# РУСЕНСКИ УНИВЕРСИ:ТЕТ „Ангел Кънчев" UNIVERSITY OF RUSE „Angel Kanchev" 

# НАУЧНИ ТРУДОВЕ <br> Том 48, серия 8.2 <br> Физическо възпитание и спорт <br> НАУЧНЫЕ ТРУДЫ <br> Том 48, серия 8.2 <br> Физическое восспитание и спорт 

# PROCEEDINGS <br> Volume 48, book 8.2 <br> Physical Education and Sport 

Pyce
Ruse
2009

# Differences in the Gained Results of the Male Students' Achievements in First Year in Sport and Sport's Activities Schooling 

Viktor Mitrevski, Georgi Georgiev, Ilija Klincarov, Biljana Popeska


#### Abstract

Differences in the Gained Results of the Male Students' Achievements in First Year in Sport and Sport's Activities Schooling: The research conducted above 353 male and female high school students from few cities in Macedonia, needs three sub-examples of those examinee students. Those subexamples are all males and their number is 81 from first grade who regularly were attending the sport and sport's activities schooling in different working conditions. With multi-variance and univariance analysis (MANOVA, ANOVA) there are differences among the achievements of the students, expressed by numerical mark grades in few sport disciplines.


Key words: mark grades, students, achievements, conditions, sport's hall, grounds.

## INTRODUCTION

When we talk about schooling we all need to mention the three important processes: its planning - a concept for the student's duty; schooling's realization - which is dependant of the quality of the working conditions in the schools; and evaluation of the students' knowledge.

Evaluation's goal is to make a clue about the students' knowledge and in the meanwhile we make an evaluation of the schooling realization planned and predicted by the professors.

Researching subjects were the students in the secondary schools, and the researching goal was to identify the differences among the achievements of the students who were attending the sport schooling and are connected with the conditions in which they are conducted.

## WORKING METHODS

Experimental example of 81 students at the age of 15-16 all of them in the first grade were divided into 3 sub-examples. This example was of total 353 members from all over Macedonia (Krushevo, Resen, Demir Hisar and Bitola), students in the secondary school. The schools in which this experiment was conducted were classified according to the conditions in which the schooling was performed:

- The first sub-example contained 21 students with bad working conditions. (There is not closed sport's hall only a ground for handball, volleyball and basketball.)
- The second sub-example contained 35 students with medium working conditions. (There is a ground for handball, volleyball and basketball and one closed sport's hall but with no adequate equipment.)
- The third sub-example contained 25 students with good working conditions. (There is a ground for handball, volleyball and basketball and one closed sport's hall with adequate equipment.)

For the first variable was made an evaluation of the athletics' achievements, with a high start.

For the second and third variable was made an evaluation of the gymnastics' achievements.

For the fourth and fifth variable was evaluated sport's game - basketball. The evaluation was made by three examinators, graduated professors of sport and gym education.

With multi-variance and univariance analysis (MANOVA, ANOVA) there are differences among the achievements of the students, and LSD-test appointed the differences between each of the sub-examples.

## RESULTS AND DISCUSSIONS

Results of the multi-variance analysis (MANOVA) table 1, there is estimated that there are significant differences among the students' achievements of first grade of 0.05. At the base of the gained results of Wilk's Lambda is 0,75 and with Rao's F approximately 5.05 and the degree of the freedom Df1 $=10.00$ and Df2 $=328.00$ there is difference of $\mathrm{Q}=0.00$ (plevel = .00).

Table 1
Multi-variance's differences in the variants for estimation of the students' achievements

| Wilks' <br> Lambda | Rao's R | df 1 | df 2 | p-level |
| :---: | :---: | :---: | :---: | :---: |
| 0,750962 | 5,049918 | 10 | 328 | 0.000 |

Results of the univariance variant's analysis (Table 2) to the estimation's variables of the achievements of the students show that there is a significant difference at the level of 0,05 in the variables like: high start, forward somersault, leading a ball in basketball, throwing the ball in the basket wheel with a leap in basketball.

