

CONSIDERATIONS REGARDING WAYS TO OPTIMISE THE DEFENCE GAME FOR JUNIOR HANDBALL PLAYERS

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Abstract

New trends in the development of strategies for optimising the factors of sports training, which are totally interdependent with the specific competitive effort, require more and more characteristics of handball players, who must be faster, more dynamic, inventive, but especially, with a high degree of adaptability to ever-changing situations both in attack and defence. The purpose of the study is to investigate the opinion of handball specialists on the stage of preparation of handball players for the defensive game, in general and especially at the level of junior teams II, and to identify the main ways to optimise the game during the defence phases.

Methods. The main research methods used were the study of specialized and interdisciplinary literature, pedagogical observation, questionnaire survey method, statistics-mathematics and graphics. So, we elaborated and applied a questionnaire to a number of 56 handball game specialists (n: 56), in connection with the need to approach the defence, different defence systems, in connection with the means used and the importance given to training factors and evaluation methods with high degree of applicability at the level of the defence game.

Results and discussions. The opinion of the specialists regarding the optimisation of the handball players' preparation for the defence game represents a key point in creating a topical vision on the defence systems used, on the attention paid to the technique and tactics specific to the defence game for juniors II.

Conclusions: The answers provided by the surveyed coaches are in full accordance with the opinions of specialists in the field recorded in the speciality literature, as well as with the requirements imposed by the practice of the game. Thus, it is confirmed that the motor structure of the current handball game requires defenders with a good specific technique, able to play from any position (at least for a short period of time), to have a good perception of the game; to be easily adapted to the protection systems imposed by the concrete situation in the field.

Keywords: defence, handball, juniors, optimisation.

Introduction

The handball game is addressed to players with special physical and mental qualities, demanding speed (of reaction, execution, movement), endurance (general and specific), strength (general, specific, combined-expansion), coordination ability (static, dynamic, perceptual-motor), mobility and joint suppleness (Dobosi, S., 2009, p. 35).

New trends in the technical, strategic, physical development in handball require more and more characteristics of players who need to be faster, more dynamic, versatile both in attack and defence, technically qualified, able to play in any position (at least for a short period of time), to have an excellent perception of the game (Pokrajac, 2007, pp 1-15; Taborsky, 2008, pp. 1 – 10).

From this perspective, in our research we started from the premise that any defence system must be supported by trained athletes from a physical, technical and tactical point of view. Thus, we started from the consideration that the verification of the specialists' opinion in terms of their own vision of the current stage of the level and methodology of preparation of the defence game in our country, can represent a

volume of useful information in the development of future trainings with themes from the defence game. At the same time, the application of a questionnaire, the interpretation of the results and the issuing of some conclusions, can determine a methodological orientation that can be developed at national level at the junior echelon II.

Methods

In this research we aimed to conduct an experimental investigation on the opinion of specialists in the field with the optimisation of the preparation of handball for the defence game, by applying a questionnaire.

We developed and applied a questionnaire to handball coaches (n = 56), in relation to the need to approach the defence, the different defence systems, in connection with the means used and the importance given to the training factors and the evaluation modalities of the junior players II.

The respondents are coaches of the teams from the country that train junior level II handball players. Coaches from 25 clubs in Romania participated voluntarily in this survey. The questionnaire included 20 questions, of which 15 closed questions and 5 open

questions and was performed in June 2019.

The obtained results were statistically-mathematically processed through a series of indicators specific to the field of activity and represented graphically for a better understanding of

Results and discussions

The age average of the surveyed coaches is of $X=45,98$ years old, (figure 1) and their experience as coaches is of $X=16,30$ years (figure 2).

By observing the answers to these two questions, it is possible to state that the questionnairesd specialists are coaches with relatively good experience in the field of sports training, focused on improvement and eager to assert themselves.

