) of 0.013, which also confirms a statistically significant difference.

The mean difference is -26.00000, with a standard error of difference of 4.93288.

The 95% confidence interval for the difference* has a lower bound of -39.69588 and an upper bound of -12.30412 (assuming equal variances), and -41.58015 to -10.41985 (without assuming equal variances).

These results suggest that there is a significant difference between the means of the groups compared in the study.

Statistical analysis for successful passes parameter

Table 6

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|-------|-----------------------------|---|-------|------------------------------|-------|-----------------|-----------------|-----------------------|---|-----------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| Score | Equal variances assumed | 1,085 | 0,356 | -5,271 | 4 | 0,006 | -26,00000 | 4,93288 | -39,69588 | -12,30412 |
| | Equal variances not assumed | | | -5,271 | 3,041 | 0,013 | -26,00000 | 4,93288 | -41,58015 | -10,41985 |

In table number seven we have interpreted the centralized data for the unsuccessful passes parameter statistically as follows:

Levene's test for equality of variances shows an F-value of 0.308 and significance (Sig.) of 0.609. This indicates that there is no significant difference between the variances of the groups tested, as the p-value is greater than 0.05.

The t-test for equality of means (assuming equal variances) shows a t-value of 3.024, with 4 degrees of freedom (df) and a significance (2-tailed) of 0.039. This suggests a statistically significant difference between the group means, with a confidence level above 95%.

The -t-test for equality of means (without

the assumption of equal variances) has a similar t-value of 3.024, but with 3.920 degrees of freedom (df) and a significance (2-tailed) of 0.040, confirming the statistically significant difference.

The observed mean difference is 2.66667, with a standard error of the difference of 0.88192.

The 95% confidence interval for the difference has a lower bound of 0.21807 and an upper bound of 5.11526 (assuming equal variances), and 0.19824 to 5.13510 (without assuming equal variances).

These results indicate that there is a statistically significant difference between the means of the groups compared in the study.

Statistical analysis for unsuccessful passes parameter

Table 7

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|-------|-----------------------------|---|-------|------------------------------|-------|-----------------|-----------------|-----------------------|---|---------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| Score | Equal variances assumed | 0,308 | 0,609 | 3,024 | 4 | 0,039 | 2,66667 | 0,88192 | 0,21807 | 5,11526 |
| | Equal variances not assumed | | | 3,024 | 3,920 | 0,040 | 2,66667 | 0,88192 | 0,19824 | 5,13510 |

3. Conclusions

The consolidation and improvement of the pass can be achieved by using carefully selected methods and drive systems, the training model developed and applied in the training of the junior football team aged between 10 and 12 years being thus verified.

Consolidating and perfecting the pass requires appropriate training methods and drive systems as close or identical as possible to those encountered in competition.

In the process of preparing junior teams, age peculiarities, the level of appropriation of specific elements of the football game and individual and collective qualities of players must be taken into account.

Coaches must take into account the importance of drive systems designed to strengthen and perfect the pass, compose and use drive systems for perfecting the pass, especially at a fixed point.

From a tactical point of view, we must take into account several aspects that meet in the game of football: the

presence and dynamics of teammates, the technique of the performer, placement, the number and mode of action of the opponent and last but not least the state of the field and atmospheric conditions.

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