Table 2
Univariance's differences in the variant for estimation of the students' achievements

| grades | groups | X | SD | f | p-level |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l} \hline \text { high } \\ \text { start } \end{array}$ | I gr | 3,96 | 1,62 | 3,5919 | 0,0297 |
|  | II gr | 4,44 | 0,86 |  |  |
|  | III gr | 4,45 | 0,60 |  |  |
| forward somersault | I gr | 4,20 | 1,05 | 3,4084 | 0,0354 |
|  | Il gr | 3,97 | 1,01 |  |  |
|  | III gr | 4,42 | 0,74 |  |  |
| Jumping over buck | 1 gr | 4,24 | 1,06 | 1,2958 | 0,2764 |
|  | II gr | 3,98 | 1,00 |  |  |
|  | III gr | 3,84 | 1,73 |  |  |
| leading a ball | I gr | 4,24 | 0,83 | 2,6112 | 0,0764 |
|  | II gr | 3,98 | 0,89 |  |  |
|  | III gr | 3,84 | 0,70 |  |  |
| throwing the ball in the basket wheel | I gr | 3,56 | 0,88 | 9,6040 | 0,0001 |
|  | II gr | 4,18 | 0,89 |  |  |
|  | III gr | 4,20 | 0,78 |  |  |

From the analyzed group's differences in the variant high start in the table 3 with LSD test (post-hok), it is confirmed that there are statistical differences between:

- the first group ( group of students that learn in a school with bad working conditions),
- the second group (group of students with medium working conditions)
- and the last, third group ( group of students with good working conditions).

The best results of the sport's activities achieved those students with best working conditions and the worst results have those with bad working conditions.

From the analyzed group's differences in the variant forward somersault in the table 4 with LSD test (post-hok) it is confirmed that there are significant differences between the groups of students:

- the second group (group of students with medium working conditions)
- and the last, third group ( group of students with good working conditions).

Table 3

| LSD test; variable VAR1 (new.sta) |  |  |  |
| :---: | :---: | :---: | :---: |
| Probabilities for Post Hoc Tests |  |  |  |
|  | \{1\} | \{2\} | \{3\} |
|  | 3,960000 | 4,439394 | 4,454545 |
| 1 gr. $\{1\}$ |  | 0,019002 | 0,020233 |
| 2 gr. $\{2\}$ | 0,019002 |  | 0,9388195 |
| 3 gr . $\{3\}$ | 0,020233 | 0,938819 |  |

The best results of the sport's activities achieved those students with best working conditions and the worst results have those with bad working conditions.

Table 4

| LSD test; variable NEWVAR2 (new.sta) |  |  |  |
| :--- | :---: | :---: | :---: |
| Probabilities for Post Hoc Tests |  |  |  |
|  | $\{\mathbf{1 \}}$ | $\{\mathbf{2 \}}$ | $\{3\}$ |
|  |  | 4,200000 | 3,969697 |
| $\mathbf{1}$ gr. $\{1\}$ |  | 0,418182 |  |
| $\mathbf{2}$ gr. $\{\mathbf{2 \}}$ | 0,194381 |  | 0,237943 |
| $\mathbf{3}$ gr. $\{3\}$ | 0,237943 | $\mathbf{0 , 0 0 9 9 9 5 6}$ |  |

From the analyzed group's differences in the variant leading a ball in basketball in the table 5 with LSD test (post-hoc) it is confirmed that there are significant differences between the groups of students:

- the first group ( group of students that learn in a school with bad working conditions),
- third group ( group of students with good working conditions).

The best results of the sport's activities achieved those students with best working conditions and the worst results have those with bad working conditions.

Table 5

| LSD test; variable NEWVAR4 (new.sta) |  |  |  |
| :--- | :---: | :---: | :---: |
| Probabilities for Post Hoc Tests |  |  |  |
| 1 |  |  |  |
|  | 4,000000 | 4,272727 | $\mathbf{4 , 3 4 5 4 5 5}$ |
| $\mathbf{1}$ gr. $\quad\{1\}$ |  | 0,07601049 | $\mathbf{0 , 0 3 1 4 2 4}$ |
| $\mathbf{2}$ gr. $\{2\}$ | 0,07601 |  | 0,6255485 |
| $\mathbf{3}$ gr. $\{3\}$ | $\mathbf{0 , 0 3 1 4 2 4}$ | 0,62554854 |  |

From the analyzed group's differences in the variant throwing the ball in the basket wheel with a leap in basketball in the table 6 with LSD test (post-hok) it is confirmed that there are significant differences between the three groups of students:

- the first group ( group of students that learn in a school with bad working conditions),
- the second group (group of students with medium working conditions)
- and the last, third group ( group of students with good working conditions).