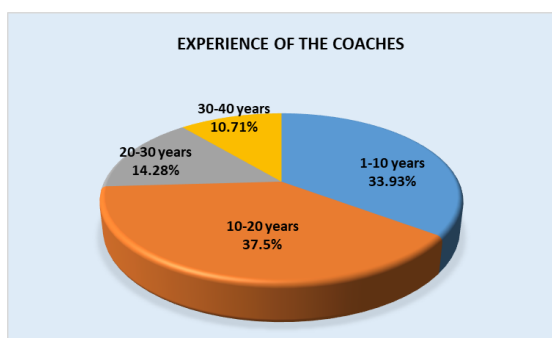


Figure 1. Age of coaches

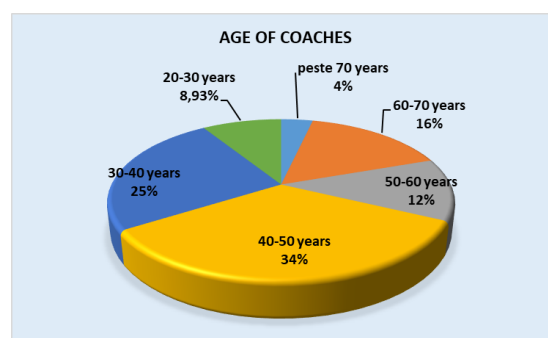


Figure 2. Experience of the coaches

To the question "At what level is the specific training for the defence game, at national level?" 50% of the coaches surveyed answered that it is at a good

level and 39.28% of them consider it satisfactory (figure 3). The lowest share is obtained by the answers "poor" (7.5%) and "very good" (3.57%).



Figure 3. The share of answers at question no 1



Figure 4. The share of answers at question no 2

From these values we can deduce that most of the questioned coaches are satisfied with the level of specific preparation for the national defence game, but this assessment does not satisfy the needs on the field during official matches, except for 3.57% of those surveyed.

highlighted a percentage of 57.14% for the "good level" option and 33.93% for the "satisfactory level" option (figure 4).

When asked about the training level of the team coached by the respondents, the analysis of the answers

Only 3.57% of those surveyed are fully satisfied with the level of their own team, scoring for the answer "very well". The values obtained for this question are compatible and highlight the current situation on the field regarding the junior II defence game.

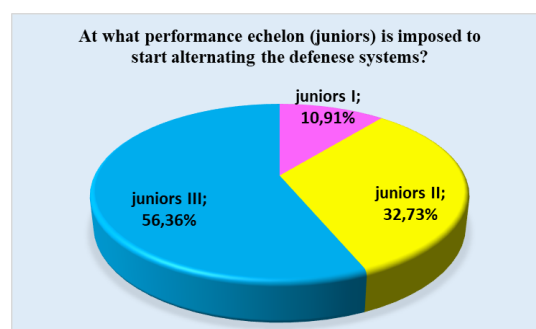
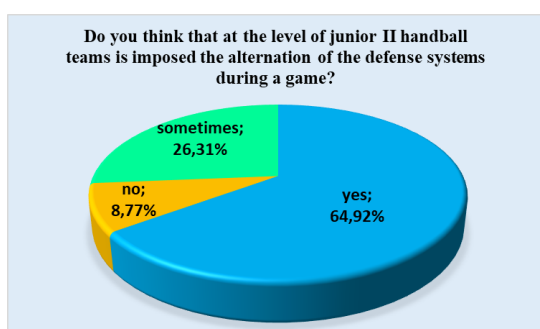


Figure 5. The share of answers at question no 3

The weight of the majority answers (69.92%), to question no. 3, focuses on the idea that at the level of junior II handball teams it is necessary to alternate the defence systems during a game. But there are also coaches who do not consider opportune this alternation of defence systems during the game to this echelon of athletes in a share of 8.77% (Fig. 5). The other surveyed coaches, representing 26.32%, appreciate the importance of alternating the defence systems used only in certain situations.

In conclusion, we observe the orientation towards a clear opinion, the majority opinion according to which for the junior echelon II the alternation of the defence systems during the game is a condition of success.

