

## EFFECTS OF ADDITIONAL HOURS OF EDUCATION OF QUANTITATIVE CHANGES OF MOTOR SKILLS

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*(Preliminary communication)***Nazim Mirtaj***University of Prishtina, Faculty of Physical Education, Prishtina, Kosova***Abstract:**

*Determining the effectiveness of certain training methods and programs for sports training, which should provide a lift training as well as the development of some motor dimensions in young students of volleyball players and student athletes aged 12 years. Subject sample consisted of 75 volleyball players and 75 athletes, aged  $12 \pm 0.6$  years a total of 150 students athletes and volleyball players, who in addition to regular school physical education, at least one year deal with volleyball and athletics at the school sports section. 9 tests used to assess motor abilities. T-test was applied to determine whether there are differences between student's athletes and volleyball players aged 12 years. Analyses were made to the program SPSS 12.0 for Windows. T-test to determine differences in arithmetic means that exist between students of volleyball players and students athletes aged 12, have statistical significance tests: running at 30 meters high start (MR30m), hand tapping (MHT), eight with motion (MEM) running in the rectangle (MRIR), and bend the gap (MBG). Educational technology applied in students athletes achieved a very positive effect in increasing the speed of the body, increase coordination and improve flexibility.*

**Key words:** *students, volleyball, athletics, physical education, tests*

**INTRODUCTION**

Younger school age in general, is an extremely sensitive period for motor skills for children, especially when it comes to learning and adopting a comprehensive repertoire of motor skills. It is important not to miss this period, and because of the advantages it has in the formation of the motor base. Child development in this and even young children are of great importance to the selection of appropriate movement activities. The success of primary school pupils in learning motor tasks, the technical elements of the sport depends on various cognitive, co native, motivational, social and other factors. In this regard, it is expected that successful students specific sports in the primary school to remain successful in sports clubs and vice versa.

The influence of certain types of additional training classes on the body of the child depends on the

training facilities that are used, the intensity and volume load, as well as state of training. It is known that training designed to develop one ability, it affects to a great or lesser extent in other abilities too.

If an athlete with poor physical preparedness present the training exercise with the primary aim of developing a capability, it is certain that this exercise also will affect the development of other skill. Raising the overall situation of the training, same training will less influence on the development of skills that are not directly intended, and its influence is limited to one or more capabilities and features. There are exercises which affect in a positive influence on the development of specific skills, while negative for another ability.

Additional programs of physical education (sports section) represent the ideal start to their sports

activities, and are based on learning the basic elements and thus provide opportunities for learning and developing basic more skills, knowledge and abilities.

The researches in this paper are more motor skills between volleyball students and athletic students of the sixth grade of primary school. The main objective of this research is to determine the difference between the volleyball students and the athletic students and to determine the influence of additional physical education in some of the motor abilities of sixth grade students of primary school in the above mentioned sports section.

## WORK METHODS

### Samples of examinees

The sample is defined as a sample taken from the population of elementary school, PS"Selami Hallaçi", PS"Musa Zajmi"and PS"Abaz Ajeti"of Gjilan/Gnjilane. Subject sample consisted of 75 male volleyball players and 75 athletic students, a total of 150 students aged  $12 \pm 6$  months, which in addition to regular physical education classes, at least one year of dealing with volleyball and athletic (disciplines in the short and medium lines) with in the school sports sections in the school year 2009/10.

Program for two groups of students, volleyball players and athletic students aged  $12 \pm 0.6$  included the regular practical class's physical education twice a week with additional training activities that are conducted on school groups for volleyball and athletic school track three a week for 60 minutes.

Terms used before determining the sample were: that the student included in physical education class, were active these sports sections and that on the days of measurement, students were healthy.

### Samples of variables

To assess the motor skills of the respondents, nine latent variables were taken, which cover an area of motion and energy processes of volleyball students and athletic students of this age.

