

TRAINING MODEL FOR 12-15 YEAR OLD JUNIORS IN THE FOOTBALL GAME

Emil Costin SĂNDOI^{1*}, Daniel NICOLAE¹, Marian DRAGOMIR^{1,2}, Cătălin FORȚAN²

¹University of Craiova, Doctoral School of Social Science and Humanities, Craiova, Romania

²University of Craiova, Faculty of Physical Education and Sport, Craiova, Romania

*Corresponding author: emi.sandoi@yahoo.com

<https://doi.org/10.52846/jskm/41.2023.1.8>

Abstract: The coach plans the activity of training and educating the junior players according to the rules established by the specialized football literature and is responsible for this concept, which is often related to the alignment to a model established within each club.

The purpose of the paper is the conception of the game and training model at the level of football performance teams at the age of 12-15, the objectives and the technical-tactical content at this level, as well as the training methodology based on well-defined criteria for the juniors aged 12-15 football teams.

From here derives **the research hypothesis** that leads us to the assumption that the details presented by us, regarding the training concept, will constitute the premises for the development of a specific team training model and will lead to the improvement of performances in the official competitions organized at this level.

Discussion and Conclusion. This is the most difficult age period in the activity of a young footballer. It is the moment of puberty when certain transformations occur in the body and which must be taken into account. The transformations produced at the level of the endocrine glands lead to physical and behavioral changes.

The experience and skill of the coach are very important. At this level, the player must demonstrate a good learning of the basic technical elements and their execution procedures, a relevant development of the general and specific motor qualities of the football game (characteristic of the respective age) as well as the necessary psycho-motor and intellectual skills progression and accumulation in the technical-tactical plan through the training process.

Keywords: model, training, coach, football.

Introduction

The importance of training children results from the organization of an instructive-educational process that meets all the requirements of sports training. It requires knowing the biopsychosocial characteristics of each child by age. This selection presents a series of difficulties regarding the prospective assessment of morphological and functional data, indices of motor qualities and technical-tactical skills. It is widely understood that a team's performance is determined by the combination of and interplay between many factors (Jennings et al., 2023).

Thus, the technical-tactical knowledge will be approached at a scientific level in order to obtain very good results. Also, their objective approach appeared naturally, the multitude of operations determining the development of a staggered operating system in order to obtain very good results regarding the use of one or another of the models of selection and sports training of junior footballers. When investigating talent development

environments, we need both quantitative and qualitative approaches (Gangsø et. al., 2021).

The coach is the one who manages and leads the training process (Cosma et al., 2021). He designs the training plans according to the physical, technical-tactical or psychological characteristics of his players (Stoica & Barbu, 2014). The fact that the game of football is played by kicking the ball, requires the formation and improvement of a technique and tactics appropriate to the modern game of football (Rădulescu, 2007). The player of our days must possess the coordinative capacities required by the game, be skillful, using his imagination and judgment in order to obtain victory.

Football training, preparation and organization of a lesson can be complex or simple, but there are some principles that must be respected. The coach plans his activity so that it is perceived by the players in a pleasant, attractive way and in which effective, mutually beneficial communication prevails. The coach is a professional who

must assume the responsibility of training the players, making them understand and execute the tasks drawn in a creative way, so that the juniors practice the game of football being characterized by fair play, based on their effort and work (Barbu, 2009).

The modern player must possess all the qualities of the performance athlete, he must be mobile, he must develop movement skills that he will improve by moving at high speed, with and without the ball, by changing places, thus avoiding static positions.

The purpose of the paper is the conception of the game and training model at the level of performance football teams at the age of 12-15, the objectives and the technical-tactical content at this level, as well as the training methodology based on well-defined criteria, at the juniors aged 12-15 team level.

From here derives the **research hypothesis** that leads us to the assumption that the details presented by us regarding the training concept will constitute the premises for the development of a specific training model for the team and will lead to the improvement of performances in the official competitions organized at this level.

