

## VALID DIFFERENCES PRESENTED IN SOME ANTHROPOMETRIC CHARACTERISTICS AND BASIC AND SITUATIONAL MOTOR SKILLS BETWEEN THE GROUP OF GIRLS AND BOYS AGED 11-12 YEARS

Hazir Salihu<sup>1</sup>, Qazim Elshani<sup>2</sup>, and Diellza Kelmendi<sup>3</sup>

<sup>1</sup>University of Pristina, Faculty of Physical Education and Sport, Pristina, Kosovo

<sup>2</sup>University of Pristina, Faculty of Education, Pristina, Kosovo

<sup>3</sup>Universe College, Department of Physical Culture, Sport and Recreation, Pristina, Kosovo

Original scientific paper

### Abstract

The study experiment includes a sample of entities of both sexes, the group of girls and the group of boys aged 11-12, who do not play basketball but only during the learning process - physical education classes. Eight variables were applied in the morphological space, while in the basic and specific moving space, eight variables were treated, through the T-test method, in the morphological space as well as in the basic and specific moving space, valuable results were obtained for the basketball game between groups of girls and boys, as well as the hypothesis put forward we can say that it has been partially realized, given the very young age of these students.

**Key words:** basketball, young students, anthropometric variables, sports equipment.

### Introduction

Basketball as a sports game, is as much loved and adored as it is close to everyone, especially children and young people. The sport of basketball has won the hearts of young men and women, who gladly train in various gyms, schools, neighborhoods, streets and squares. Basketball requires high preparation through complex exercises with quick reactions of movements in different directions, even immediate stops, jumps, agility, shooting from different positions that are crowned with efficiency and then situational attractions as well as frequent turns in the result. make this game the most adored of all. Therefore, conditioning preparation is a complex and comprehensive process of applying various programs for the development and maintenance of functional and motor skills as well as the morphological characteristics of basketball players.

#### *Purpose and tasks of the study*

Based on the presentation of the results, we will also confirm the differences between the group of boys and girls in the anthropometric space and in the realization of basic and specific movement tests important for the game of basketball. The purpose of this paper is to understand-confirm the presentation of differences in some morphological characteristics, as well as basic and situational motor skills between the two groups of girls and the group of boys. The tasks of the study, based on the realization of the purpose of this paper, are the following tasks of experimentation: To determine the level of psychomotor development in both groups of students, To determine the level of anthropometric features in both groups of students, and to determine the differences in

anthropometric features and motor skills in both groups of students.

#### *Basic hypothesis*

The experiment reflects the single hypothesis, with the aim of accurate and scientific verification set out in the research and based on the problems identified by the review of previous research, we set the hypothesis as follows: H1 - Assume that significant differences in some anthropometric characteristics and basic and situational motor skills between the group of boys and girls aged 11-12 will be gained.

### Methods

#### *Sample of entities*

The study experiment includes a sample of entities of both sexes, the group of girls and the group of boys aged 11-12, who do not play basketball but only during the learning process - physical education classes. The tests were conducted in sports gyms in the city of Prishtina. The sample of those tested for research-experimentation are students aged 11-12, two groups of 30 students each, the group of girls and the group of boys, a total of 60 students are treated. The number of variables consists of 8 variables of anthropometric characteristics and also 8 variables of basic and situational motor ones.

#### *Sample of variables*

Study-experimentation includes the number of eight variables from the basic-specific moving space, as well as eight anthropometric variables.

*Anthropometric variables*

Body weight - ABWI Body height - ABHE Arm length - AALE Leg length - ALLE Palm length - APALE Palm width - APAWI; The length of the sole of the foot - ATLSF Toe width - ATOWID

*Basic motor variables*

Fast running 30m - MFARU30m High jump from the country - MHIJC; Long jump from the country - MLOJC; Throwing the basketball away from the ground with both hands. - MTHBGH

*Situational motor variables*

Free throws with the right hand - MFTHRH Free throws with the left hand - MFTHLH Back and forth dribbling - MBFDR; Half-distance shooting with the help of the table - MHDSHT

*Methods of processing results*

Predicting the primary results of the study and the hypothesis presented, methods will be applied

which will enable the provision of sufficient information for the realization of this study, using the appropriate program for data processing.

The T-test method will be applied to confirm the differences between the age groups.

**Results and discussion**

Differences presented between the group of girls and boys; T-test between the group of girls and the group of boys in the anthropometric space.

Table.no.1. Presents the results in the anthropometric space between the group of girls and the group of boys that present statistically significant differences in only two variables that of arm length and width of the toe, while other results have shown that in this age their growth and development is almost the same.

Table 1. Differences between the group of girls and boys in the anthropometric space.

Group Statistics						Sig. (2-tailed)
Variable	Group	No	Mean	Std. Deviation	Std. Error Mean	
ABWI	Girls	30	48.5867	10.75081	1.96282	0.484
	Boys	30	50.6200	11.61136	2.11993	
ABHE	Girls	30	157.5667	9.31326	1.70036	0.412
	Boys	30	159.6333	10.06011	1.83672	
AALE	Girls	30	68.6167	5.15933	0.94196	0.038
	Boys	30	71.3267	4.72849	0.86330	
ALLE	Girls	30	18.7133	9.96521	1.81939	0.173
	Boys	30	16.1500	2.11395	0.38595	
APALE	Girls	30	7.5633	0.51225	0.09352	0.574
	Boys	30	7.6433	0.58172	0.10621	
APAWI	Girls	30	86.9267	6.51401	1.18929	0.730
	Boys	30	86.2033	9.40893	1.71783	
ATLSF	Girls	30	21.7267	3.89792	0.71166	0.070
	Boys	30	23.2733	2.43649	0.44484	
ATOWID	Girls	30	7.6767	0.76954	0.14050	0.021
	Boys	30	8.1267	0.69972	0.12775	

T-test between the group of girls and boys in the basic and situational motor space.

