

**EDU WORLD 2022****Edu World International Conference Education Facing Contemporary World Issues****SURVEY REGARDING THE EFFORT CAPACITY OF WING  
HANDBALL PLAYERS IN ROMANIA**

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**Abstract**

The purpose of this article is to highlight, following a mixed questionnaire survey, how is the effort capacity of the performance handball players in Romania specialized as a wing, evaluated by specialists working in the men's Handball League, in relation to the athletes with the same position that play at the highest level but also in relation to the general requirements of the top competitions. In this regard, we conducted a questionnaire survey which included 18 mixed questions to which the possible answers were fixed, but also open, which gave the respondents the opportunity to freely express their opinions on the chosen topic. The sample that responded to our questionnaire was represented by 35 specialists that are involved in male handball (coaches, physical trainers, Methodists) with a notable experience in sports training, in order to obtain objective answers based on professional experience and specialized knowledge. The answers received from the specialists highlight the relatively low level of performance from the Romanian male handball, which comes as a consequence of the notable difference between the technical-tactical behaviour of the players specialized for the wing position in the national and international competitions, and of the effort capacity of the wing players at national level, assessed as being of medium level and which is seen as a determining factor for optimizing the performance of the players and implicitly of the teams participating in the top national leagues in Europe.

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## 1. Introduction

Sport has become an integral part of any society. The interest towards performing sports has grown more and more. Therefore, sport has become a strong social phenomenon anchored in people's lives. (Baştiurea, 2006). When we talk about performing in sports, we can't ignore the handball game. Handball is a young game, but it has quickly become appreciated and practiced due to its spectacular style that derives from the multitude of movements. This permanent development (International Handball Federation, 2021) has led specialists to orient the training process according to the evolution of the modern game (Bajgoric et al., 2016). Moreover, studies on the handball game have expanded, and specialists such as (Bompa & Buzzichelli, 2021; Bonnet et al., 2020; Mihăilă, 2013) focused their studies on the theoretical and methodical substantiation. The role of the handball players that are playing as wings is becoming more important in handball, in all phases of the game (fastbreak, attack, balance or defence), based on collective actions (when collaborating with teammates) or individual actions. Taking this into account, there is the issue of individualized training (Bernicu et al., 2020) especially for the young handball players (Ruscello et al., 2021), issue highlighted by Hermassi, Laudner et al. (2019, p. 11) who recommend coaches to “develop position-specific training concepts”. This issue highlights the importance of specialization of players on different positions, in attack and defence, taking into account the type of effort related to the motor structure of the handball game, as well as the technical-tactical content specific to the playing positions. Handball players (in this case - wings) need special technical skills and anthropometric characteristics, a high level of strength and speed (Cazan, 2018; Hermassi, Delank, et al., 2019; Mohoric et al., 2021) and also mental qualities (Hermassi, Chelly, et al., 2019). Ghermănescu et al., (1983) and Negulescu (2000) consider that depending on the playing position, physical training should be a permanent concern. According to Eftene and Acsinte (2012), position-specific trainings as a working method, "represents a form of organization of the training process" (p. 145). They recommend for the wings a series of means to improve their strength, speed, coordination, all carried out in a technical and tactical regime. So, according to Mihăilă (2005) individualization is "a special activity of preparing athletes according to individual characteristics" (p. 39). For the handball game, we know that the bio-psycho-social characteristics of the player must be related to the technical-tactical content specific to the phases of the game for attack and defence, as well as the motor structure and dynamics of the effort specific to each game position (Büchel et al., 2019; Font et al., 2021; Machado et al., 2020).

## 2. Problem Statement

In countries with notable results in recent years in top handball competitions, it is known that specialists are concerned with improving the effort capacity in accordance with the specific requirements of the position on which each player evolves in relation to the specifics of the current handball game, and there is also an increasing focus on the performance handball in our country.

### 3. Research Questions

The questionnaire that we put together followed the next hypothesis: Will a survey that compares the involvement in the handball game of world's top wing players, to the wings in the Romanian league, open the way to improving the training concept for handball teams in the National Handball League when it comes to specific training regarding the effort and the motor qualities that need to be emphasized?

### 4. Purpose of the Study

The survey we present below was designed to honestly and objectively assess the level of male handball performance in Romania relative to the increasingly demanding physical characteristics of handball practiced by competitive teams at top international level and find the solutions identified by the specialists in order for the athletes specialized for the wing position in Romanian handball to become as efficient as the international athletes to which we relate.

