# **Original Article**

# Identification of particularities of the conception and application of training programs of goalkeepers specialized in the performance handball

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### Abstract.

Sports performance at the level of handball cannot be achieved without the design and implementation of individualized training programs that take into account the specificity of the effort, the technical tactical content and the motoring structure imposed by the ever changing dynamics of the handball game, but above all by the characteristics of the game. Identifying the most important particularities of the training and efficiency of the handball players in the game was accomplished by means of a questionnaire survey applied to a number of 42 specialists from Romania and France, who answered a set of questions elaborated in this way so that we centralize the most up-to-date data and information for our study. The research methods used were those with a high degree of applicability, specific to the field of activity, namely: the method of analysis and generalization of specialized and interdisciplinary literature; method of pedagogical observation; statistical and mathematical method of objective processing of results; survey method; graphic and tabular. The answers of the 42 surveyed specialists were processed and interpreted statistically and mathematically for detachment of guiding conclusions in the training of handball players specializing in goalkeepers, and for better visualization were represented graphically. The conclusions drawn from the interpretations of the respondents answers highlight the role and importance of the specialized handball player on the goalkeepers level in the optimization of sports performance in the handball performance, as well as the particularities of the ways of conceiving and putting into practice the training programs, the general recommendation being individualized training.

Keywords: handball, performance, goalkeeper, training, program

#### Introduction

The current handball game involves a new player training methodology aimed at personalizing effort-focused training based on technical-tactical content and game-specific motoring structure that players are specializing in. The continuous evolution of international sporting performance has led to the modeling of training and game in relation to the technical-tactical content, the motor structure and the effort specific to each game station that the players are specialized in. In the major international handball competitions, the level of performance achieved was, is and will be largely conditioned by the player's specialist performance as a goalkeeper. Practice shows that "the great teams, both club and national, have always had their heroes in the name of famous, high-value goalkeepers" (Popescu C., 1969), so that the role and importance of the player specialized on the post goalkeeper is universally recognized internationally. In the view of the authors Martinet, J., P., & Pages, J., L., 2007, for the handball game, the goalkeeper is the player who, in the context of throwing the goal, represents the last defender to stop it " striker, given that it is often the one that initiates the counter-attack or quick attack.

The motor structure specific specialized handball players as a goalkeeper at the level of the handball performance, must undergo a training program tailored to the particularities of the field players, but especially an individualized, specific to the game post, which contributes to the efficiency in the game, without which cannot be achieved performances at team level, individualization being viewed by specialists (Dragnea, & Mate Teodorescu, 2002; Bota, & Pereira, 2003; Trosse, 2004; Weineck, 2005; Issurin, 2012; Bompa, & Haff, 2013) as a mandatory requirement for modern training, with positive transfers to specific training.

The characteristics of this sporting game have proven today that the transition from an emotional sports game to a collective sport of total commitment contributes both to the increase of each player's performance on the game economy and the sports performance. (Bota, & Macovei, 1983; Kunst Ghermănescu, Gogâltan, Jianu, & Negulescu, 1983; Sotiriu, 1998; Voicu, 2003; Martinet, & Pagges, 2007; Ribeiro, & Volossovitch, 2008; Torres Martin, & Iniesta Molina, 2009; Nicol, 2010; Mihăilă, 2013) records as a distinct moment the training of handball players specialized on the goalkeepers, due to the totally different technical and tactical content of the other players, but also the importance of community training, with the team, in relation to the objectives set.

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The purpose of our research is to demonstrate that the training of the player on the handball player's handball is a major indicator by following a methodology that aims to improve the dominant driving qualities for this team-level, fast-.

Developing, applying and confirming the effectiveness of handball training programs for handball players, specialized in portraits, aimed at establishing their own methodology in line with the requirements imposed by their work on the playing field. For this, our research has set several goals and tasks to be covered in the investigations.

#### Materials and methods

In order to achieve the goals, objectives, tasks and working hypotheses formulated, a series of research methods, significant for the field of Science of sport and physical education were used, such as: method of analysis and generalization of specialized and interdisciplinary literature; method of pedagogical observation; statistical and mathematical method of objective processing of results; comparative method; graphic and tabular.

A very important role in the realization of our research was given by the use of a sociological survey based on a questionnaire, an investigation technique consisting of a set of questions, logically ordered and administered by the operators, in order to determine a series of responses centered on getting results.