Theoretical and methodical considerations of teaching the game of football to juniors, aged 12-15

1. The peculiarities of growth and development at the age of 12-15 years

The first phase of puberty, qualified as the second phase of morphological maturing, begins around the age of 12-13 years in boys. It lasts until about 14-15 years. It is the age at which the student needs more relationships with the environment because the intellectual level allows him to penetrate the problems of nature and society. It is the period when the ability to select, analyze and synthesize the information received increases, motoric indices having the highest growth norms for speed, coordination or resistance.

For many children, during this period, oscillations appear regarding the traits characteristic to the sports development. Starting from the psychological, physiological, somatic and biochemical characteristics that children of these ages have in common, the organization of training and

instruction must be done very carefully. Circuit training has particular effects on the development of functional and morphological indices of motor qualities (Păun et al., 2022). The strong increase in waist and weight, which sometimes alternates the strength-weight ratio, is largely responsible for the decrease in specialized coordination. The accuracy of general control decreases, the movements are typical at this age. All of this requires proper training orientation. In the first pubertal phase, motor skills are improved as a priority, then coordination stability will be followed and, if possible, their progressive improvement (Cosma et al., 2017).

The intelligence quotient of athletes is normal, with a small difference between the quotient of verbal expression, which is favorable to non-athletes. The higher intellectual level at this age allows a new form of gestural learning and training in general, but for learning to take place it requires concentration, effort, sustained attention or interest. If these conditions are met at an appropriate level, we can learn almost anything. If they are not present, very little learning occurs, and this little is called incidental learning.

In the case of dosage of training tasks, the instability of training motivation must be taken into account. The coach has the difficult task of keeping the motivation of his athletes intact, of stabilizing it and solving possible conflict situations through a careful behavior that respects the autonomy and hopes of the teenager and dosing the training according to the individual capacities.

The positive influences of playing sports on intellectual efficiency are visible in athletes through the development of psychomotor skills and through the development of the acuity of some psychosensory qualities, which contribute to the improvement of intellectual capacities. Located at the border of two periods, childhood ending and adolescence beginning, puberty is characterized by numerous organic and psychic phenomena, which create tendencies towards feverish activity, often exaggerated liveliness, unleashing of feelings, the desire to impose one's will, the manifestation the spirit

of curiosity constitutes the positive background of personality development. It is obvious that a process with such a rich content cannot be homogeneous. During the 3-4 years that puberty lasts (12-15 years for boys), numerous physiological, psychological and pedagogical problems arise.

Knowing the features of these ages of great morphofunctional transformations is necessary for any coach, who carries out his activity every day with children of pubertal age. In conclusion, we must remain with the idea that puberty is a decisive breakthrough in the evolution of the human organism. In this period, childhood ends and another stage begins in which the organs are shaped and perfected for more complex functions.

2. The intelligence specific to the game of football manifests itself as a technical ability that requires not only the correct execution of a technical procedure - passing, taking over, shooting at the goal, etc., but also adapting motor behavior to the concrete situation determined by the nature of the field, speed and the direction the ball is coming from, etc. It includes sensory elements (external perceptions, proprioception - kinesthetic and balance sensations) and logic (understanding the situation, relating it to the task and intention), as well as memory data combined with specific skills (Epuran et. al., 2001).

The final expression of the intelligent motor act combines all these elements in a way of directing body movements in relation to space, time and the moving ball. The higher the level of technical motor intelligence, working with the ball and with one's own body is all the more effective.

3. The selection of methods and means, that are strictly necessary to achieve the proposed objectives, represents one of the most difficult problems faced by the coach.

Of course, each coach has the freedom to decide on the methods and means that better solve his requirements in the composition of the team. The diversity of situations in which the team can find itself, the number of criteria for categorising methods and means determine a continuous process of improving performances, generated both by the progress

of the game and by the concerns of specialists in this regard (Stoica & Barbu, 2019).

4. Modeling refers to the construction of methods and means that consider:

- Creating situations in the training games that highlight the individual contribution to the collective effort;
- Encouraging the entire team to make a special effort, with an emphasis on complexity and intensity;
- Formation of tactical skills, stimulating players' interest in acquiring tactical schemes and combinations;
- Consolidation and improvement of a mode of action within a game system;
- Other methods used in the training activity of the players:
 - observation and analysis of the opponent's game;
 - active participation in the development of the tactical plan;
 - active participation in game analysis meetings;
 - training the players in the preparation and analysis of the games.