### 5. Research Methods

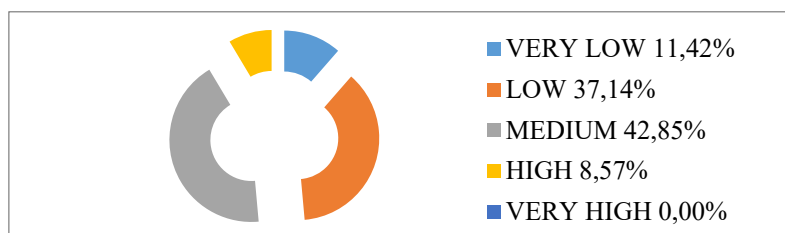
In order to carry out this research, we applied a mixed questionnaire survey on 35 specialists that are involved in performance handball in Romania (coaches, physical trainers, Methodists). It included 18 questions considered representative for investigating the level of training for male wing players and identifying practical possibilities in order to optimise their performance.

Along with the questionnaire survey method, other research methods were used such as: The method of studying the literature, the method of analysis, the graphic method, the statistical-mathematical method that contributed to the achievement of the proposed purpose and objectives.

### 6. Findings

The results obtained from the study are consistent with the research carried out in other countries with a well-represented handball in major international competitions and highlight as a priority factor of training, specific training in terms of technical and tactical requirements and especially of effort, adapted to the on-court position of each player.

Thus, at the first question of the questionnaire referring to **the level of performance of the Romanian male handball at this time**, we note that the answers rate it as medium to low as seen in figure 1.



**Figure 1.** The level of performance for the Romanian handball

Below, in Table 1, we can notice that most specialists consider **native physical quality** as the main factor that enhance performance and **the disposition to work at maximum level** (mentality) as the most important aspect that limits performance of handball players.

**Table 1.** Enhancing and limiting factors of male handball players in Romanian National League

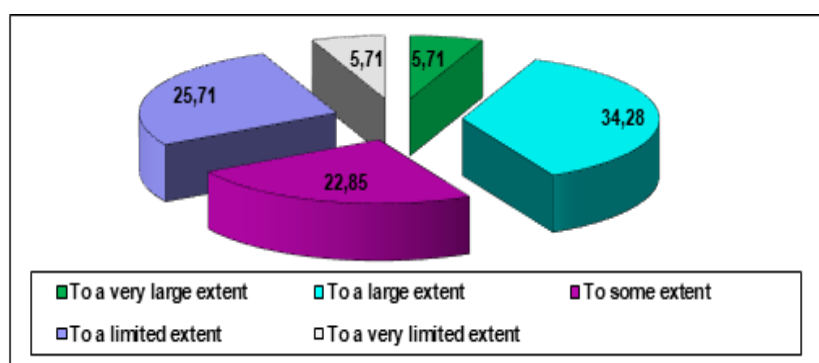
Factors enhancing/limiting performance	No. of answers	Percentage %
Native physical quality	18	51,42
The pleasure of practicing a beloved sport in Romania	0	0
Financial factors	14	40
Other factors	3	8,57
Poorly prepared coaches	5	14,28
Willingness to work at the maximum level	17	48,57
Outdated methods of training	5	14,28
Other factors	8	22,85

As one can see in Table 2, the answers for the question “do you consider effort capacity as a determining factor in order sports performance at elite handball players?” Make us consider the effort capacity of handball players, a determining factor for optimizing the performance of players and implicitly of the teams competing at top level competitions.

**Table 2.** Centralization of effort responses

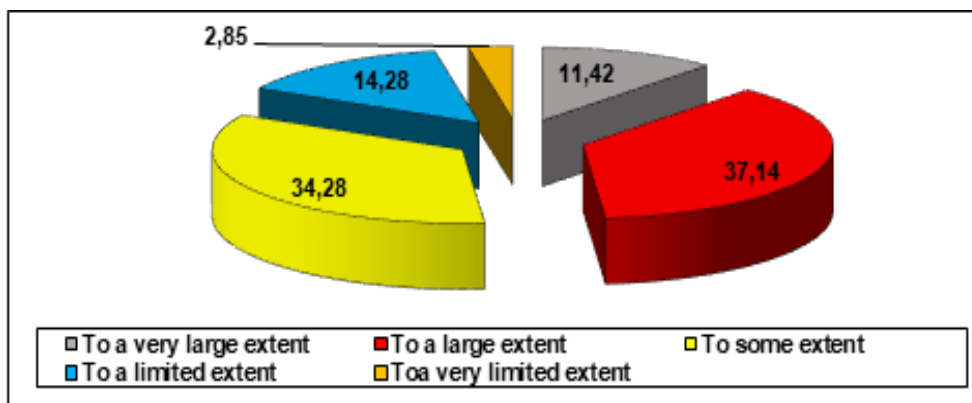
"Do you consider effort as a driving factor in order to optimize sports performance among elite handball players?"	No. of answers	Percentage %
To a very large extent	13	37,14
To a great extent	15	42,85%
To some extent	7	20
To a small extent	0	0
To a very small extent	0	0

For the question, “In your opinion, is the effort capacity of handball players dependent on the playing position in the team?” we can find the analysis of the answers in figure no. 2 showing that the effort capacity of the performance handball players is dependent on the playing position to an extent large enough to put the emphasis in the training on this aspect.



