

PHYSICAL EDUCATION AND SPORTS

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ASPECTS CONCERNING MEN'S HANDBALL PLAYERS PREPARATION IN THE OPINION OF THE ATHLETES

***Abstract.** The aim of the research was to obtain useful information concerning strength preparation of the senior men's handball players, completing and applying a questionnaire to achieve this purpose. Every question has a precise objective, in order to obtain useful data concerning physical preparation, especially strength, of the senior men's handball players. The conclusions of this research, obtained after analyzing the answers from the questionnaire, require some adjustments in order to improve the physical preparation of the senior's male handball players.*

***Keywords:** strength, physical preparation, handball, athletes, questionnaire.*

Introduction

During a handball game there are 60-70 attacking situations out of which 55-63 are completed with a throw, and in turn, between 30 and 40 are goals. It is also very important the manner in which the actions with goal are completed: fast-break - 11%, second phase - 7%; throws from 7 m - 11%, throws from wings - 17%, shots from distance (inter, center) - 25%, throws from the central area of the 6m line - 28%, other types of throws - 1% [1, 7, 8].

Physical training is the component of sports training that aims at developing motor qualities, morphofunctional indices of the body. It is divided into: general and specific physics [5, 10, 11].

The motor quality, strength, is present in several forms of manifestation in the handball game at senior level: explosive strength (throwing strength and specific strength to perform the actions specific to the goalkeepers), explosive strength in resistance regime (strength of detachment and displacement), maximum dynamic

strength (combat strength) or in complex forms (speed- strength-resistance; strength-skill-resistance; strength-speed-skill) [2, 3, 4, 6].

The orientation of the training for handball players must be realized in the direction of the improvement and the efficient execution of the short and explosive actions, because this is the main way of progress in the contemporary handball [9].

The purpose of the research is the design and application of a training methodology that will lead to the optimization of the strength capacity of senior handball players with a performance effect and efficiency throughout the game.

Material and methods

In order to obtain truthful and up-to-date information for the research topic (developing the capacity of strength in the performance handball at senior level), we conducted a sociological inquiry using the questionnaire method, through which athletes of the men's handball teams were questioned.

The questionnaire addressed to the athletes included a number of 17 questions, of which 7 with open answers, and 10 with closed answers, with scaled items. 240 athletes from 14 National League teams and 2 from Division A answered the questionnaire questions.

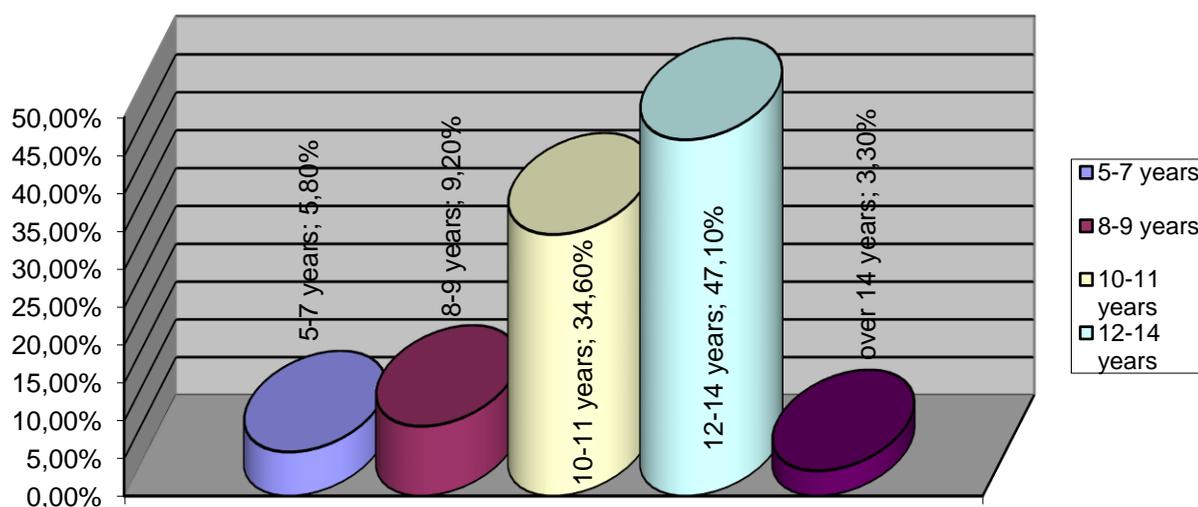
Each question had a specific objective, with the final purpose to obtain real and current data on how the physical training is carried out at senior level, especially that of strength.