In the learning and improvement process, the coach shows how to acquire motor skills and specific skills, and the players perform a practical and theoretical activity to understand, interpret, practice and amplify this material. The main characteristic feature of the training methods consists in the fact that they are in a close connection and condition each other, they are used in total at any level of training, in any training period and in any form, in a certain weight that the training variables give it.

The exercises represent the active movement actions, carried out in accordance with the pedagogical, physiological and psychological laws, executed in order to acquire and perfect the motor, technical and tactical skills. They have a scientific and methodical character, conferred by the pedagogical framework, in which they are integrated, the choice and management by the coach-teacher, the form of organization of the activity, the arrangements and the material basis, their negative, psychological, social influences.

5. Priority aspects of manifestation of motor qualities in training

A. Speed and strength training during puberty

At the end of puberty, latency and reaction times reach values equivalent to those of adults. The frequency of movement, which will later change slightly, reaches its maximum value between 13 and 15 years. Hormonal secretion, especially the increase in the percentage of testosterone in boys, conditions important changes that occur in maximum strength and strength-speed, as well as the increase in anaerobic capacities (visible in the improvement of endurance-speed and endurance-strength). In soccer, accelerations, decelerations, changes of direction, and high/very high-intensity runs are most prevalent prior to scoring a goal, becoming determinants of the game's success (Hermosilla-Palma et. al., 2022). For these reasons, important gains in speed are observed during this period, extremely important being linear runs, but also with a change of direction (Sagelv et. al., 2019). Instead, contrary to the previous stages, it is possible to resort more to some anaerobic training content, to be used especially for a training focused on one of the components of speed capacity: force-speed.

B. Resistance training during puberty

The most appropriate training methods for the development of resistance capacity during childhood and adolescence are the continuous method and the method on short intervals (lactacids) and fractional type tasks. Resistance training in youth is advocated to aid performance and injury risk (Drury et al., 2021).

C. Flexibility training during puberty

The rapid increase in stature on the one hand and on the other hand the decrease in the mechanical tolerance to effort of the passive locomotor apparatus can have different consequences: in this phase, first of all, a deterioration of mobility is observed because the elasticity of the muscles and ligaments does not adapt immediately to the growth basket. During puberty, a versatile and general mobility training is necessary, but

overstraining the passive locomotor system must be avoided at all costs.

6. The means used for the development of motor skills in juniors aged 12-15 in the game of football must take into account:

- the predominance of the side of qualitative training of all players and less of team formation;
- respect for age characteristics by following:
 - the moment of fatigue;
 - avoiding abuse of static efforts;
 - avoiding traction exercises only with the help of the arms;
 - avoiding jumping in large numbers (especially deep jumps);
 - normal development of strength and resistance;
 - emphasizing the development of coordinative capacities, speed in all forms of manifestation and correct and harmonious physical development.

Starting from these recommendations and taking into account the fact that performances begin to be obtained at younger and younger ages, the content of the lessons intended for the training of children and juniors will be oriented according to the respective indications.

7. The relationship between motor skills and technical-tactical training

Each training must be structured in such a way as to appreciate and relate to the technical-tactical structure and to a psychological support of the group for which it was designed. Establishing the weight of the basic components of effort in training requires a lot of skill, so as not to neglect other aspects of technical-tactical development at this age. Abilitățile motrice de coordonare segmentară sunt extrem de importante în acest sens (Bojkowski et al., 2022).

Barbu (2012) shows that between the development of motor skills and technical-tactical training there is such a close connection and mutual conditioning that their broken treatment, in stages, constitutes a brake in improving the results and qualitative growth of the child. For this reason, it is necessary that the technical-tactical training

be done in parallel with the development of psycho-motor qualities. Therefore, in some stages of training, physical training is closely related to technical training. The use of different zones of the field introduces the concepts of generating space and centres in the game. These also allow one to introduce more complex tactical systems (García-Angulo et al., 2020).

