

Influence of the Eurofit program for children on motor knowledge and habits among the students at secondary education

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Influence of the Eurofit program for children on motor knowledge and habits among the students at secondary education: The survey was conducted among 170 regular male students at secondary education. The objective of this research was to see in what connection, i.e. the influence of the system of motor tests from EUROFIT program for children on the motor test - for evaluation polygon of the motor skills and habits among students who regularly followed the teaching at the subject sport and sport activities. The sample of indicators was consisted of one criteria variable for evaluation of motor skills and habits and eight motor variables for evaluation the motor skills. With regression analysis was established statistically significant impact on the system of motor variables on the criterion.

Key words: students, links, tests, knowledge, abilities, influence.

INTRODUCTION

Indisputable fact is that success in achievements and results among students affect many factors of psychological and body constitution of the individual. Certainly some impact on success, belongs to the socio-economic status and cultural level and school teaching and education organized through the teaching process. Success in motor knowledge and habits depend on a sequence of motor skills. But to establish the most favourable relations from motor skills and success of motor habits and knowledge among students, and thus success in the teaching process, are necessary more researches in that direction and effective monitoring of the entire educational process in the secondary education.

The subjects of our research were male students of secondary education in several cities in the Republic of Macedonia which during the year regularly attended classes on the subject sport and sport activities. The objective of this research was to see what was the impact of motor skills on motor knowledge and habits among female pupils gained during the training process.

EXPOSITION

SAMPLE OF SUBJECTS AND WORKING METHODS

The research was carried out among 170 students from the first year in high school who regularly attended the classes on the subject sport and sport activities.

Applied were nine indicators, one indicator as criteria variable for assessment of the motor skills and habits and eight predictive variables to assess the motor skills of the EUROFIT program for children.

As an indicator of motor skills and habits a test polygon was made to asses the psycho-motor knowledge among students. Modification was made on the polygon to check on the psychophysical readiness of applicants under the program and the criteria for student's enrolment to the first year in the academic year 2007/08, in the state secondary school "Metodi Mitevski - Brico" in Skopje. Polygon was amended on the basis of the recorded conditions of the working conditions in the schools where the testing was done. The polygon was previously tried (tested) to increase its objectivity. By acquiring the polygon's goals was executed checking of the specified motor skills: speed, explosiveness, strength, agility, coordination and precision.

The sample of the motor tests included: standing long jump (SDM), height knuckle (VIZ), raising the body from the ground (PTT), multiple progressive running (agile); dynamometric of the stronger hand (DPR) hand taping (TPR), a deep bend on a bench (PDK) and the balance with eyes closed (RZO).

Data from all variables are treated with basic descriptive statistical parameters, and before that their normality of distribution was tested with the method of Kolmogorov and

Smirnov. The data processing of connectivity and impact of the test of motor knowledge and habits and motor tests of EUROFIT program for children was carried out with regression analysis.

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

RESULTS AND DISCUSSION

After the data processing with basic statistical parameters was performed regression analysis in the manifested space in which as a criterion was the test-polygon for checking of psycho-motor knowledge among the students, and as predictors were taken: standing long jump (SDM), height knuckle (VIZ), raising the body from the ground (PTT), multiple progressive running (AGIL); dynamometric of the stronger hand (DPR); taping by hand (TPR), a deep bend on a bench (DPK) and balance with eyes closed (RZO), the variables for assessment of motor abilities from the EUROFIT program for children.

Multiple regression analysis (Table 1) with a system of motor measures as predictors and the motor test to assess motor knowledge and habits (test-polygon), as a criterion of students showed statistically significant influence of .00. The coefficient of multiple correlation, i.e. correlation of all motor measures with the test was described with 41% ($R=.41$), and the prediction coefficient of $R^2=.17$ which means that the system of motor measures made conditions on the success in the test. The remaining 59% in the explanation of the total variability of the test for assessing the motor knowledge and habits remain on some other characteristics and abilities of students who were not subject of this research (such as other motor variables, anthropometric, conative, cognitive, motivational, functional, etc.). Individually positive impact on the criterion showed only the variable taping by hand (TPR). For the specified variable can be said that it has the biggest contribution to the overall impact on the predictor system over the criteria.

Table 1
Regression analysis of the system of motor tests with the test the polygon for checking motor knowledge and habits among the students of secondary education

$R=.41$ $R^2=.17$ Adjusted $R^2=.13$ $F(8,161)=4,12$ $p<.00$ Std.Error of estimate:12,31						
	Beta	St. Err. of Beta	B	St. Err. of B	t(161)	p-level
SDM	-0,16	0,09	-0,10	0,06	-1,76	0,08
VIZ	-0,08	0,10	-0,07	0,10	-0,78	0,43
PTT	-0,09	0,10	-0,26	0,27	-0,95	0,35
AGIL	-0,02	0,09	-0,11	0,56	-0,19	0,85
DPR	-0,08	0,08	-0,14	0,14	-0,96	0,34
TPR	0,18	0,08	1,03	0,49	2,13	0,03
DPK	-0,02	0,08	-0,05	0,19	-0,26	0,80
RZO	0,07	0,08	0,08	0,09	0,91	0,37

CONCLUSION

Based on the results obtained in this research we can conclude the following:

1 - The motor test system for evaluation of motor skills is conditioned by the test conditions during the performance of the test for assessment of the motor knowledge and habits among female pupils in the secondary education.

2 - Individually, statistically significant impact was observed with the variable taping by hand, which means that it has the biggest contribution to the success of the test performance.

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The report has been reviewed.