In our research the sociological survey was elaborated and applied through a representative questionnaire addressed to a number of 42 specialists from Romania and France. For us, this type of investigation has been a system of questions designed to centralize data and information that is as enviable as possible for our study. The questionnaire developed and applied by us in the research was of a closed type taking into account the following aspects, namely: the content of the questions had been taken into account in the aspects of the issues addressed in the research; the answer was made in fan, assuming several variants; determining questions in order of order began with introductory questions, followed by pass-through questions, filter questions, control and identification questions; it was considered that the wording of the questions would not give rise to different interpretations.

On the basis of the above, the questionnaire proposed by us envisaged a good quantification of the answers of the 42 specialists, considered real and objective, stating that any correct "diagnosis" in the scientific research can be achieved only by making use of the of several methods, starting from a clear, well-identified methodology and in its entirety.

## **Discussion / Results**

Regarding the level of training of handball players specialized in the field of handball in Romania, the coaches questioned have the following opinions: very good - 2 (4.76%); good 11 (26.19%); mean 12 (28.58%); weak - 14 (33.33%); very weak - 3 (7,14%) (Table 1). We can note that at national level there is a very small number of value porters that are active in top teams but it is necessary to increase their number at all levels of performance handball and even create a unitary training concept and specialized centers on training players on this game.

Table no. 1. The level of training of handball players specialized on the goalkeepers' position in Romania

How do you think it is, in general, the level of training of the handball players specialized on the goalkeeping at the level of the handball performance in Romania?	Nr. of answers	Percentages
Very good	2	4,76%
Good	11	26,19%
Environment	12	28,58%
Weak	14	33,33%
Very weak	3	7,14%

The answers of the specialists to the question, "what proportion in the current handball game, the evolution of the player specialized on the goalie can lead to victory?" Shows us the following: 26 respondents believe that in the handball game, the player specialized on the position of goalkeeper has a decisive role in winning, with a contribution of over 50%; 11 of the respondents consider that a percentage of between 40 and 50% is determined by the evolution of the goalkeeper; 5 of them think that a percentage of 30-40% is enough. There is no response from specialists (20%) and 20% (Table 2).

These answers confirm the literature of the specialized literature regarding the role and importance of the specialized player on the goalie, the Romanian handball successes are largely due to the valuable portals he had "(Bota & Macovei, 1983, p. 7), and "the big teams, both clubs and national teams, have always had their heroes in the name of famous portraits of great value" (Popescu, 1969, p. 7).

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Table no. 2. Centralize the results of the goalkeeper's contribution to victory

In what proportion in the current handball game, the evolution of the player's specialist on the goalie can lead to victory?	Nr. of answers	Percentages
>50%	26	61,90%
between 40% - 50%	11	26,19%
between 30% - 40%	5	11,91%
between 20% - 30%	0	0%
□20 %	0	0%

Responding to the question "Find out that individualized training can help optimize sports performance for handball players specializing in the goalkeepers", the questioned specialists have the following answers: 32 of them, representing 76.19%, consider that individualized training with players specialized in the goalkeepers, leads "to a great extent" to achieving superior results; 8 of them, that is, 19.05% opt for the "largely" option and only 2 (4.76%) choose the "somewhat" option. For the "small" and "not at all" variants, none of the respondents opt. In the view of the authors Martinet, & Pages, 2007, p. 101, the goalkeeper is the player who, in the context of throwing the goal, is the last defender to stop it ", being also" a key man of the match to be rewarded in training "(Gueniffey, 1998, p.115).

Table no. 3. Results on optimization of sports performance through individualized training

Do you find fit that individualized training can help optimize sports performance at handball players specializing in goalkeepers?	Nr. of answers	Percentages
To a great extent	32	76,19%
Largely	8	19,05%
Somewhat	2	4,76%
To a small extent	0	0%
Not at all	0	0%

To the question "What is the role of specific motorized capacity in the training of players specializing in goalkeeper in the handball performance?" 33 of those questioned consider the specific motorized capacity as very important in optimizing sports performance for this position, representing a percentage of 78.57%, while 9 of them, respectively 21.42%, consider that they have an important role. "Not important" and "not important" is not attributed to any of the specialists who answered the questions (Chart 1).