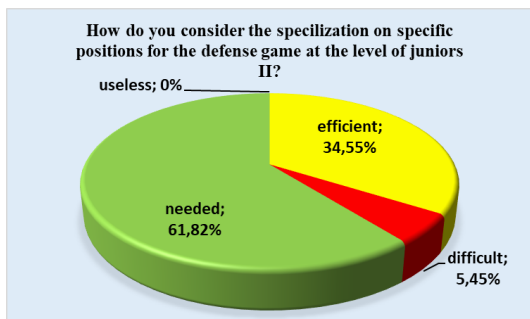


Figure 7. The share of answers at question no 5

The need to specialize in the positions specific to the defensive game since junior level II (61.82%) represents the majority of the answers received from the surveyed coaches (question no. 5, figure 7). 34.5% consider this specialization on positions at the junior II echelon to be effective, while 5.45% of the surveyed coaches believe that the approach to this specialization is difficult at this level. None of the respondents considered it unnecessary to approach the specialization on positions at junior level II handball players.

From this perspective we can say that the introduction in the training of junior II athletes of the specific exercises of some game positions and thus the leadership towards a specialization of the players, represents a desideratum, a necessity of the dynamics of the handball game from this level of performance.

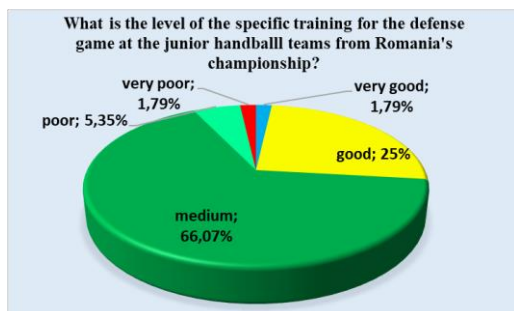


Figure 9. The share of answers at question no 7

Figure 6. The share of answers at question no 4

The answers to question 4 lead us to an early approach of the defence systems in the training process, the share calculated for starting the alternation of the defence systems for juniors III being 56.36%. (figure 6)

32.73% of the surveyed coaches answered that this need is imposed from the junior level II, and 10.9% considered that only at the junior level I it is necessary to change the defence systems in the game.

We consider these answers inconsistent with reality because such an early application of the alternation of the defence systems in the game would have led to another level of the teams in the championship in terms of the defence game.

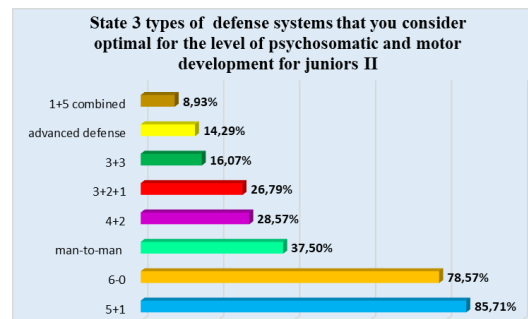


Figure 8. The share of answers at question no 6

The defence game system used by most coaches in the Romanian championship is 5 + 1, the share of the answers in favour of this option being 85.7% (question no. 6, figure 8). The next defence system used by the surveyed coaches is 6-0, the calculated share for this answer is 78.57%. The third defence system used at the level of juniors II is the "man to man" system, for which a percentage value of 37.5% was obtained. Also present in the answers of the surveyed coaches were the 4 + 2 systems (28, 57%), 3 + 2 + 1 (26.79%), 3 + 3 (16.07%), advanced defence (14.29%), 1 + 5 combinations (8.93%).

It is observed a wide range of defence systems used at this level by handball players due to their specific adaptation to the particularities of psychosomatic development of athletes.