The modernization of the training process, an indispensable requirement in order to be able to keep up with the evolution of national and global performances, involves an active and creative participation of the family, the school, the teachers who ensure the training of junior football players (Barbu & Stoica, 2021).

8. The technical-tactical improvement must be at the level of the development of mental resources for the 14-15-year-old athlete to have a high degree of success. Decisive for the development of the motor qualities modeled on the technical-tactical structure of the junior and the psycho-motor development is the creative and demanding way of application, of knowing his constitutional profile, in order to put into practice a logical chain of the training process. The development and improvement of technical-tactical qualities is conditioned by the motor and mental qualities and the previously accumulated motor skills (Barbu, 2008). The mental component is considered one of the fundamental aspects that influence sport success (Benítez-Sillero et al., 2021).

Sports practice marks the development of motor skills in the stage of mental stability of harmonizing body proportions, high intellectual level, improved observation capacity, which conditions the improvement of technical-tactical qualities at 14-15 years and beyond, for the elimination of some deficiencies in the expression in the game junior.

During this training period, the increase in aerobic effort continues as well as the development of those motor capacities with a preponderance in the development of speed and coordination capacities. It is possible to move from a first specialization on positions (defenders, midfielders, forwards) and to the

consolidation of game combinations and relationships (Barbu et. al., 2015).

The first tasks will be given to the players specific to the positions they play. It is essential to work on the individual needs of players according to their positions during the football training process to help them achieve the required fitness levels necessary to perform efficiently on match days (Bujnovsky et al., 2019). The weight of teaching the exercises falls on the development of coordinative capacities, realized through:

- Execution of movements in various conditions of balance, turns, stops, detours;
- Correct execution of the main technical procedures;
- Cultivating quick action in training and playing, with increased indices of reaction speed and execution;
- Strength and resistance exercises performed according to age characteristics, with recovery breaks, with your own weight, well staggered methodically;
- The judicious combination of the global and analytical form of training, with special emphasis on the correct acquisition of basic mechanisms and procedures;
- The gradual development of tactical thinking, taking into account the fact that after 13 years of age, children's capacity for abstraction increases a lot.

The aim is to create a special educational character of the training process: discipline and fairness in the coach-player relationship. Permanent supervision of the social relations of the team, the connection with the family is required to succeed in curbing any wrong orientations of the young person, in the informational field of society, giving the junior player examples of great footballers, great positive characters, worthy of following. At the end of the period, it is aimed to form at least two groups of 18 players each.

The results obtained in motor tests applied to 14-year-old juniors

1. Speed running for 10, 30 meters: Start from the feet, start at the sound signal. They run 2 times, on synthetic ground, two repetitions.
2. Standing long jump.
3. Shuttle – 4 x 5 m. Run at full speed between two poles placed 5 m apart.

4. Specific test. In order to see to what extent certain specific technical procedures in the football game can be strengthened and perfected, we proposed and experimented the following exercise: Dribbling among the posts followed by a shot at the goal: the player 30

m from the goal drives the ball at speed between 5 posts placed from 3 in 3 meters, and near the penalty area executes a powerful shot at the goal. The exercise is repeated by each subject 10 times. The number of shots made on the goal area is tracked.