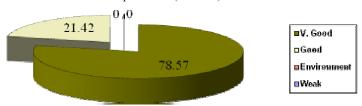


Chart no.1. The role of specific motorized capacity in optimizing performance for handball players specialized on the goalkeeper

Personalized training with handball players specializing in the goalkeepers can be done in all its forms of expression, the proposed variants, relatively close to the number of answers being recommended with the following percentages: training lessons separated by the others Players 11 Responses, representing 26.19%; before the training session common to all players is recommended by 9 specialists, 21.43%; during the training session with all the members of the team 12 of the respondents, ie 28.57%; after the joint training 10 respondents, the needles represent 23.81% (Table 2). Bompa, 2002 considers the individualization of sports training as an important requirement of sports training by which the coach "has to give individual attention to each sport, according to its qualities and potential". For handball at the level of the performance echelon, "all players must also prepare for individual training plans, both in order to increase the value of their own personality and as a constitutive element of the game system gear" (Mihăilă, 2005, p. 87).

Table no. 4. Place of individualized training in the training process

The place of individual training in the training lesson	Nr. of answers	Percentages
Training lessons separate from other players	11	26,19%
Prior to joint training	9	21,43%
During your joint training	12	28,57%
After the joint training	10	23,81%

2250

Analysis of the answers to the question "Do you consider that in the training program of handball players specialized in the goalkeepers it is necessary to develop individualized training programs focused on the improvement of the specific motorized capacity? demonstrates that specialists working at the level of handball have a clear vision of what scientific training means. Thus, their answers are focused on the first two qualifiers, namely "very much" a number of 36 responses representing 85.71% and "to a large extent" a number of 6 answers, representing a percentage of 14.29%. None of the respondents recommend that these programs be used "somewhat", "to a lesser extent", or not "used" at all in training players specializing in portraits, at handball performance. We believe that the opinions of specialists converge with those from the literature, the use of individualized programs focused on improving motor skills is not only necessary, but also useful in optimizing the performance for this very important game-playing position within the handball team.

Table no. 5. The place of individualized training in the training process

Do you think that in the training program of handball players specialized on the goalkeepers it is necessary to develop individualized training programs focused on the improvement of the specific motorized capacity?	Nr. of answers	Percentages
To a great extent	36	85,71%
Largely	6	14,29%
Somewhat	0	0%
To a small extent	0	0%
Not at all	0	0%

Regarding the question, "What do you think is the percentage of training components in sports training for handball players?" The analysis of the answers to this question for Specific Physical Training shows us that 40% opt for 3 of those questioned, representing 7,14%, 4 of them opting for 35%, representing 9.52%, 13 of them opting for 30%, representing 30.95%, 14 of them opting for 25%, representing 33.33%, 6 of them opting for 20%, representing 14.28%, 2 of them opting for 15%, representing 4.76% (Chart 1).

The answers elaborated by the majority of specialists are in line with the data from the literature, at the level of performance sports, a relatively small number of those surveyed recommends a higher or lower percentage.

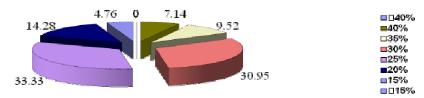


Chart no. 2. Specific physical training within the annual training cycle at handball players

### **Conclusions**

The elaboration, application and confirmation of the effectiveness of training programs for specialized handball players as a goalkeeper, in the opinion of the specialists consulted, the establishment of an own training methodology according to the requirements imposed by the technical tactical content and the motric structure of its activity during the game.

Based on the arguments of field specialists dealing with the training of handball players specializing in the goalkeepers, at the level of the handball performance, the ways and means of training the player specialized on this game position and its role in increasing and maximizing performance can be established in training and competition.

Increasing the speed of the technical-tactical executions in the performance handball, as well as other combinational and coordinating motor skills impose today in the modern training, the rapid adaptation to the demands of the effort of each segment and part of the requested body, which can be achieved by increasing strength, skill, reaction speed, etc. For a professional handball player in the handball, it is one of the priority directions of training where the use of general and special physical training produces a greater increase in the player's specific motor skills in such a team.

The study, according to the surveyed experts, confirms the data collected from the literature by: in the performance handball, no better results can be obtained than those teams that comprise a specialized player as the goal keeper (the evolution of the goalkeeper can influence in percentage of over 50% winning, 61.9% of surveyed specialists agree, individualized training with handball players acting on this game, recommended by all specialists, is of special importance and can be applied in all its forms, with the same efficiency, the vast majority of the specialists who answered the questions of our questionnaire, highlight the driving force that is indispensable to the superior development of the specialist goalkeeper, the combined power of speed.

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