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UTJECAJ MOTORIČKIH MANIFESTACIJA IZ EUROFIT PROGRAM ZA DJECU NA MOTORIČKE VJEŠTINE I NAVIKE KOD UČENICA U SREDNJOJ ŠKOLI

1. INTRODUCTION

Choosing appropriate methods and techniques for working at the class of sport and health education is only one of the factors that have significant impact on the actual effect of the teaching process. Motor abilities and morphological characteristics which has separately each individual, certainly has contributed to the overall achievements and results of the student. So it is very important continuous and uninterrupted monitoring of the development of the individual, along with transformation processes caused during class, because in that way can be noted positive changes, and possible drawbacks, which is of paramount importance for further development of science and educational process in general [2, 5].

The subject of our research we were female students from the secondary education in several cities in the Republic of Macedonia, which during the year regularly attended the course sport and sport activities. The aim of the research was to see what is the impact of motor skills on motor knowledge and habits of pupils who have acquired during the training process.

2. METHODS

The survey was implemented on 183 first-year students at high school who regularly attended the course sport and sport activities.

Applied were nine indicators, one indicator as criteria variable for assessment of motor skills and habits and eight predictor variables for the evaluation of motor abilities from EUROFIT program for children.

As indicator of motor skills and habits was made a test - polygon to check the psycho-motor skills among students. Modification of the polygon was performed to check the psychophysical readiness of applicants under the program and criteria for enrolment of students in first year in the 2007/08 school year in The State Secondary School "Methodi Mitevski Brico" in Skopje. The polygon was modified based on the recorded conditions of the working conditions in schools where testing was performed. Polygon previously tried (tested) to increase its objectivity. By acquiring the training area of the polygon was carried out a verification of the stated derived motor skills: speed, explosiveness, strength, resourcefulness, coordination and precision [3, 4].

The sample of motor tests included: standing long jump (SLJ), in the skyward knuckle (SKK), lifting the body from the ground (LBG), multiple progressive running

10x5 (RUN); dynamometric of the stronger hand (DSH) arm taping (ATA), a deep bend on the bench (DBB) and the balance with eyes closed (BEC).

The data from all variables are treated with basic descriptive statistical parameters, prior to their normality of distribution was tested with the method of Kolmogorov and Smirnov. The data processing about the relation of motor test skills and habits and motor tests from EUROFIT program for children was carried out with regression analysis.

With regression analysis were calculated: coefficient of multiple correlation between variables and system criteria predictors (R), the correlation coefficients between each predictor and criteria variable (R^2), the partial correlation coefficient of each variable predictor with criteria variable (PART - R), partial and regression coefficients of each predictor variable (BETA), the standard error of prediction (SIGMA), T-test level of significance of the partialysation coefficients (Q-BETA), coefficient of determination, standard error of forecast criteria variable, following the based prediction system on (SIGMA), and for checking the hypothesis that the true value of multiple correlation is actually zero, was calculated F-test and its significance with appropriate degrees of freedom (DF1 and DF2) [1].

3. RESULTS AND DISCUSSION

After data processing with the basic statistical parameters was performed regression analysis in the manifested space in which as a criterion was the test-polygon review of psycho-motor skills of students, and as predictors were considered: standing long jump (SLJ), in the skyward knuckle (SKK), lifting the body from the ground (LBG), multiple progressive running 10x5 (RUN); dynamometric of the stronger hand (DSH) arm taping (ATA), a deep bend on the bench (DBB) and the balance with eyes closed (BEC), the variables for assessment of motor abilities EUROFIT program for children.

Table 1. *Regression analysis of the system of motor tests with the test - polygon to check the motor skills and habits of female pupils from the secondary education.*

Variables	Beta	St. Err. of Beta	B	St. Err. of B	t(167)	p-level
SLJ	-0,27	0,08	-0,31	0,10	-3,18	**0,00**
SKK	0,01	0,09	0,03	0,28	0,11	0,91
LBG	0,06	0,09	0,19	0,30	0,63	0,53
RUN	0,16	0,08	1,04	0,55	1,89	0,06
DSH	0,21	0,07	0,69	0,23	3,06	**0,00**
ATA	0,27	0,07	1,88	0,53	3,58	**0,00**
DBB	-0,13	0,08	-0,55	0,32	-1,73	0,08
BEC	-0,10	0,07	-0,18	0,12	-1,51	0,13
R=,59	RI=,35	Adjusted RI=,32	DF1=8	DF2=174	F=11,82	p<,00

Multiple regression analysis (Table 1) with the system of motor measures as predictors and motor test to assess motor skills and habits (test - polygon), as a criterion of the students showed statistically significant impact of 0,00. The coefficient of multiple correlation, i.e. correlation of all anthropometrical measures with the test explained with 59% (R=.59), and the prediction coefficient R^2=.35 which means that the system of motor measures preconditioned the success in the test. The remaining 41% in explaining of the total test variability to assess motor skills and habits remains of some other characteristics and abilities of students who are not research subjects (e.g. other motor variables, anthropometrical, conative, cognitive, motivational, functional, etc.).