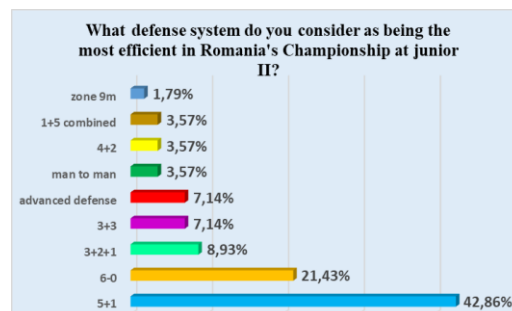


Figure 10. The share of answers at question no 8

The highest share (66.07%) of the respondents of our questionnaire consider the level of specific training of the defence game of the junior teams in the Romanian Championship (question no. 7, figure 9) as average, while 25% consider that the level is good.

The same percentage (1.79%) is calculated for the answers "very good" and "very poor" which certifies the fact that the level of specific training for defence in Romanian handball at the junior level is not appreciated as being of quality, the results obtained in large-scale competitions, also pointing out this aspect.

5.35% of those surveyed considered the level of training specific to the defence of handball teams in the Romanian junior championship to be "poor".

These percentages represent very clearly the situation in reality, the coaches usually focusing in training more on the operational systems specific to the attack game, which leads to the creation of deficiencies in the correct and efficient implementation of the defence phases.

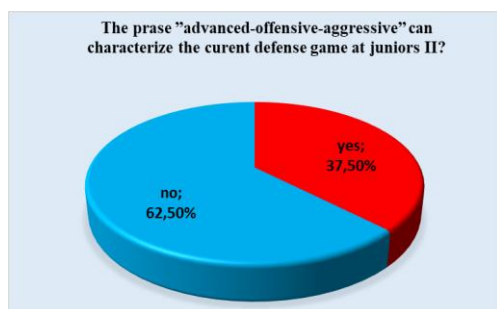


Figure 11. The share of answers at question no 9

The characteristic of the international defence game "advanced-offensive-aggressive" does not coincide with the conception of Romanian coaches in connection with the defence game of juniors II in Romania (question no. 9, figure 11). We consider that this answer occurred from knowing the mental characteristics of athletes, specific to age (assertion of one's personality, opposition to the image of the adult, etc.) and who for now cannot control emotions, cannot fully and correctly realize the actions of the opponent or decision of referees.

The share given to the preparation of the defence game represents on average between 40% and 50% of

As active participants in the Romanian Championship, 42,86% of the surveyed coaches appreciate the 5 + 1 defence system as an efficient one, adapted to the requirements of the technical level of the junior II level players. The following share (21,43%) is

assigned by the coaches to the 6-0 defence system. (Question 8, figure 10)

From the answers received to this question, we observe the wide range of defence systems considered to be the most effective by senior coaches in training junior II level handball athletes.

Comparing the answers received for this question with those recorded in question no. 6, we observe that the first 2 defence systems coincide (6+0 and 5+1), which means that the majority of surveyed coaches consider them as being applicable in practice from the perspective of the psychosomatic possibilities of athletes but also from the perspective of their efficiency.



Figure 12. The share of answers at question no 10

the total time allocated to the training, an observation obtained from the calculation of the coaches' answers (42.86%). However, a percentage of 33.93% of the coaches give a higher share (over 50% of the total training time) to the preparation of the defence game (question no. 10, figure 12). None of the surveyed coaches opted for the answer option "below 30%". These answers give us the certainty that in the view of the surveyed coaches the defence game has a significant importance in training handball players at this level of performance.

