

VALID PERFORMANCES IN SOME MORPHOLOGICAL AND MOTORIC VARIABLES, BASIC AND SPECIFIC TO 12-13 YEAR OLD GIRLS

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Abstract

The study-experiment consists of a group of 30 girls aged 12-13 who do not attend regular training sessions in basketball, but only regular classes in the school's teaching process, physical education and sports. Five morphological variables, three basic motoric tests and two specific variables were applied. In this study, the basic variance parameters and the performance of valid connections between the morphological and the basic and specific motoric variables were specified, with the help of tools, methods and requirements for carrying out this study-experimentation.

Key words: entities, girls aged 12-13 years, morphological variable, basic and specific variables, correlations between basic and specific tests, tools, requisites and test instruments for carrying out the study.

Introduction

Basketball is becoming a glamorous, attractive game for all ages, especially in younger children of both sexes. Basketball though is a complex sport, however, it offers pleasure to young people, who besides escorting between the two bins, they also experience attractiveness in situations and special moments of the game. To achieve advanced results in this sport, high physical, conditioning, technical-tactical and moral-good preparation is required. Experts of this sport should provide innovation to influence young people, especially girls who should be inspired to be oriented to basketball. At the same time, it is necessary to provide modern infrastructure for achieving the results of competitions at different levels.

Purpose of the study

The purpose of the study is to ascertain the performances of some morphological and basic variable motifs specific to girls aged 12-13 years. Verify the validity of links between the basic and specific moving space as well; Certification of correlations between morphological variables and basic and specific motoric tests in girls of the age in question.

Basic hypotheses

Based on the study data, two hypotheses are foreseen:

H1 - Assume that there are significant correlations between the morphological and the basic and specific motoric variables.

H2 - Assume that there are valid performances between the group of basic and specific variables in girls aged 12-13 years.

Methods

Sample of entities

The sample of entities includes the number of 30 girls aged 12-13 who do not attend regular basketball training sessions, but only regular classes in the school curriculum, physical education and sports.

Method of realization of the study

Testing from morphology was carried out in the morning hours, and measurements from basic and specific moving spaces were conducted during regular physical education classes. All tests were conducted at the sports gym in the city of Prishtina. Measurements-tests were conducted during March '18.

Morphological variables

Body weightBWEIGH
Body heightBHEIGHT
Arm lengthALENG
Foot lengthFLENG
Horizontally widened widthHWIDE

Basic motoric tests

Fast running 20mFARUN20m
Jumping from distance to countryJUDCO
Jumping from place to altitudeJUPAL

Specific motoric variables

Filling a packed medicinal ball at distance FPMBD
Dribbling between barriers 20mDRBEB20m

Interpretation of results and discussion

Basic statistical indicators of the specific and basic morphological parameters

In table no. 1. Arithmetic average scores, minimum score, maximum score, standard deviation, distribution or asymmetry parameters (skewness, asymmetry) and spatial distribution curve (Kurtosis - convexity) are presented. The arithmetic mean of anthropometric variables, body height (BHEIGHT) is 153.42 cm. The minimum (136.40 cm) and maximum (163.20 cm) of this variable indicates a significant difference between entities.

The arithmetic mean of anthropometric variables, wing length (ALENG) is 63.78 cm. The minimum score (57.10 cm) and maximum (69.30 cm) of this variable indicates a significant difference between the entities. The common feature of two anthropometric next-of-war anatomy variables (HWIDE) and leg length 22 (FLENG) is that they belong to the longitudinal dimension. The gained values of these characteristics indicate that the obtained results do not have a particular emphasis on this, based on the results obtained at the Skewness and Kurtosis distribution parameters.

The arithmetic mean of anthropometric variables, body weight (BWEIGH) is 49.66kg. The minimum score (30.10 kg) and maximum (65.40 kg) of this variable indicates a significant difference between entities. The arithmetic average of the motor variables, running at 20m (FARUN20m) from the

top star is 3.74sek. The minimum score (3.11 sec) and the maximum (4.67sek) of this variable indicates that girls do not have a pronounced difference between themselves. Arithmetic average evariable, bouncing away from home (JUDCO) is (1.55cm). The next variable, high jump from the country (JUPAL) has arithmetic average (33.86cm). The minimum score (27.70 cm) and the maximum (47.00 cm) indicates that there is a marked difference between the maximum and the minimum score. The next-rate variance of the country's medical drug balloon (FPMBD) has arithmetic average (3.29cm).

The minimum score (2.63cm) and the maximum (4.23cm) indicates that there is a marked difference between the maximum and the minimum score. The next variable with dribbling the zik-zak basketball ball at a distance of 20 meters (DRBEB20m) has an arithmetic average (5.69cm). The minimum score (5.07cm) and the maximum (6.46cm) indicates that there are significant differences between the maximum and the minimum score. So even though all of the variables have a distinct difference between the minimum and the maximum result, it is seen that the variability and convexity of the acquired distribution (Skewness and Kurtosis) do not have significant deviations from the normal distribution.

