THE PERFORMANCE OF SOME BASIC MOTOR CHARACTERISTICS AND SPECIFIC SKILLS OF YOUNG BASKETBALL PLAYERS

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Abstract

In this research there are treated 15 years old +/- 6 month young basketball players, who attend process of exercise basketball in different basketball schools in the city of Prishtina. The experiment includes 10 variables, 5 from those variables are from the basic motor performance and 5 other variables are from specific skills. In this study-experiment, is applied factorial method. The study includes 43 entities of males, who are subjected to certain tests. There were obtained: The factor of the explosive force of lower limb and repetitive strength and Alternative speed factor of upper extremities, agility and accuracy.

Key words: *basketball, motor, basic variables, specific variables, factor analysis*

Introduction

Comparing with the past, today the game of basketball is characterized with big changes in terms of dynamics, rate of speed movements and concretization of successive stock. Basketball as a game is popular all over the globe and it is played (preferred) by all the ages regardless of gender. This game becomes more specific and also more attractive when considering sport field in which the game takes place, then the number of players and the attractive of a share at certain moments.It is clear that everyone who seeks success as a player of a particular position, should make great efforts to achieve favorable position for the successful implementation of technical-tactical elements and mobility in the field. In order for the players to conduct requirements, respectively duties assigned by the instructor (coach), they must have high level of specific basic motor skills.

The purpose and objectives of the study-experiment

The purpose of this study is to ascertain the performance of some basic and specific motor skills to basketball players age 15 years +_6 months. The purpose of this study will be defined in: - Verification of performance in some specific and basic motor skills to young basketball players. The primary purpose is: The performance-variables are to be treated wih factor analysis, using the relevant factors that are extraced from some basic motor tests and specific skills to young basketball players.

Methods of the study

Model (sample) of entities
The research-experimentation includes 43 entities of males, who are subjected to certain tests, besides learning process they exercise basketball in different basketball schools in the city of Prishtina. The tests are conducted in March and April'15, in the sports halls in the city of Prishtina. Tests of basic motor skills are conducted in the morning hours, while variables of specific skills tests were conducted during the training sessions in basketball. Selected basketball players that there were treated are young basketball players age 15 years, male.

The basic hypothesis
H: On the single hypothesis that we have, expect to verify the importance of performance of the variables of locomotive in space of basic motor and specific at young basketball players.

Samples of variables
Basic motor variables**:** SLJ - Standing long jump, JAR - Jump and reach, SR25m - Sprint running 25m, AM - Abdominal muscle or repetitive force, FA – Flexion of the arms. Specific motor variables: DWTB25m - Dribble with the ball, one way and return back, TBBD - Throwing the basketball ball in a distance, HD4m - Half-distance shot from 4 meters with the help of the table, with right and left handm, FSRL - Free shot with the right and the left hand, SJD - Shot with a jump in a distance from the three different positions.

Methods of processing the results
Results were processed with SPSS program, version 20.0 for Windows. The data are handled in the latency and manifestos area Components and Direct Oblimin, in specific and basic motor space.

Results and discussion

Factorial analysis
Latency characteristics in the specific and basic motor area
In table no.1 are shown the characteristic roots (LAMBDA), as well as partial contribution (%) and their cumulative total variability explanation. Characteristic roots are arranged according to size. This sequence shows hierarchical structure of latent. According to the method and criteria Hotteling GK Regulation (Gutman-Kaiser), are extracted two latent dimensions that explain 91.6% of the total variance.

The first characteristic root explains 78.9% of the total variance of the system, while the second explains the root of 12.4%.

Table 1. The roots key characteristic of specific and basic motor variables

	Total	Cumulative	% of Variance	Cumulative %
1	11,02	11,02	78.70	78.70
2	1,74	12,76	12.43	91.13
3	0,34	13,99	2.42	93.56

In table no.1 is presented the group of main components with two factors and the utilities of variables. Seeing this group we notice that the first component of motor variables are designed to measure explosive strength and repetitive: tab.no.2. standing long jump, jump and reach, sprint running 25m, abdominal muscle or repetitive force, flexion of the arms the coefficients of (051 - .883). In the second component are designed variables which are the index of agility, precision and accuracy: Dribble with the ball, one way and return back 25meters, throwing the basketball ball in a distance, half-distance shot from 4 meters with the help of the table (with right and left hand), free shot (with the right and the left hand) and shot with a jump in a distance from the three different position with the optimal value of (.041 - .494).