Processing and interpretation of the obtained results

1. a. Speed running for 10 m

Statistical parametres for 10 m sprint

Parametres	A.V. 10 m T.I.	A.V. 10 m T.F.
Result	1,98	1,96

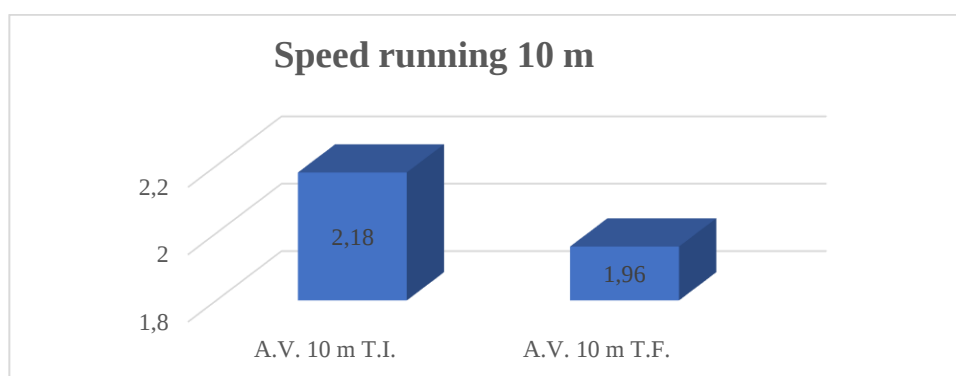


Fig. 1. 10m sprint - graph of arithmetic averages

The difference between the two tests, following the application of the technical-tactical training programs, is 0.22 seconds.

1.b. 30 m sprint

Statistical parametres for 30 m sprint

Parametres	A.V. 30 m T.I.	A.V. 30 m T.F.
Result	5,46	5,02

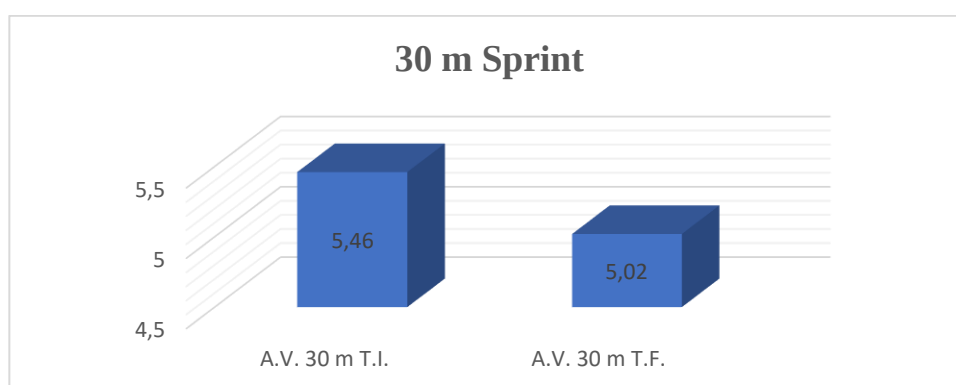


Fig. 2. 30 m sprint - graph of arithmetic averages

The difference between the two tests, following the application of the technical-tactical training programs, is 0.44 seconds.

2. Standing long jump

Statistical parametres for standing long jump

Parametres	S.L.L. T.I.	S.L.L. T.F.
Result	1,86	2,14

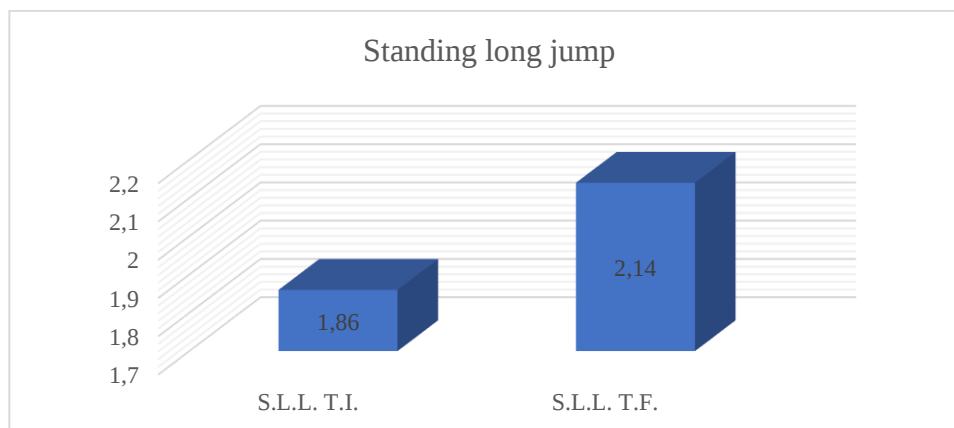


Fig. 3. Standing long jump - graph of arithmetic averages

The difference between the two tests, following the application of the technical-tactical training programs, is 28 cm.