The questionnaire was elaborated between October 2018 - January 2019, when the pilot study was also carried out to verify their functionality and the degree of understanding of the questions. The application was carried out between February 2019 - May 2019, and the analysis of the answers to the questionnaires' questions was carried out in June 2019.

Results and discussions

The sample to which the questionnaire was addressed is represented by the athletes of the men's handball teams at senior level in the first two value levels (National League and Division A). To the questions of this questionnaire there were answers of 240 athletes from 14 teams from the National League and 2 from Division A.

Of the 240 athletes, 212 are active athletes in the clubs of the National Handball League and 28 in the clubs of the Handball Division A. Regarding the experience in handball, 14 are in the range of 5-7 years (5.8%), 22 practice the handball of 8-9 years (9.2%), 83 have an experience of 10-11 years (34.6%), 113 have an experience of 12-14 years (47.1%), and 8 practice this sport for over 14 years (3.3%): Figure 1.



**Fig. 1. Results of the survey questionnaire
(athletes experience in handball)**

At the first item "The level of Romanian Men's Handball at senior level", the athletes considered: 56, representing 23.3% that it is high; 152, representing 63.3% that it is medium, and 32, representing 13.4% that it is low (Figure 2).

At the second question "How do you rate the training level of the performance handball players in our country?", 62 athletes, representing (25.8%), appreciated that the training is at a good level, 158 (65.8%) stated that it is at a medium level, and 20 (8.4%) at a low level (Figure 2).

In both questions it is observed that most of the respondents (over 60%) indicate that both the level of Romanian men's handball and the level of training of the players is average, and the average of the whole group (240) also indicates the same answer.