Table 2. Key Components

	1	2
SLJ	**.88**	-.54
JAR	**.14**	.16
SR25m	**.19**	-.03
AM	**.23**	.04
FA	**.05**	.09
DWTB25m	.14	**.40**
TBBD	.02	**-.04**
HD4m R	.07	**.16**
HD4m L	.04	**.41**
FSRL R	.03	**.39**
FSRL L	.04	**.49**
SJD	.04	**-.10**
SJD	.07	**.12**
SJD	.06	**.16**

Once the main components often cannot be clearly interpreted, they serve mainly as coordinate systems to extract the group of correlative vectors. To be better explained the structure of the latent space, the main components are transformed into steep positions, avoiding the orthogonal condition. As a result of the steep solutions have won three group:
♦ Group of parallel projections - which represents parallel projections vectors of the variables in factors.
♦ Group of orthogonal projections - represents the orthogonal projections - correlations between vectors and factors, and
♦ Group which represents correlation between isolated factors.

Tab.no.3. Parallel projections

	1	2
SLJ	**.89**	-.08
JAR	**.59**	.03
SR25m	**-.59**	-.01
AM	**.50**	.09
FA	**.35**	.09
DWTB25m	-.39	**.10**
TBBD	.09	**-.19**
HD4m R	.07	**.20**
HD4m L	-.10	**.17**
FSRL R	.11	**.10**
FSRL L	.10	**.40**
SJD	-.21	**-.11**
SJD	.02	**-.15**
SJD	.16	**.20**

Table 4. Orthogonal projections

	1	2
SLJ	-.58	-.28
JAR	.86	.79
SR25m	-.28	-.18
AM	.26	.02
FA	.04	.04
DWTB25m	-.27	.00
TBBD	.49	-.56
HD4m R	.04	.12
HD4m L	-.06	.13
FSRL R	.09	.09
FSRL L	.10	.40
SJD	-.22	-.14
SJD	.02	-.15
SJD	.19	.01

To gain further information about the structure of space motor latency, the main components are transformed into solutions bias factors "OBLIMIN". As a result of these transformations have won three groups: Group of parallel projections of variables of the vectors in factors, group of orthogonal projections and intercorrelation group between factors. Greater importance in explaining the latent space has group of parallel projections.

In table 3 it is shown group of parallel projections, in which we observe that high projection have variables that measure explosive strength and repetitive: standing long jump, jump and reach, sprint running 25m, abdominal muscle or repetitive force, flexion of the arms with coefficients of (.345 - .887). Therefore, based on these projections, this factor can be defined as *explosive force factor of lower extremities and repetitive force*. The second factor is defined by specific variables which are indicators of agility, accuracy and precision, dribble with the ball, one way and return back 25meters, throwing the basketball ball in a distance, half-distance shot from 4 meters with the help of the table (with right and left hand), free shot (with the right and the left hand) and shot with a jump in a distance from the three different position with projections of (.202 - .401). The second factor can be interpreted as the *speed factor alternative of upper extremities, agility and accuracy.* As we can see from the correlations it shows that these factors are independent of each other.

Table 5. Correlation of factors

	Factor 1	Factor 2
Factor 1	1.00	
Factor 2	.234	1.00

Analysis and confirmation of the hypothesis
In this research-experiment the hypothesis was conducted on the basis of the results were obtained in two latency dimensions, specific and basic motor skills.

Conclusion

The young basketball player's aged 15 years old, male, they did 10 tests specified in manifest and latent space. With Factorial analysis the variables are treated and as a result, we have two basic motor dimensions and specific latency:

The factor of the explosive force of lower limb and repetitive strength and Alternative speed factor of upper extremities, agility and accuracy. Based on the age of the young basketball players, factors are important indicators, which means that to achieve success, it is required maximum effort therefore all of them who are dealing with basketball should be taken provision for the development of infrastructure and creating the conditions for young people, to get involved in teams reach the contemporary level. Based on this research - experimentation are observed changes in basic motor space, as well as specific tests which are in favor of young basketball players, their work in training sessions and during the basketball game, helped them to be transformed in terms of locomotion and in particular for typical tests for the game of basketball, as agility and accuracy.

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IZVEDBA NEKIH TEMELJNIH MOTORIČKIH ZNAČAJKI I SPECIFIČNIH VJEŠTINA MLADIH KOŠARKAŠA

Sažetak
U ovom istraživanju tretirani su 15-godišnji (+/- 6 mjeseci) mladi košarkaši, koji su sudjelovali u procesu vježbanja košarke u različitim školama košarke u gradu Prištini. Pokus uključuje 10 varijabli, a 5 od tih varijabli su temeljne motoričke a 5 drugih varijabli opisuju specifične vještine. U ovom eksperimentu primjenjena je faktorska analiza. Studija uključuje 43 osobe muškog spola, koji su podvrgnuti određenim testovima. Dobiveni su: faktor eksplozivne i repetitivne snage donjih ekstremiteta i Faktor alternativne brzine gornjih ekstremiteta, agilnost i preciznost.

Ključne riječi: *košarka, motorika, temeljne varijable, specifične varijable, faktorska analiza*