In table no.2. are presented the results in the space of basic motor and situational motor for the game of basketball between the group of girls and the group of boys by analyzing the results, they show that the differences between the two groups

can be seen in three variables of motor basics that have shown that the group of boys have better skills than the group of girls in realizing these variables.

Table 2. Differences between the group of girls and the group of boys in the motor space.

Variable	Group	No	Mean	Std. Deviation	Std. Error Mean	Sig.
MFARU30m	Girls	30	5.9907	0.69023	0.12602	0.120
	Boys	30	5.7193	0.63948	0.11675	
MHIJL	Girls	30	33.4667	5.46925	0.99854	0.537
	Boys	30	34.4833	7.09113	1.29466	
MLOJC	Girls	30	130.1000	21.75467	3.97184	0.003
	Boys	30	146.7333	19.47400	3.55545	
MHDSHT	Girls	30	515.4000	104.58608	19.09472	0.002
	Boys	30	652.6000	200.87474	36.67454	
MFTHRH	Girls	30	12.1800	1.94769	0.35560	0.000
	Boys	30	9.6297	1.46883	0.26817	
MFTHLH	Girls	30	2.5667	1.54659	0.28237	1.000
	Boys	30	2.5667	1.54659	0.28237	
MBFDR	Girls	30	0.5333	1.16658	0.21299	0.909
	Boys	30	0.5000	1.07479	0.19623	
MHDSHT	Girls	30	3.0000	1.48556	0.27123	0.363
	Boys	30	2.6333	1.60781	0.29354	

#### *Hypothesis analysis and validation*

Accurate and scientific reflection in this study-experiment based on the obtained results shows that the following hypothesis has been confirmed:

H1- In the only hypothesis we prove that significant differences of motor-motor skills have been obtained between the two groups of boys and girls, we can say that it has been realized in part because significant differences have been presented only in two variables in anthropometric space and three variables in the basic and situational moving space.

#### **Conclusion**

The sample of the entities of the two groups, the group of girls and the group of boys who do not play basketball, will be in function of advancing the transformation processes of a very young age, and

in particular with value in the basic and situational moving space. The application of scientific research methods of study, reflects the best way as a basis of information of program values and contents during the learning process from the subject of physical education and sports. The results of this experiment will be valuable for basketball educators and coaches regarding the important information that presents the basic and situational motor skills in order to determine the volume and intensity of loads in children aged very young 11-12 years. The study-experiment, according to the obtained results, shows that the goal has been achieved and the difference between the group of girls and the group of boys who do not play basketball has been confirmed, so this study will remain as a model for discovering the most valuable results at the age of these students in question.

## References

- Blazevich, A. (2010). Sports Biomechanics the Basics. Optimizing Human Performance. London: A&C Black Publishers Ltd.
- Dobovičnik L., Jakovljević S., Zovko V., & Erčulj F. (2015). Determination of the optimal certain kinematic parameters in basketball three-point shooting using the 94Fifty technology. *Fizička kultura*, 69(1), 5-13.
- Bp (1996). Curriculum of physical education in high school. Tirana.
- Papadhopulli, E. (1997). Student self-assessment - aspects of new communication in school. Tirana.
- Āorf, B., & Rađo, I. (1998). Analiza grupisanja manifestnih varijabli, FFK. 1998. Sarajevo.
- Gandolfi, G. (2003). NBA coaches playbook: techniques, tactics, and teaching points, Human Kinetics, Group of authors: 'Save the children' program how to design a test. Tirana.
- Salihu, H. (2011). Measurements-tests evaluation in the chosen sport. Disp.msc. Prishtina.
- Salihu, H. (2016). Rating changes introduced in som charavteristic mopholgical and basic-specific motor skill to young active and inactive basketball players. *European Journal of Physical Education and Sport Science*. Vol.2.Issue.2. ISSN:2501-1235.
- LaMonte, M.J., et al. (2001). Comparison of Physical and Physiological Variables for Female College Basketball Players *Journal of Strength and Conditionong Research*, 2001. England.
- Daci, J., & Belliu, V. (2000). Të mësuarit e veprimeve lëvizore dhe trajtimi i diferencuar i nxënëseve. Tiranë.
- Krzyzewski, M., & Spatola, J.K. (2006). Beyond Basketball: Coach K's Keyōords for Success, Warner Books.
- Blaskovic, M., & Hofman:, E. (1983). Povezanost izmedu bazicnih motorickih sposobnosti i uspjesnosti u kosarci, *Kineziologija*. vol.15.br.2. Zagreb,.
- Šoše, H.,& Rađo, I. (1998). Mjerenje u kineziologiji. Sarajevo.
- Sanchez, H. (1982). The scientific principles of shooting a basketball. *The Coaching Clinic*, February, 2-10
- Tang, W.T., & Shung, H.M. (2005). Relationship between isokinetic strength and shooting accuracy at different shooting ranges in Taiwanese elite high school basketball players. *Isokinetics and Exercise Science*, 13, 169-174.

---

*Received: December 20, 2020*

*Accepted: December 20, 2021*

*Corresponding author:*

*Qazim Elshani*

*University of Pristina,*

*Faculty of Education, Pristina, Kosovo*

*E-mail: qazim.elshani@uni-pr.edu*