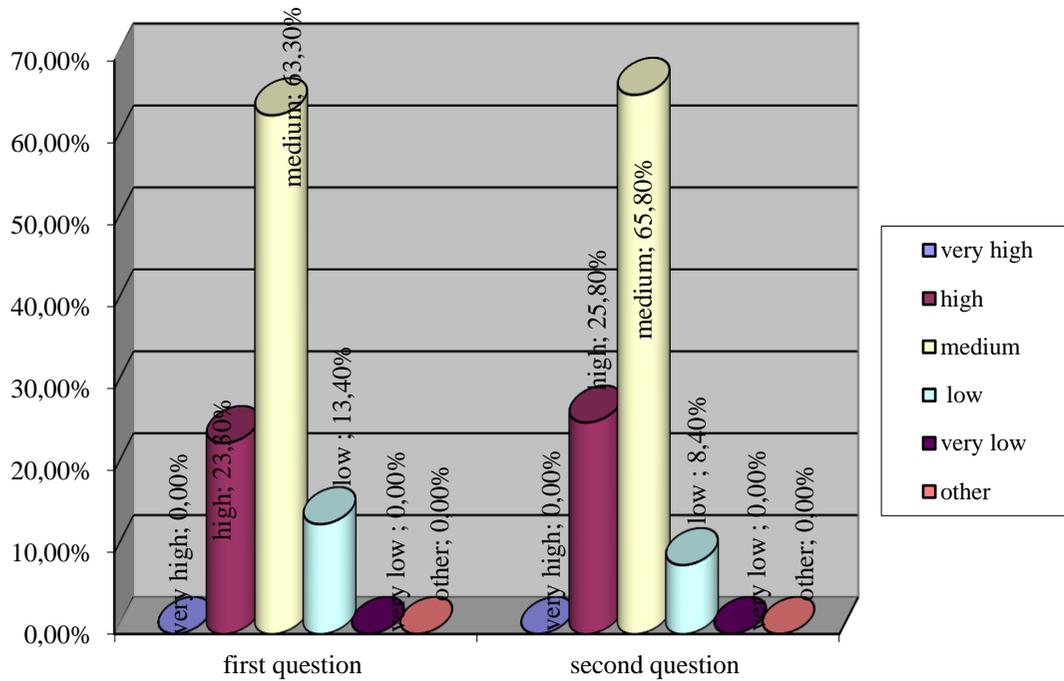


Fig. 2. Results of the survey questionnaire (questions 1, 2)

Regarding the importance of the sports training factors (question 3), expressed, as a percentage of a total of 100%, in order to obtain the performance in the top handball, the analysis of the answers of the 240 athletes established the following order: Physical – 29,1%, Technical - 21,7%, Tactical – 26,7%, Psychological – 14,1%, Theoretically – 8,4% (Figure 3).

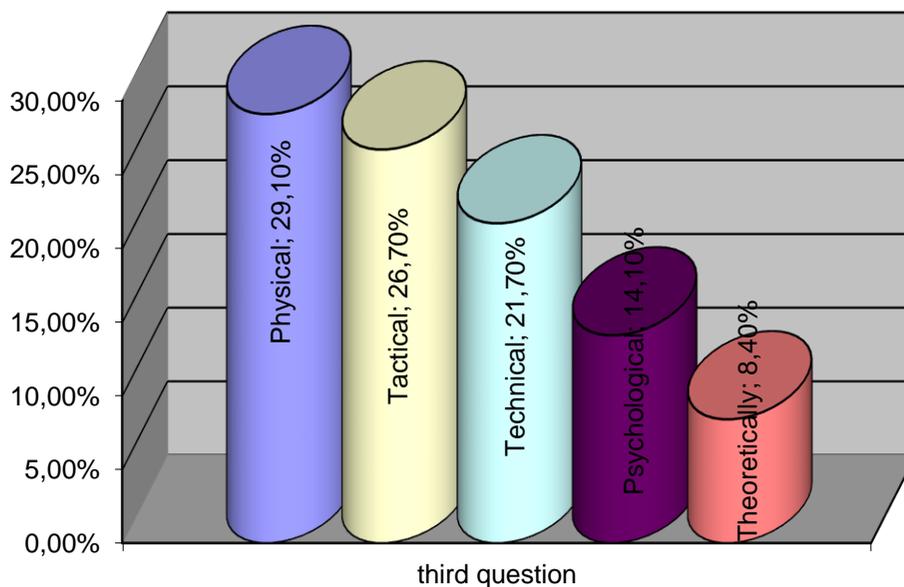


Fig. 3. Results of the survey questionnaire (third question)

Regarding the role that physical training plays in the performance handball (question 4), the athletes, unanimously, consider that this is a very important one for the performance.

In fifth question, "What do you think is the importance of each motor quality in the physical training of the players (in percentage)?" The distribution of the answers is equal for the 4 motor qualities, 25% for each.

Regarding the role played by the strength in the context of the physical training for handball players (question 6), the opinions of the respondents are unanimous, all considering it to be very high.

At the seventh question, "If you train exclusively for physical training, how many times per week do you schedule them, for periods", after analyzing the received answers, the average of the physical training exercises is 3-4 for the training period, 2 in the pre-competition and 1-2 in the competitive period.

Regarding the optimum difficulty of the workload for the physical training for handball players, in order to achieve the best performances, during training periods (question 8), the athletes answers generally indicate a share of 60-80% during the training period, of 40-60% in the pre-competitive period, respectively up to 20-40% in the competitive one.