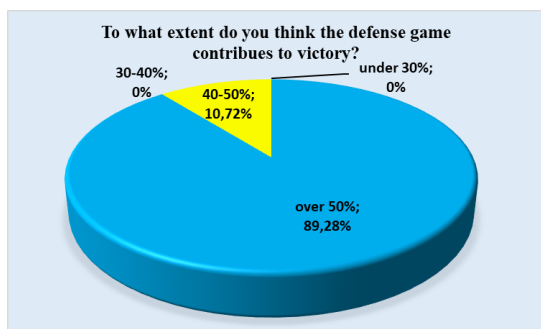


Figure 13. The share of answers at question no 11

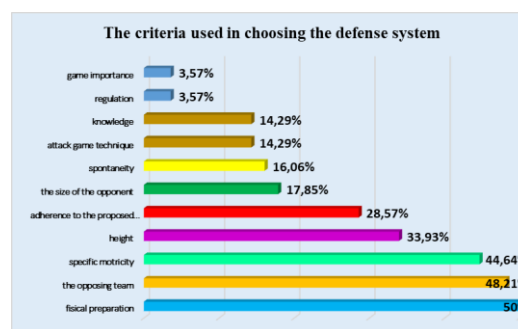


Figure 14. The share of answers at question no 12

The answers received to the previous question are also due to the fact that the respondents consider the defence game as a plus in obtaining the victory (question no. 11, figure 13). But 10.72% give a share between 40-50% to the defence game in obtaining the victory. From these percentage values we observe that in theory all coaches know the importance of the defence game when it comes to winning.

Wanting to know what are the criteria according to which the coaches choose the defence system used, I asked question no.12. Thus, they offered several answer options depending on the importance given.

The most common criterion used in choosing the defence system is the level of physical training of own team (50% of coaches). However, 48.21% of respondents believe that the level of preparation of the opposing team is an important criterion in choosing their own defence system in play. Also, specific motor skills are another important criterion (44.64%) in choosing your own defence system in play (question 12, figure 14). Other criteria in the order of the calculated share are the Athlete's heights; Adherence to the proposed system; The size of the opponent; Spontaneity; Attack game technique; Level of knowledge; Regulations; The importance of the game.

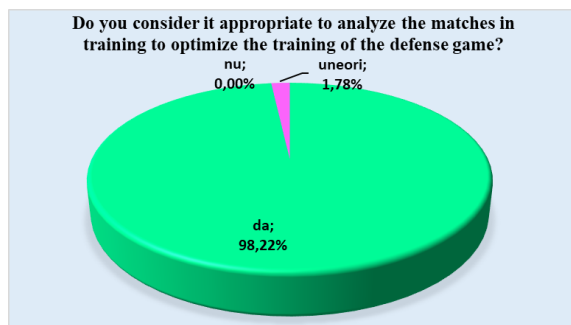


Figure 15. The share of answers at question no 13

A percentage of 1.78% considers the analysis of matches in training as opportune only occasionally.

This practice is, therefore, very used by the surveyed coaches, which shows us that both the players and the coaches receive feedback after the matches in order to improve the technical-tactical aspects and to verify the accumulations within the trainings. (Figure 15)



Figure 16. The share of answers at question no 14

42.86% of the coaches included in our survey allocate equal time to training for attack and defence within the training time. Equally answered "no" and "sometimes" 28.57% (figure 16 - question no.14).

We notice from the analysis of the answers to the same question that there are still coaches who do not consider the game in defence as important as the one in attack, not paying equal attention during training.

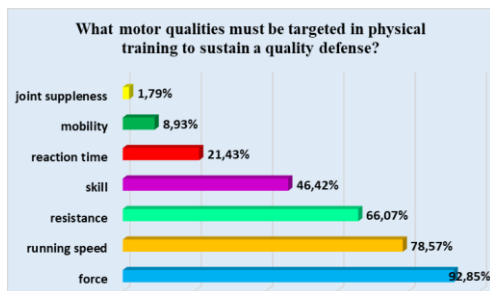


Figure 17. The share of answers at question no 15

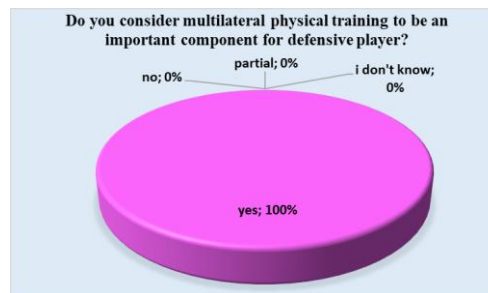


Figure 18. The share of answers at question no 16

In question no. 15, the motor qualifications targeted as important to sustain a quality defence and listed by the surveyed coaches were:

