



**Kolegji AAB**

FACULTY OF PHYSICAL CULTURE AND SPORTS

POST DIPLOMATIC-MASTER STUDIES

THEME:

**THEME: CHANGES OF MORPHOLOGICAL AND MOTOR  
CHARACTERISTICS EFFECTUAL FOR THE SPORT OF  
HANDBALL IN THE ELEMENTARY SCHOOL “ZENEL HAJDINI”**

Mentor :

Prof.Dr. Mehdi Jashari

Candidate

BlertaHashani

Prishtinë, 2013

Content	
Introduction.....	
Current Researches .....	
Purpose of the paper.....	
Main hypothesis .....	
Methodology of Work.....	
Sample of entities.....	
Samples of variables .....	
Anthropometric variables.....	
Motor basis variables .....	
Situational basis variables.....	
The program and procedure of measurement .....	
The conditions of measurement of anthropometric parameters.....	
Anthropometric Levels .....	
Measurement anthropometric instruments.....	
Techniques of measurement of anthropometric parameters .....	
Techniques of measurement of motor basis parameters .....	
Techniques of measurement of motor situational parameters .....	
Methods for processing the results .....	
Interpretation of the results .....	
Results of the essential statistical parameters in students.....	
Discriminative analysis of anthropometric, motor and specific motor variables between the students .....	
Confirmation of hypothesis.....	
Conclusion .....	
Literature.....	

## **Introduction**

Handball is part of collective sports games and based on the fundamental motor characteristics they enter in the compound of complex poly structural activities of human. So humans as biological beings in life where they live and work along with the development of science and technology attaches great importance to their health, through cyclic and acyclic movements which are adapted with top acts. It's a game with an unlimited number of movements starting from those which are elementary to those that are more complex.

In addition through the handball game is achieved the transformation of other anthropological as those morphological, cognitive and conation characteristics and situational motor, typical for the game of handball. Growth, development and the changes of some attributes and morphological abilities effectual for the sport of handball are basic indicators for the creation and development of new handball players, where the requests of the future will be much larger in the establishment of the quality setting. So the development of handball with students in schools is the most effective way to come up to the desired destination. Important role in the game of handball have anthropometric dimensions and motor skills, so there must be made choices of the necessary anthropometric and motor dimensions, as well as the selection of operators to be adequate in order to transform the right orientation towards the performance of quality results of Handball.

The culminating handball today is in the group of anaerobic and aerobic sports. The activity of handball player is based on the total motor skills, which enables the achievement of knowledge on specific elements, technical and tactical situational relevant for achieving success in the game of handball.

Orientation and determination of the youth to the sport of handball is conditioned by the desire of its young for this sport or through Selection by an expert of the game of handball taking into consideration the morphological characteristics of this sport, psychomotor and cognitive skills and the speed of learning and improvement of technical and tactical elements (Fulgozi, 1994). Selection, except the choice that must be made, it means the orientation and perfection of talent players and potential peak handball players (Paranosic and Savic, 1977). This is a long process and complicated which requires teamwork and multidisciplinary approach.

Handball according to their characteristics belongs to the poly structural complex movements, and is counted in the category of attractive sports. Success in all sports, including handball, depends on many factors connected among themselves, such as: motor skills, cognitive ability, conative features, structural motivation, physiological-functional characteristics dynamics of the micro social district, elements of technical and tactical game, as well as the morphological structure of the player. All these are intertwined into a common structure responsible for a better outcome in the game of handball. In this context it is possible to determine the role of morphological dimensions and situational-motor skills of handball subsystem (as a system), and

as a component program of transformational process (Demir, 1998). Management of these processes is possible if the relationship constantly functions between each subsystem (Gabrieliçi, 1977). Characteristics of the game of handball are very fast actions with explosive and multiple cyclic and acyclic movements which require complex skills to the player and a high scale of coordination, functional and cognitive skills, which are the basis of the strong fast and precise actions. Complex situations in the game require players to be prepared, skilled technical and tactical actions in the game precisely, with intensity and the optimum time to realize. Anthropological space is a multi-dimensional space, interactive and therefore we will be determined to particularly describe those theoretical models of the relevant below space which have a significant impact in achieving success in the game of handball.