The best results of the sport's activities achieved those students with best working conditions and the worst results have those with bad working conditions.

## Table 6

| LSD test; variable NEWVAR5 (new.sta) Probabilities for Post Hoc Tests |  |  |  |
| :---: | :---: | :---: | :---: |
|  | \{1\} | \{2\} | \{3\} |
|  | 3,560000 | 4,181818 | 4,200000 |
| 1 gr. $\{1\}$ |  | 0,000151 | 0,0001815 |
| 2 gr. $\{2\}$ | 0,000151 |  | 0,9074627 |
| $3 \mathrm{gr} .\{3\}$ | 0,000181 | 0,907463 |  |

From the analyzed group's differences in the variant in leading a ball with LSD test (post-hoc) it is confirmed that there are not significant differences between the students' groups.

The best results in the evaluation of the sport's disciplines shows the third group of students, those with best working conditions and the worst results shows the first group of students, those with the bad working conditions.

## CONCLUSIONS

The results are appointing to the next conclusions:

- There are significant differences between the achievements and grades of the students according to the conditions in which they are attending the schooling.
- There are significant differences in the achievements and grades of the students, who attending schoolings with different conditions.
- Achievements and grades of the students who study in better working conditions are better than those who study in bad working conditions.


## LITERATURE

[1]. Арсић, М. (1996). Како не оцењивати ученике. Крагуевац: Весић.
[2]. Bala, G. (1986). Logicke osnove metoda za analizu podataka iz istrazivanja u Fizickoj kulturi. Novi Sad: Sava Muncan.
[3]. Бабијак, J. (1986).Оцењивање моторних способности деце. Физичка култура, (Титоград), (1), 59.
[4]. 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.
[5]. Клинчаров, И. и Туфекчиевски, А. (2005). Просторните капацитети за реализација на училишни спортски активности во основните училишта во Република Македонија. Физичка култура (Скопје), (2), 161-163
[6]. Majeric, M. (2004). Analiza modelov ocenivanja sportnih znanj pri sportni vzgoji.
Doktorska disertacija, Ljubljana: Univerza v Ljubljani, Fakulteta za sport.
[7]. Малцев, М. и Георгиев, Г. (2005). Мислењата на наставниците од ОУ и ДСУ за наставата по физичко образование спорт и спортски активности. Физичка култура (Скопје), (2), 73-74.
[8]. 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.
[9]. Поповски, К. (1996). Современи сфаќања за проверувањето и оценувањето на постигнатите резултати. Скопје: Мис.
[10]. Rokita, A. (2001). Interes za sportske aktivnosti ucenika prvih razreda srednje skole u razdoblju od 1995. do 2001. godine, Kineziologija, 37, (1), 99-105.
[11]. Саити, Б. (2007). Оценувањето на моторичките способности како прилог на општата оценка по физичко и здравствено образование за учениците од I-IV одделение во PM. Докторска дисертација, Скопје: Универзитет „Св.Кирил и Методиј", Факултет за физичка култура.
[12]. Симовски, А. и Ристевски, Д. (1987). Модел за оценување во наставата по физичко воспитување во училиштата. Физичка култура. (Скопје), (1-2), 38-45.
[13]. Томас, Г.Ш. и Дамиан, П.М. (2007). Примена на стандардите за оценување на учениците. Скопје: USAID, Secondary Education Activity.

## For contacts:

Mr. Sci. Viktor Mitrevski, Demir Hisar, Republic of Macedonia, GSM: +389 70269 252, e-mail: mitrevski_viktor@yahoo.com

Doc. D-r Georgi Georgiev, University „Ss. Cyril and Methodius", Skopje, Faculty of physical education, Republic of Macedonia, GSM: +389 70802 955, e-mail: ggeorgiev2005@yahoo.com

Prof. D-r Ilija Klincarov, University „Ss. Cyril and Methodius", Skopje, Faculty of physical education, Republic of Macedonia, GSM: +389 70366 646, e-mail: i.klincarov@ukim.edu.mk

Ass. Mr. Sci. Biljana Popeska, University "Goce Delchev", Faculty of pedagogy, Stip, Republic of Macedonia, GSM: +389 75499 539, e-mail: bibimitevska@yahoo.com

Докладът е рецензиран.