- force – 52 answers – 92,85%
- movement speed – 44 answers - 78,57%
- endurance in speed regime – 37 answers – 66,07%
- specific handiness – 26 answers – 46,42%
- reaction speed – 12 answers – 21,43%
- articular mobility – 5 answers – 8,93%
- muscular suppleness – 1 answer – 1,79%

Thus, the first 3 motor qualities mentioned by most of the coaches included in our research are force, movement speed and endurance in speed regime. We notice that the answers are very consistent with the needs and tendencies of the handball game in which the force of the players, the speed of movement but also the endurance of the athletes to multiple sprints are important advantages of the players in the economy of the game.

Multilateral physical training (question 16 - figure 18) as well as specific physical training (question no. 17 - figure 19) have an important role in the vision of surveyed coaches for defence players. In support of this statement is the calculated percentage

Analysing the answers to question no.17, it is observed that 8.93% of the surveyed coaches consider the importance of specific physical training for specific sports; mainly for the defence game is average and for 3.57% is minor. Given that the defence game by its specificity requires qualities such as force, speed of reaction, mental qualities such as attention and determination, decision making in a short unit of time and much more, we consider that these answers are inconsistent with what involves the training of specialized athletes in defence positions.

In addition to multilateral training, paying special attention to physical training specific to defensive positions can be a major advantage in matches.

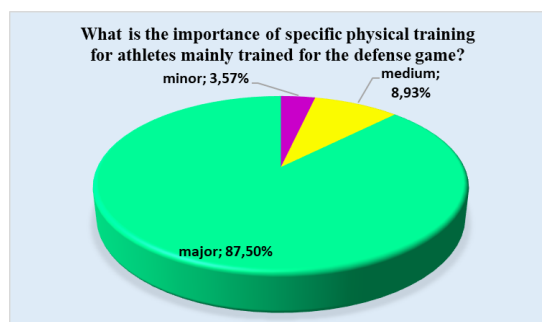


Figure 19. The share of answers at question no 17

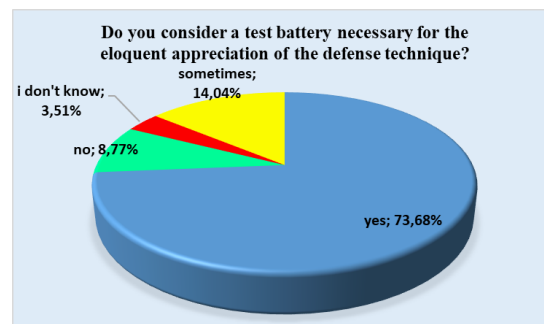


Figure 20. The share of answers at question no 18

The need for a battery of tests for the eloquent determination of the defence technique mastered by athletes emerges from the answers to question no. 18 (figure 20). Thus, 73.68% of the surveyed coaches consider a test battery specific to the appreciation of the defence technique necessary, while 14.04% consider that only sometimes such a test battery is

needed. 8.77% consider that there is no need and 3.51% do not know if such an instrument is needed.

The answers to question number 19 are multiple. The coaches were asked to specify 3 tests to verify the mastery of the defence technique at junior level II.

36 coaches (64.28%) considered that moving in a triangle is a specific test to verify the technique of the defensive game; 16 coaches (28.57%) specified the shuttle test; 15 coaches (26.79%) mentioned the Cooper test; 13 coaches (23.21%) specified the Zigzag test; 11 coaches (19.64%) considered that the general physical development tests can be part of the battery of specific tests to verify the mastery of the defence technique at junior level II.

Tests were also specified, such as the small marathon, Illinois, tests to verify the expansion, the test of the 3 cones, etc.