3. Shuttle – 5 x 10 m

Statistical parametres for Shuttle – 5 x 10 m

Parametres	Shuttle – 5 x 10 m T.I.	Shuttle – 5 x 10 m T.F.
Result	13,52	12,96

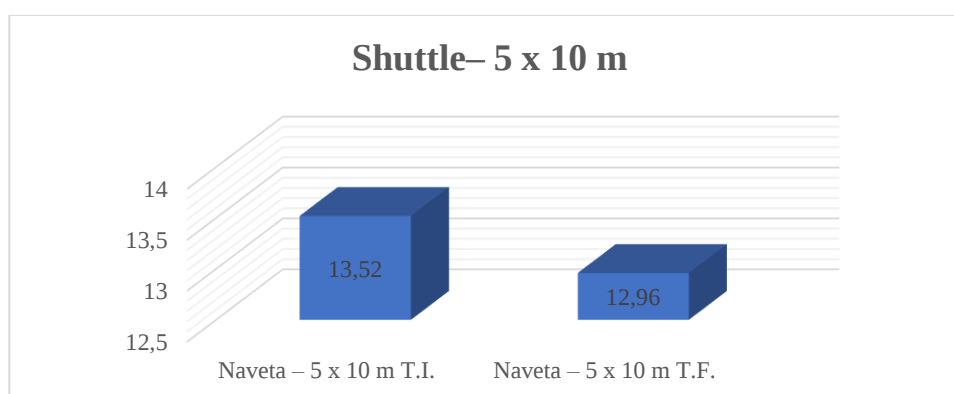


Fig. 4. Shuttle – 5 x 10 m - graph of arithmetic averages

The difference between the two tests, following the application of the technical-tactical training programs, is 0.56 sec.

1. Specific test

The values of the experimental group at the initial and final testing when dribbling between the posts followed by a shot at the goal

Parametres	Specific Test T.I.	Specific Test T.F.
Result	4,72	5,61

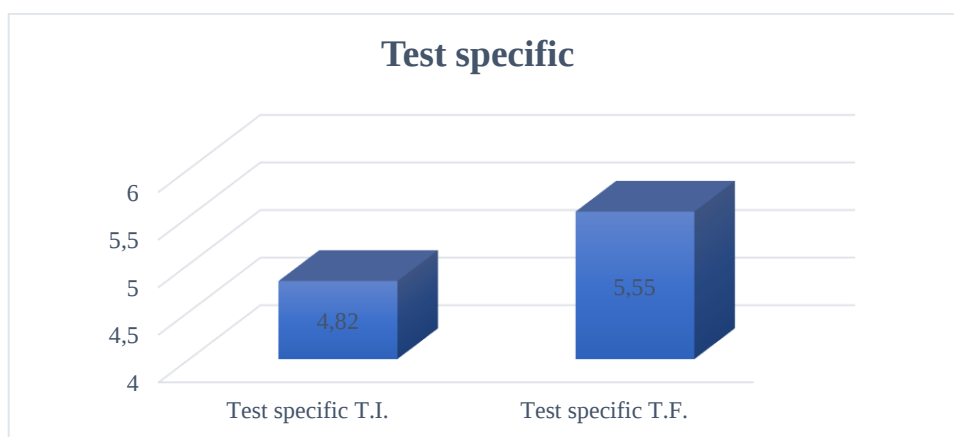


Fig. 5. Specific test - graph of arithmetic averages

The difference between the two tests is significant – 0.73 sec., mainly due to the training model.

Discussion and Conclusion

This is the most difficult age period in the activity of a young footballer. It is the moment of puberty when the transformations produced in the endocrine glands occur, leading to physical and behavioral changes, so it is extremely difficult to make an accurate assessment of the player. Training programs aimed at improving reactive agility and speed of change of direction in soccer players during puberty should be aimed at achieving a precise and efficient movement technique (Krolo et al., 2020).

The experience and skill of the coach are very important. At this level, the player must demonstrate a good learning of the basic technical elements and execution procedures, a development of general and specific motor qualities of the football game (characteristic of the respective age) as well as psycho-motor and intellectual skills necessary for progression and accumulation in the technical-tactical plan through the training process. Short accelerations and linear sprints as the most important actions during a football game since they frequently precede goals and other decisive actions (França et al., 2022).