Individually statistically significant negative impact on the criterion showed variable standing long jump (SLJ). Individually positive impact on the criterion showed variables stronger dynamometric of the stronger hand (DSH) and the arm taping (ATA).

For these variables can be said to have the largest contribution to the overall impact of the predictor system onto the criterion.

4. CONCLUSION

Based on the survey results we can conclude the following:

• The system of the motor test for evaluation of motor abilities is conditioned by the performance of the assessment test of motor knowledge and habits among pupils in the secondary education.

• Individually statistically significant impact was noted at variables long jump from place, the stronger hand dynamometric and taping by hand, which means that they most contributed to the success of the test performance.

5. LITERATURE

1. Bala, G. (1986). *Logicke osnove metoda za analizu podataka iz istrazivanja u fizičkoj kulturi.* Novi Sad: Sava Muncan.
2. Клинчаров, И. (2001). *Оптимална поставеност на наставата по физичко и здравствено воспитување во основното образование во Република Македонија.* Докторска дисертација, Скопје: Универзитет „Св. Кирил и Методиј", Факултет за физичка култура.
3. Митревски, В. (2009). *Критериуми за оценување во наставата по спорт и спортски активности. Магистерски труд*, Скопје: Универзитет „Св. Кирил и Методиј", Факултет за физичка култура.
4. Mitrevski, V. (2010). Relations between some manifest morphologic characteristics and latent motor dimensions with schoolgirls at high school. U „Иновации в образованието" (стр. 998-1003). Шумен: Шуменски университет „Епископ Константин Преславски", Педагогически факултет.
5. Наумовски, А. и Георгиев, Г. (2000). Споредба во релациите на некои манифестни и латентни антропометриски и биомоторни варијабли со различни методолошки постапки кај учениците од 11 години. *Физичка култура* (Скопје), 1-2, 48-51.

INFLUENCE OF MOTOR MANIFESTATIONS FROM THE EUROFIT PROGRAM FOR CHILDREN ON MOTOR SKILLS AND HABITS AT HIGH SCHOOL FEMALE STUDENTS

The survey was conducted among 183 regular female students in the secondary education. The objective of the research was to see what was the correlation, i.e. the influence of a system of motor tests EUROFIT program for children on motor test - polygon to assess motor skills and habits of pupils who regularly attended the course sport and sport activities. The sample of indicators included one criteria variable for the assessment of motor skills and habits and eight motor variables for the assessment of motor skills. With regression analysis was determined the impact of the system of motor variables on the criterion.

Key words: *students, correlation, tests, knowledge, abilities, influence.*
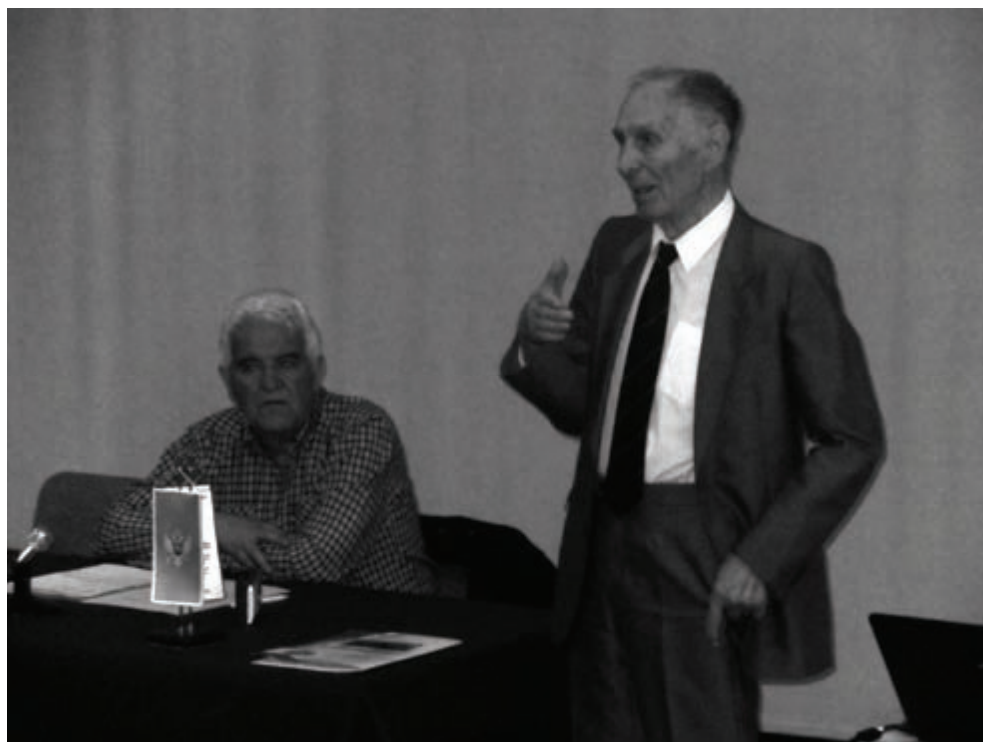
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