To question no. 20 "What are your sources of information on the news regarding the means of teaching-learning-evaluation of the defensive game?",

the coaches opted for several variants of answer as follows:

- a-web sources-10,72%
- b-books and speciality works – 8,93%
- c-training course-5,35%
- a+b – 8,93%
- a+c – 12,5%
- b+c – 10,72%
- a+b+c – 42.85%

These shares of the answer variants accredit us to state that the information regarding the novelties of the handball game represents a permanent preoccupation of the coaches included in this survey.

Conclusions

The 20 questions addressed to the coaches included in our research answer the need to know their current needs regarding the defence game with all the aspects related to this moment, the important success of a match.

The answers offered by the coaches are correlated with the current situation in Romanian handball at the level of the junior II echelon, in that the results from the national competitions clearly reflect the conception of the coaches of these handball teams.

The perception on the level of training specific to the defence game is a good one, both at national level (question 1, figure 3) and at the level of one's own team (question 2, figure 4). The beginning of the alternation

of defence systems is appreciated by most coaches as being able to start from junior III level. The most frequently used defence systems are "5 + 1" and "6-0", because the level of psycho-somatic development is optimal at this age level for the specificity of achieving these two forms of defence, a conclusion that emerges from the analysis of the answers received for questions 6 and 8. These aspects are correlated with the use criteria used in choosing the defence systems used (question 12, figure 14), in which the first three mentioned are the training, the special strength of one's own team and the level of performance of the opposing team.

From a theoretical point of view, coaches allocate time between 40-50% and over 50% for the defensive game in training (question 10, figure 12), which correlates with the answers to question 11, in which 89.28% agree that obtaining the victory is due in proportion of 50% to the defence game (figure 13). However, the answers to question 14 (figure 16) offer us a different approach in the field because only 42.86% consider that the time allocated to training the defence game is equal to that given to the attack game.

The qualities of the players for a successful defence are force, movement speed and endurance (question 15, figure 17) along with multilateral training (question 16, figure 18). It is noted that the majority of coaches in

this level of performance need a battery of tests focused on the specificity of the defence game (question 19) in order to be able to verify and model the training of athletes preparing for this phase of the game. The variants of tests oriented towards verifying the mastery of the athletes' defence technique were multiple, noting mainly "triangle movement", "Shuttle test", "Cooper test".

The information of the surveyed coaches regarding the defence game is made with the help of several means such as web sources, specialized courses and specialized publications. These concerns of the coaches give us a clear picture of the need to introduce in the trainings of the athletes newer and more effective methods and means of learning-teaching-evaluation of the defence game.

At the national level, the design of the game in defence aims at the application in the field of the basic characteristics and principles that will ensure an increased efficiency of the game systems (Mihaila, I., 2015). It is desired to create the supernumerary ratio in the ball area, to increase the individual aggression and

implicitly of the entire defence system. Radical changes in defence systems occur in matches depending on the opponent and the situation of the game.

Each team presents a variety of defence tactics, with distinct differences in how each method is applied and adapted by players, depending on their abilities to effectively prevent a goal attempt by opponents. In this perspective, it is interesting for both coaches and players to be aware of the associative indicators with defensive systems, in order to increase the chances of winning (Oscar, G.A. & Pascual, P.J., 2011, p.3).

A coherent application of some tests is necessary, especially the comparison with a standard of the model of players characteristic of the defence game. Only keeping these conditions, the physical and technical training will be able to lead to juggling with exercise structures, in trainings, which will address the specifics of the athlete and at the same time contribute to the collaboration between the players, which is so important.

In compliance with the speciality literature, the answers provided by the surveyed coaches confirm that the new trends in the development of the game in general and the defence game in particular, require players with special physical skills, evolved technique and tactics, but elastic during games, such as adequate psychological training.

The opinion of the specialists in connection with the optimisation of the handball players' training for the defence game represents a key point in creating a topical vision on the defence systems used, on the attention paid to the technique and tactics specific to the defence game for junior II.



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