The methods used in preparation, during this period, will continue those used in the initiation period, but the degree of complexity of the means used will increase - the degree of adversity, the volume and intensity of the executions. Both the choice of models and the

training itself must be adapted to the players' particularities and value, without reducing the strictness in training and with the focus on fulfilling performance objectives (Barbu & Stoica, 2020I). In the setting of the game and training model, aspect shared, also, by the authors Motroc & Motroc (1996) we propose:

- the acquisition of the individual technique in an analytical and global way, under optimal conditions;
- strengthening the technique based on the theoretical and methodical aspects presented;
- the creation of the most diverse means of action, which allow the individualization of training;
- the direct use of specific exercises in game conditions, in order to make the activity more efficient at this level;
- the optimization of the training process must be based on the training model characteristic of the performance level and in accordance with the real potential of the players.

Acknowledgement

This work was supported by the grant POCU/993/6/13/153178, "Performanță în cercetare" - "Research performance" co-financed by the European Social Fund within the Sectorial Operational Program Human Capital 2014-2020.

References

Barbu, D., (2008). *Tehnica jocului de fotbal*. [The technique of the football game] Universitaria.

- Barbu, D., (2009). *Fotbal. Pregătirea psihologică*. [Football. The psychological training] Universitaria.
- Barbu, D., (2012). *Teoria și practica în fotbalul de înaltă performanță*. [Theory and practice in the high performance football]. Pro Universitaria.
- Barbu, D., Stoica, D. (2020). Increasing the execution speed of offensive and defensive tactical actions in the football game at the time of transition. *Journal of Sport and Kinetic Movement*; 36(II): 5-13.
- Barbu, D., Stoica, D., (2021). *Fotbal - Modele strategice în pregătirea tactică* [Football - Strategy models in tactical training]. Universitaria.
- Barbu, D., Stoica, D., Ciocănescu, D., Barbu, M.C.R., (2015), The improvement of the offensive combinations within 1-4-3-3 system in the football game. *Journal of Sport and Kinetic Movement*; 26 (2): 25-30.
- Benítez-Sillero, J. de D., Martínez-Aranda, L. M., Sanz-Matesanz, M., & Domínguez-Escribano, M. (2021). Determining Factors of Psychological Performance and Differences among Age Categories in Youth Football Players. *Sustainability*, 13(14), 7713. <http://dx.doi.org/10.3390/su13147713>.
- Bojkowski, Ł., Kalinowski, P., Śliwowski, R., & Tomczak, M. (2022). The Importance of Selected Coordination Motor Skills for an Individual Football Player's Effectiveness in a Game. *International Journal of Environmental Research and Public Health*, 19(2), 728. <http://dx.doi.org/10.3390/ijerph19020728>.
- Bujnovsky, D., Maly, T., Ford, K., Sugimoto, D., Kunzmann, E., Hank, M., & Zahalka, F. (2019). Physical Fitness Characteristics of High-level Youth Football Players: Influence of Playing Position. *Sports*, 7(2), 46. [doi.org/10.3390/sports7020046](http://dx.doi.org/10.3390/sports7020046)
- Cosma, G., Barbu, D., Nanu, M.C., Burcea B., Cosma M.A. (2017). *Pregătirea fizică în sportul de performanță*. Edit. Universitaria, Craiova.
- Cosma, G.A., Chiracu, A., Stepan A.R., Barbu D., Brabiescu-Călinescu M.L., Voinea F., Orțănescu D., Țifrea C., Munteanu R.V. (2021). Job Insecurity and Work Meaning in Romanian Sports Coaches. *Applied Sciences*. 11(24), 11862. [doi.org/10.3390/app112411862](http://dx.doi.org/10.3390/app112411862).
- Drury, B., Clarke, H., Moran, J., Fernandes, J. F. T., Henry, G., & Behm, D. G. (2021). Eccentric Resistance Training in Youth: A Survey of Perceptions and Current Practices by Strength and Conditioning Coaches. *Journal of Functional Morphology and Kinesiology*, 6(1), 21. <http://dx.doi.org/10.3390/jfmk6010021>.
- Epuran, M., Holdevici, I., Tonița, Fl., (2001). *Psihologia sportului de performanță*. București, Edit. FEST.
- França, C., Gouveia, É., Caldeira, R., Marques, A., Martins, J., Lopes, H., Henriques, R., et al. (2022). Speed and Agility Predictors among Adolescent Male Football Players. *International Journal of Environmental Research and Public Health*, 19(5), 2856. <http://dx.doi.org/10.3390/ijerph19052856>.
- Gangsø, K., Aspvik, N. P., Mehus, I., Høigaard, R., & Sæther, S. A. (2021). Talent Development Environments in Football: Comparing the Top-Five and Bottom-Five-Ranked Football Academies in Norway. *International Journal of Environmental Research and Public Health*, 18(3), 1321. <http://dx.doi.org/10.3390/ijerph18031321>.
- García-Angulo, A., Palao, J. M., Giménez-Egido, J. M., García-Angulo, F. J., & Ortega-Toro, E. (2020). Effect of the Modification of the Number of Players, the Size of the Goal, and the Size of the Field in Competition on the Play Actions in U-12 Male Football. *International Journal of Environmental Research and Public Health*, 17(2), 518. <http://dx.doi.org/10.3390/ijerph17020518>.
- Hermosilla-Palma, F., Loro-Ferrer, J. F., Merino-Muñoz, P., Gómez-Álvarez, N., Bustamante-Garrido, A., Cerda-Kohler, H., Portes-Junior, M., et al. (2022). Changes in the Mechanical Properties of the Horizontal Force-Velocity Profile during a Repeated Sprint Test in Professional Soccer Players. *International Journal of Environmental Research and Public Health*, 20(1), 704. <http://dx.doi.org/10.3390/ijerph20010704>
- Jennings, J., Wundersitz, D., Sullivan, C., Cousins, S., & Kingsley, M. (2023). Including a Technical Factor with Physical and In-Game Movement Factors Improves Model Sensitivity When Evaluating Draft Outcome in Elite-Junior Australian Rules Football. *Sports*, 11(3), 63. <http://dx.doi.org/10.3390/sports11030063>.
- Krolo, A., Gilic, B., Foretic, N., Pojskic, H., Hammami, R., Spasic, M., Uljevic, O., et al. (2020). Agility Testing in Youth Football (Soccer) Players; Evaluating Reliability,