Regarding the training schedules for strength development, during training periods (question 9), the weekly average is 3-4 training sessions in the preparatory period, 2 in the competitive period and 1-2 training sessions in the competitive one.

Asking them which are the main means for developing the strength used in the training for handball players (question 10), the athletes answered: exercises with objects (with weights; heavy balls; TRX; elastic bands), exercises with the weight of your own body; plyometric exercises; isometric exercises; exercises with partner.

At question 11, we notice that all coaches use specific means for strength development, but 208, meaning (86,6%) state that the physical training aimed at the strength that was adapted to the specific of the position and to the individual characteristics of the players, and 32, representing (13.4%), report that strength training is identical for all players (figure 4).

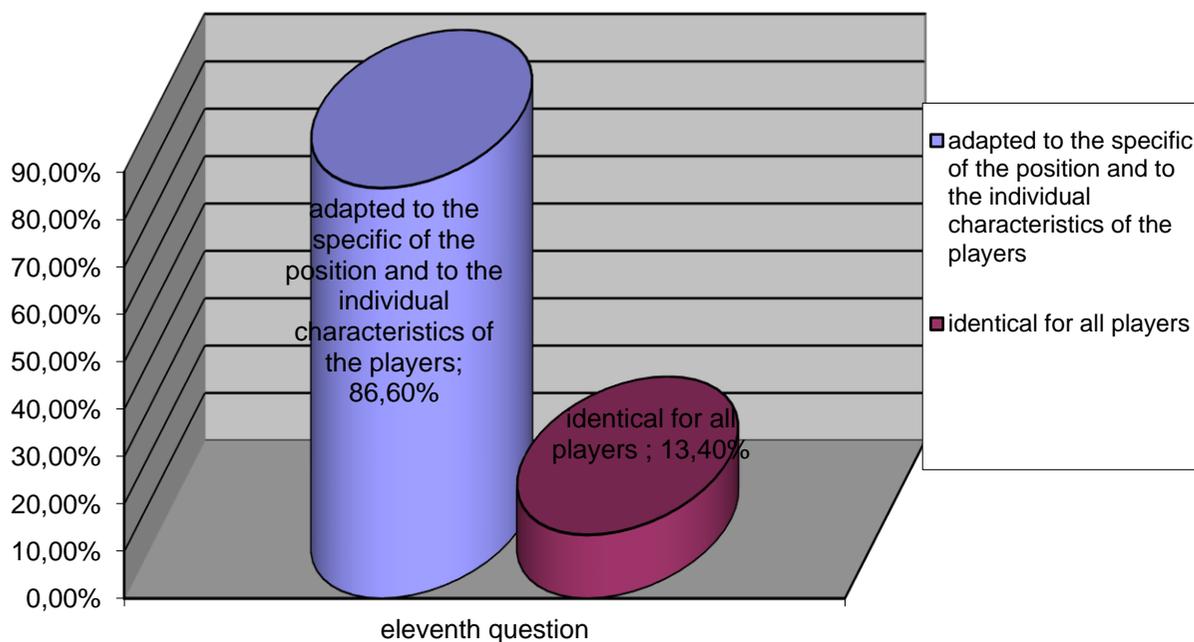


Fig. 4. Results of the survey questionnaire(eleventh question)

Twelfth question shows the tests and control tests used by the handball players to evolve the level of physical training of the athletes are: the Beep test (endurance speed); maximum force - 1RM (maximum repetition); Cooper test. Of these tests, the athletes answer to thirteenth question was that the one evaluating the strength index is the 1 RM test.

In fourteen question, the athletes think that in order to improve the physical training in handball, a special emphasis should be placed on the physical and technical-tactical training and psychological training.

The answer to fifteen question, regarding what should be improved regarding the physical training of the players, the athletes consider important that the training be adapted to the particularities of the athletes and the particularities of handball game.