Morphological characteristics (dimensions) we must understand their biological and physiological essence which generates the manifestation of anthropometric characteristics such as: body height, weight, circumference of the body and extremities, bone length and width, thickness and other adipose tissue. With these characteristics is defined the growth and development of children and youth, as well as their physical construction and it is also proved that the structure of morphological characteristics (Bala, 2007). Physical construction is the most obvious feature of the human. In adults this is related with behaviors in life, profession, illness, sports activity and success. Knowledge and study of the physical construction during development and growth enables to understand better the constitution variation of humans. Determination and definition of physical constitution of children and adults is difficult to execute, because they still don't have stable referential characteristics, especially the female gender. Some methods require stable and fixed characteristics (eg. Somotipet of Sheldonit). Development and different growth of morphological characteristics and tissues (especially sub-cutaneous adipose tissue) rapidly changes the body proportions, which significantly affects the reliability of defining the physical constitution of children and adults.

The laws of growth of children and youth can be simplified and multiply in three feature

- a) the intensity of growth of several bodies is not the same;
- b) growth is not linear, but it shows quickly or slowly periods of intensity
- c) organs during growth not only increase their amount but also change their structure.

During the growth of youth is evident the continual change of the body height which mainly lasts until the age of 20, even though the final formation and increase bone ends after the age of 23 years. The physiological mechanism of the bone growth and formation is practically the same for the whole skeleton. Besides bone tissues and soft tissues (muscles) grow and develop over time.

With motor dimensions we understand those abilities of humans who participate in performing motor tasks and condition successful movements in all sports (even in the game of handball) regardless of whether the skills are acquired through training or not . At the current level of scientific knowledge in this space it noted that motor dimensions in many researches arise in certain ways with different tasks. With the application of factor analysis are revealed many factors that prove the existence of many motor factors vehicle such as strength, speed, coordination, flexibility, and others that has led to the question of how motor dimensions objectively exist and what is the relationship between them. Based on the researches that had taxonomic character in the structure of the motor space (factor of the first order) are defined as factors of action type (strength, speed, flexibility, balance, coordination and precision) and topological factor-type (force measured with dynamometer, explosive force, repetitive force of hands and the chest repetitive force of legs, repetitive force of the body, static force of hands and chest, static force of the feet, static force of the body, the precise observation, the precise shot, balance with eyes closed, balancing with eyes open, flexibility, speed of simple movements, speed of learning new motor tasks coordination in rhythm, the agility, stereotyped reorganization of movements, speed of the execution of motor complex tasks, coordination of the whole body, coordination of hands, coordination of legs). Most of psychomotor skills are acquired and developed mainly during the Childhood. In this period of development is built and developed the structure of motor space and after the period of puberty (16-18 years) starts to get stabilized (Metikos, 1974, Kurelic with co., 1975, Bala, Kis and Popovic, 1996). At this stage of development we successfully adopt the elements of sports technique executing them with a higher intensity, and that in this period it is necessary a more advanced training process (Duraskovic, 2002).



## Conclusion

Numerous scientific researches, especially in recent years have proved and explained the great importance that anthropometric parameters have, especially longitudinal dimensions that determine the success in the game of handball. Besides longitudinal anthropometric parameters of particular importance in handball games have the motor skills especially those of explosive force. The peak results can be accessed only during a long training process and well organized, which is subjected to the laws of bio-psycho-social development and possible training stimulants and necessary for the dynamic development of basic and specific skills and, qualities and knowledge of handball players. The research was conducted in order to determine the differences of some anthropometric and specific motor characteristics between students of both sexes aged 15-16 years. The sample included two groups of 40 students of both sexes (female and male) aged 15 -16 years. All motor anthropometric and specific motor measurement of parameters are made during physical education classes. Total in research are included 80 students who were tested during school time period April-May 2012.

All used motor anthropometric and specific motor variables and underwent basic statistical processing on the basis of which it is established that all the tests have satisfactory metric characteristics. The difference between the results of the arithmetic averages of the surveyed groups is determined by the discriminative analysis T-test.

According on the basic statistical parameters of anthropometric variables, motor and specifically motor in this paper we see that although the sample has a difference in age calendar, as well as the major difference between the minimum and maximum output on these variables, the results do not have any asymmetry highlighted by the normal.

The correlation coefficients show a significant relation within the group of anthropometric variables, within the group of motor variables and not within the group of specifically motor variables in a statistical significant level.

Discriminative analysis of t-test shows that there is a statistically significant difference in anthropometric and motor parameters between the sexes of students. Displayed obtained values show that students have higher anthropometric and motor parameters than the students of this age. The statistically significant difference is not obtained in specific motor variables. This shows that there is a significant difference in morphological and motor development between the students of two sexes.