- Motor variables consisted of:
- Running at 30 meters high start (MR30m)
- Foot taping (MFT)
- Hand taping (MHT)
- Eight with motion (MEM)
- Steps aside (MSA)
- Running into a rectangle (MRIR)

- Deep on the bench (MDB)
- Bend gap (MBG)
- Lateral stage (MLS)

### Data processing

Processing, data entry, analysis results were used appropriate mathematical and statistical methods and procedures. The results were processed By SPSS 12.0 for windows. To determine the level of transformation was used T-test (paired samples T-test) for testing differences of means between volleyball students and athletic students 12 years.

## RESULTS AND DISCUSSION

First will be presented the results of basic statistical, and then differences between groups of volleyball students and the group of athletic students in motor skills.

A review of basic descriptive statistical parameter, at the volleyball students (table 1) and the athletic students (table 2), an exception to the normal distribution of results was considered the hypothetical variables that asses coordination, the variable side steps (MSA) and flexibility, the variables lateral (MLS) at the sample of volleyball students, or running agility at the variable in the rectangle (MRIR) that we can define as the ability to change direction in athletic students.

Based on the coefficient of skew ness (Skew) and coefficient of curvature distribution (Kurt) of the variables, determined b their distinct positive asymmetry which leads to the conclusion that a large number of volleyball students and athletic students set lower results in a larger number of students.

To determine whether there are significant differences between volleyball students and athletic students 12 years in nine motor variables we have used T-test (Paired-Sample T-test) for two independent groups (Table 3 and Chart 1)

Results were as follows: the differences between 75 male volleyball students an 75 athletic students in the performance measurement of motor skills was statistically significant for the variables: Running at 30 meters high start (MR30m) (Mean -0.426, t-4, 920, DF-74, sig. -0.000), hand taping (MHT) (Mean -1.760,t-03.290, df-74, sig. -0.003), eight with motion (MEM) (Mean -0.663, t-4, 711, df-74; sig.-0.000), and bend the gap (MBG) (Mean -4.240, t-2, 499, df-74: sig. -0.015) since the differences of arithmetic were in favor of athletic students, T-test results are listed and visible in the table , as the

degrees of freedom (df) of 74 were statistically significant at the level of  $p < 0.05$ .

And in the other motor variables athletic students had better results than the volleyball players, but these differences were not statistically significant  $p < 0.05$ .

To the athletic students these changes indicated that the kinesiology treatment effect on physical education was improving the performance of motor tasks in greater or lesser extent.

One-year kinesiology treatment to the volleyball students was probably more focused on learning and improving tactical elements of volleyball game than to the athletic students who have worked more on the effectiveness of certain training.

Changes in these motor variables indicates that the quality and scope of work in conditional training of athletes at this age is critical because this is the best time to develop the motor skills for which variability mechanism responsible for the regulation of tone and synergistic regulation and mechanism for the structuring of movement.

These results suggest that a variety of education technologies can achieve different effects in latent mobility area was confirmed in studies Arunović, (1984).

## CONCLUSION

In a sample of 75 volleyball students and 75 athletic students aged  $12 \pm 0,6$  years applied a battery of 9 motors tests that cover the structure of motor abilities.

After conducting appropriate statistical procedures, it was concluded that the study included a group of students realized after the experimental treatment significantly differ in 5 of 9 observations of motor skills. This means that from T-test were determined the differences in arithmetic means that exist between volleyball students and athletic students aged 12, have statistical significance on the tests: running at 30 meters high start (MR30m), hand tapping (MHT), eight with motion (MEM), running in a rectangle (MRIR), and bend the gap (MBG).

Education technology applied in athletic students achieves very positive effects in increasing the movement speed of the body, increasing coordination and in increasing flexibility.