**Figure 2.** To what extent the effort capacity is dependent on the on-court position

Looking at the answers for “do you think there are differences between the behaviour of the wings in our league and the top-level leagues?” we have found that there is a notable difference between the technical and tactical behaviour of the players specialized on the wing position at national and international level, as shown by figure no.3.



**Figure 3.** The differentiation level between wings playing in Romania and those regarded to be elite

In Table no. 3 we find the opinions of the specialists on the question “What do you think are the causes that lead to differences between the in-game manifestation of the athletes specialized on wing position in Romania and those who play in countries with a high level of handball ?” and that they are divided, but we can say that the level of the specific effort capacity of wings, one of the causes that lead to these significant differences in manifestation during games, is largely determined by the lack of a modern training concept in full accordance with the driving structure and specific effort of current handball.

**Table 3.** Causes leading to differences between Romanian and foreign wings

“What do you think are the causes that lead to differences between the in-game manifestations of the athletes specialized on wing position in Romania and those who play in countries with a high level of handball?”	Number of answers	Percentage %
Effort capacity	9	25,71
Player’s characteristics	2	5,71
Training concept	6	17,14
Playing concept	7	20
Training methods	9	25,71
Others	2	5,71

To the question regarding the “the predominant motor quality” in handball, answers show that the opinions are divided into all qualities, but the largest number of them consider the strength capacity as a priority as seen in Table 4.

**Table 4.** The prevailing motor quality in the game of handball

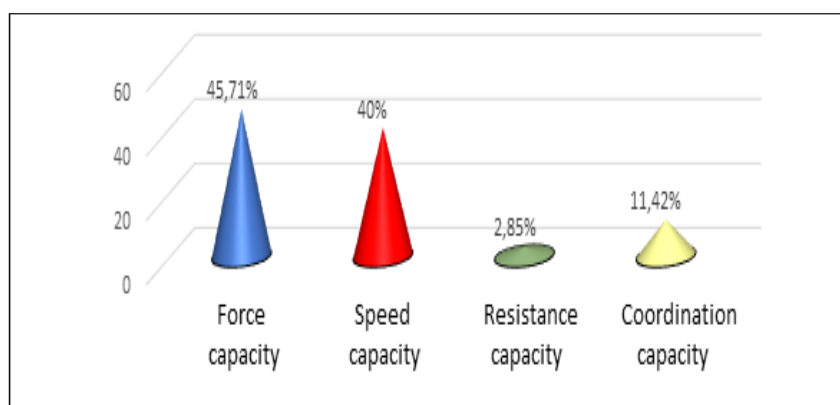
<b>"The predominant motor quality in handball is:"</b>				
Answer	Force capacity	Speed capacity	Resistance capacity	Coordination capacity
Number of answers	16	14	1	4
Percentage %	45,71	40	2,85	11,42

As it can be seen in Table 5, for question no. 5 the grouping of answers in the central area of the questionnaire shows that the training level of wing players at national level is seen as medium and fully reflects the results obtained at international level by the Romanian men's handball teams.

**Table 5.** Centralizer with experts' opinions on the training level of wing players

<b>"Do you consider that the training level of wing players that perform in the Romanian National League is:"</b>					
Answer	Very good	Good. Good	Medium	Weak	Very weak
Number of answers	0	10	15	9	1
Percentage %	0	28,57	42,85	25,71	2,85

In figure no. 4 we find the analysis of the answers to the question of „the predominant motor quality in elite handball for wing players”, which records that they are fully consistent with those obtained in the previous question, which places the capacity of force and speed on the first two places. Even though many specialists consider speed capacity to be predominant for wings (Georgescu et al., 2019), it should be taken into account that force is the basis for carrying out all the technical-tactical actions specific to the motor structure of this playing position, force being according to Bompa (2013) “a determinant factor in performing rapid movements in most sports” (p. 205).



**Figure 4.** Dominant motric quality for wings

## 7. Conclusions

The responses of the specialists working at the level of performance handball are fully consistent with the specialized literature specific to the field and confirm the importance and need of a research at the highest echelon of handball in Romania on modelling the training to improve the effort capacity in

accordance with the requirements specific to each position in general and to players specialized for playing on the wing position in particular, a position on which there is not enough emphasis in tactical conception and training where force is identified as the predominant motor quality followed closely by speed.

The results of this survey can be a starting point for rethinking and updating the training process for handball players that play in the Romanian Handball National League, through individualized training that takes into account the dynamics and motor structure of the current handball game.

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