Table 1. Basic statistical parameters of morphological and basic motoric and specific variables.

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis	
BHEIGHT	30	136.40	163.20	153.42	6.47	-.698	.393	
ALENG	30	57.10	69.30	63.78	3.39	-.321	-.770	
FLENG	30	75.10	87.30	82.20	3.35	-.397	-.874	
HWIDE	30	137.60	164.40	154.96	6.60	-.727	.410	
BWEIGH	30	29.00	68.30	49.66	8.52	-.017	.180	
FARUN20m	30	3.11	4.67	3.74	.440	.387	-.636	
JUDCO	30	1.31	1.89	1.55	.159	.547	-.505	
JUPAL	30	27.70	47.00	33.86	4.12	.821	.862	
FPMBD	30	2.63	4.23	3.29	.416	.357	-.453	
DRBEB20m	30	5.07	6.46	5.69	.453	.067	-1.451	

Correlation results

Interlinking results between anthropometric variables

In Table No.2. Simplified linear correlation coefficients of anthropometric variables will be presented and analyzed. Analyzing the intercorrelation matrix, we notice that almost all anthropometric variables between them are in a high statistical relation, with a very high positive

correlation. It is seen that the anthropometric parameters related to the measurement of body lengths are in very high correlation between levels (p <0.01). A lower correlation is the test for measuring body length with body weight. The body weight stands in significant statistical correlation with the variables that have been aimed at measuring the length of the body, the hand, the ankle and the wings. This shows that taller people also have heavy weight.

Table 2. Intercorrelation coefficients of anthropometric variables.

	BHEIGHT	ALENG	FLENG	HWIDE	BHEIGHT	
BHEIGHT	1.000	.841*	.785**	.996**	.769**	
ALENG	.841**	1.000	.838**	.840**	.695**	
FLENG	.785**	.838**	1.000	.788**	.625**	
HWIDE	.996**	.840**	.788**	1.000	.754**	
BHEIGHT	.769**	.695**	.625**	.754**	1.000	

** Correlation is significant at the 0.01 level (2-tailed).

Results of interrelations between basic and specific moving variables

In the next table, the basic moving test (FARU20m) stands in correlation with explosive force tests, bouncing from the ground (JUDCO) and jump at altitude (JUPAL). Also important correlation value of this variable is also with the specific test, dribbling with a 20-meter ballast (DRBE20m). This shows

that the dominance in the speed of basketball leadership is the speed of the steps during the run. The country-wide bouncing test (JUDCO) stands in correlation with the 20-meter running variation (FARU20m), altitude jump (JUPAL) as well as with the situational test, slalom ball management up to 20 meters (DRBE20m).

Table 3. Basic statistical parameters of basic and specific moving variables.

	FARU20m	JUDCO	JUPAL	FPMBD	DRBE20m	
FARU20m	1.000	.710**	.673**	-.063	.829**	
JUDCO	.710**	1.000	.762**	-.007	.668**	
JUPAL	.673**	.762**	1.000	.110	-.712**	
FPMBD	-.063	-.007	.110	1.000	.017	
DRBE20m	.829**	.668**	.712**	.017	1.000	

** Correlation is significant at the 0.01 level (2-tailed).

Matrix between the morphological and the basic and specific mobility variables

Cross-correlation coefficients between the morphological and the basic and specific motion characteristics show weak and statistically

insignificant correlation. The reason for the irrelevant connection between anthropometric characteristics and basic and specific motoric tests should be sought in other morphological and biomechanical characteristics.

Table 4. Matrix between the morphological and the basic and specific mobility variables.

	BHEIGHT	ALENG	HWIDE	FLENG	BHEIGHT	
FARU2m	.221	.068	.046	.198	.287	
JUDCO	-.232	-.158	-.113	-.198	-.288	
JUPAL	-.093	.103	.052	-.065	-.228	
FPMBD	-.028	-.007	.059	-.018	.009	
DRBE2m	.038	-.127	-.062	.010	.250	

Analysis and verification of hypotheses

Based on the hypothesis of the study we conclude the following:

H1 - The first hypothesis is partially realized.

H2 - The second hypothesis is realized in its entirety.

Conclusion

Based on the results achieved, we can say that we discovered some of the valuable performance in the performance of basic and specific mobility tasks important for basketball sports as well as the correlations and correlations between morphological and basic mobility variables specific to girls aged 12 -13 years old. So by detecting these performances directly related to the realization of certain tasks in basketball, they are

valuable and effective for orienting, selecting, diagnosing, planning, programming and controlling young people to achieve more advanced results the future of our basketball. Study-Experimentation has dealt with the entities, the group of 30 girls aged 12-13 who did not exercise basketball but only attended regular classes in the school curriculum, the subject of physical education and sports.

Based on the data of this study, we can conclude that despite the fact that the girls are of young age, there are some valuable morphological and basic performance specifics, of particular importance to the basketball game, planning that this age will be the golden future of basketball sports. This study may remain in the service of experts in this field, as nothing is definitive because, the age of this experiment is still at the stage of puberty.

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