- Validity, and Correlates of Newly Developed Testing Protocols. *International Journal of Environmental Research and Public Health*, 17(1), 294. <http://dx.doi.org/10.3390/ijerph17010294>.
- Motroc, I., Motroc, Fl., (1996). Fotbalul la copii și juniori. București, Edit. Didactică și Pedagogică, RA.
- Păun, D. G., Grigore, G. & Păun, L. I. (2022). Circuit Football Training Customized for Young Players during and after the COVID Period. *Sustainability*, 14(24), 16611. <http://dx.doi.org/10.3390/su142416611>.
- Rădulescu, M., (2007). Fotbal – Tehnica. Factor prioritar [Football – Technique. Priority factor]. Răzeșu.
- Sagelv, E. H., Selnæs, I., Pedersen, S., Pettersen, S. A., Randers, M. B., & Welde, B. (2019). Effects of Linear Versus Changes of Direction Repeated Sprints on Intermittent High Intensity Running Performance in High-level Junior Football Players over an Entire Season: A Randomized Trial. *Sports*, 7(8), 189. <http://dx.doi.org/10.3390/sports7080189>.
- Stoica, D., Barbu, D., (2014). The influence of specific football training methods during the preparation period upon the physical and motor development of 17–18-year-old juniors. *Palestrica of the third millennium – Civilization and Sport*; 15(1), 40–44.
- Stoica, D., Barbu, D., (2019). Sports competitions on reduced pitch areas - a means of training and evaluation in the football game. *Journal of Sport and Kinetic Movement*; 34(2): 43-48.