Regarding what and how should be improved in the field of strength training for handball players (question 16), athletes believe that establishing a strength program with strength corroborated with the other physical qualities(speed, explosive strength, endurance, coordination) in accordance with the particularities of the athletes(age, position in the game).

In the seventeen question, what you think should be improved in order to increase the quality of the training, the answer follows: a careful planning of the training and a continuous training at all levels, starting from the junior level.

Conclusions

Following the realization of the sociological survey, we can conclude by stating the following about the Romanian Men's Handball at senior level:

- The achievement of sports performances is conditioned by the achievement of high quality training for each component of the training.

- At the base of sports training there is a good physical training carried out during all stages.

- Adaptation and individualization of the training according to the requirements of the game station and the particularities of the player.

- Adapting the strength training to the demands of the game is a necessity in contemporary handball.

- The use of means for the development of the strength must be adapted to the objectives and requirements of each training period.

- Periodic testing of the indices of the development of the players' strength in order to obtain a feed-back of the sports carried out training activity.

- The training plan must contribute to the optimization of the training process by objectively establishing the difficulty of the training factors for each training period according to the competition schedule.

- The methodology for developing the capacity of specific strength to the handball game at senior level must have a well-defined place, with objectives that must be met in order to increase the performance potential.

In the context of the approached topic, with regard to the capacity of strength, we can say that in the performance sport at senior level, it is emphasized that the level of strength development influences the degree of manifestation of the other motor qualities, as well as the quality and efficiency of the technical-tactical executions, which determines a complex methodical approach to its development. In the handball game, the specialists specify the need to identify the specific manifestation forms of the strength as indispensable, and the knowledge of the

relation of the strength with the other motor qualities is essential to determine its role and place in the general and specific physical training. For the practice of the handball game at a high level, the relationships strength-speed, strength-resistance, strength-skill, strength-mobility are important.

References:

1. Buchheit M. (2003). *Bilans médicaux, épreuves d'effort en laboratoire et tests de terrain* (L'exemple du Handball).
2. Cercel P. (1975). *Calitățile motrice în handbal*. București: Sport-Turism, p. 75.
3. Ghermănescu I.K., Gogâltan V., Jianu E., Negulescu I. (1983). *Teoria și metodică handbalului*. București: Didactică și Pedagogică, p. 194-197.
4. Hantău, C. (2000). *Handbal*. Buzău: Alpha, p. 141-147.
5. Leuciuc F.V. (2012). *Aprofundare într-o ramură sportivă: handbal*. Suceava: Universității Ștefan cel Mare, p. 41-42.
6. Leuciuc F.V. (2010). *Musculație*. Suceava: Universității Ștefan cel Mare, p. 30-31;
7. Leuciuc F.V., Pricop G., Grosu B., Păcuraru A. (2016). Longitudinal study on the effectiveness of the game actions at the European woman's handball championship seniors (2006-2014). *Sport and Society. Interdisciplinary Journal of Physical Education and Sports*, 16 (Special issue), 58-69, Iași: UAIC.
8. Leuciuc F.V. (2017). Longitudinal study on the effectiveness of game actions during the Olympic Games men's handball (2004-2016). *Journal of Physical Education and Sport*, 17(2), 717-721, Pitești.
9. Leuciuc F.V. (2018). Longitudinal study on the effectiveness of the game actions in men's handball top competitions (1998-2016). *Kinesiologia Slovenica*, 24(2), 36–43, Ljubljana.
10. Nicu A., coordonator (2002). *Enciclopedia educației fizice și sportului din România, volumul IV-Dicționar descriptiv și explicativ de noțiuni și termeni*. București: Aramis Print, p. 296-297.
11. Șiclovan I. (1977). *Teoria antrenamentului sportiv*, ediția a III-a revăzută și completată. București: Sport-Turism, p. 15-16.