## LITERATURE

- Arunović, D. (1978). *Uticaj posebnog programa nastave fizičkog vaspitanja (sa akcentom na košarku) na neke motoričke sposobnosti učenika uzrasta 15-16 godina* [The influence of a specific program of physical education (with emphasis on basketball) on certain motor skills of students aged 15-16 years. In Serbian]. Magistarska teza, Beogra: Fakultet za fizičku kulturu.
- Bala, G. (1973). O nekim testovima psihomotorike [On some tests of psychomotor. In Serbian]. *Športno-medicinske objave*, 10(1-3), 80-97.
- Bala, G. (1981). *Struktura i razvoj morfoloških i motoričkih dimenzija dece SAP Vojvodina* [The structure and development of morphological and motoric dimensions of children SAP vojvodina, in Serbian]. Novi Sad: Fakultet fizičke kulture.
- Šekeljić, G., & Stamatović, M. (2010). Uticaj različitih nastavnih tehnologija na motorički prostor učenica četvrtog razreda osnovne škole [The effect of different teaching technologies in motor space student fourth grade. In Serbian]. *Sport Mont*, Podgorica, (3-24), 254-258.
- Kurelić, N., Momirović, K., Stojanović, M., Šturm, J., Radojević, Đ., & Viskiće-Štalec, N. (1971). *Praćenje rasta, funkcionalnih i fizičkih sposobnosti djece i omladine SFRJ* [Monitoring the growth of functional and physical abilities of children and youth Yugoslavia. In Serbian]. Beograd: Fakultet za fizičko vaspitanje.
- Royce, J. (1958). Isometric fatigue curves in human muscle with normal and occluded circulation. *Research Quarterly*, 29, 204-12.
- Secher, N.H. (1975). Isometric rowing strength of experienced and inexperienced oarsmen. *Medicine and Science in Sports*, 7, 280-283.
- Solomonović, V. F. (1972). *Fiziologija sporta* [Physiology of sport. In Serbian]. Beograd: Jugoslavenski savez organizacija za fizičku kulturu.
- Start, K. B., & Holmes, R. (1963). Local muscle endurance with open and occluded intramuscular circulation. *Journal of Applied Physiology*, 18, 804-07.
- Zaciorski, V.M. (1975) *Fizička svojstva sportiste* [The physical properties of an athlete. In Serbian]. Beograd: Partizan-NIPU.

## ЕФЕКТИ НА ДОДАТНИ ЧАСОВИ ПО ФИЗИЧКО ВОСПИТУВАЊЕ ВРЗ КВАНТИТАТИВНИТЕ ПРОМЕНИ НА МОТОРНИТЕ СПОСОБНОСТИ

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(Прейходно соопштение)

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### **Апстракт:**

*Утврдувањето на ефикасноста на одделни методи за тренинзите и програмите за подготвките кои треба да обезбедат подигнување на тренираноста, а со тоа и развој на некои моторни димензии кај учениците одбојкари и атлетичари на возраст од 12 години, беше целта на овој труд. Примерокот на испитаниците беше сочинет од 150 ученици, поделени во две групи на возраст од 12 години ± 6 месеци. Едната група од 75 ученици, освен обичноста со редовна настава по физичко образование, една година во рамките на училина спориска секција редовно се занимаваше со одбојка. Другата група, исто така соодветно како едната група, се занимаваше со атлетика. На учениците од двете групи беа применети 9 тестови за проценување на моторните способности. За утврдување на разликите на аритметичките средини во моторните способности меѓу учениците од двете групи, применети се Т-тести за големи независни примероци. Од неговите резултати е утврдена статистички значајна разлика во тестовите: вртчање на 30 метри од висок старт (MT30B), тинг со рака (MТАРУ), осумка со наведување (МОСАГ), вртчање во правоаголник (МТПКУ) и вртчање во расчекор (МФПРА). Со најавната технологија по атлетика, постигнати се подобри резултати во моторните способности: брзина на движењата на телото, координацијата и флексибилноста.*

**Клучни зборови:** *ученици, одбојка, атлетика, физичко образование, тестови*