

COMPARATIVE ANALYSIS OF THE PHYSICAL DEVELOPMENT OF THE STUDENTS, SPORTING IN THE SOFIA UNIVERSITY

Preliminary communication

Anzhelina Yaneva

University of Sofia "St. Kliment Ohridski", Sports Department, Sofia, Bulgaria

Abstract

The article presents the results from a part of the experiment, carried out in the frames of larger scientific project titled: "Study of physical development and ability of students practicing various sports disciplines at Sofia University", financed by the budget of Sofia University. The data from the conducted experimental research of students who practice different sports disciplines in regular classes during the academic year 2015/2016 are analyzed. The test battery is unified for all students participating in various sports disciplines at Sofia University.

The results of the study show that the distribution of the data by the different indicators is in the same range, but there are some more specific results, which are due to the specifics of the sport or the preliminary preparation of the students.

These results represents an indicator of the different levels of physical development and the propensity of the students - men and women, with predominantly the lower level of physical development.

Keywords: *students, sports, physical development*

INTRODUCTION

Physical development, often subjected to research, reflects the morphological, functional and psychological features that determine the overall state of the personality, and especially the young people who are still developing.

Following, are the three main groups of parameters that can be explored:

- Anthropometric: height, weight, chest circumference, etc.
- Physiometric: vital capacity, muscle strength, reactivity and accuracy of the motor act;
- Somatoscopic: body, muscular development, chest and leg shape, male sexual organ development, secondary sexual signs, puberty.

Almost all authors in the term "physical development" also include "physical capacity", as they are the main indicators that take into account the current physical state and, hence, the state of health of the individual (Наумовски (Naumovski), 1999; Рачев и сор (Rachev et al), 1984; Янев и сор (Yanev et al), 1982; Янева (Yaneva), 2009a, 2012; Янева, Недкова & Туманова (Yaneva, Nedkova & Tumanova), 2015).

To improve the methodology and organization of sports training at the Sofia University "St. Kliment Ohridski", an experiment was carried out to monitor the physical state of the students at the University. Despite the insufficient number of hours regulated by the Law on Sport in the Republic of Bulgaria, the efforts of the sports teachers are aimed not only at improving the methodology and the organization of training but also in motivating the students for regular sports and healthy lifestyle activities. The number of administrative classes in higher education institutions is decreasing and this necessitates increasing the efficiency and intensity of the activities, as well as the application of new forms, means and methods.

In this regard, the University's Sports Teachers organize various forms of physical activity for the students - sports holiday themes, competitions in attractive and non-traditional and traditional sports disciplines, training in extreme, sport, tourism and water sports. (Nedkova, 2014; Yaneva, (Янева) 2008a; 2008b; 2009a; 2009b; 2010a; 2010b).

The team of lecturers at the Department of Sports at the Sofia University conducted a study of students participating in regular training groups on various sports. The research is part of a project

funded by the Sofia University's budget on "Studying physical development and legal capacity of students practicing various sports disciplines at the Sofia University" (Naumovski, 1999; Nedkova, 2014; Slanchev (Слънчев), 1992; Yaneva (Янева), 2008a; 2012; Yaneva et al, 2015) to update curricula, according to the current physical and health condition of the students.

METHODS

The purpose of this study is to analyze and compare the physical development of students practicing different sports and legal capacity data from the conducted research.

The following tasks were set:

- To verify the distribution of data on the indicators of students practicing various sports at Sofia University.
- Analyze the results obtained and compare them with the aggregated data from the overall sample of all students enrolled in the experiment.

On the basis of the analyzed literature and the personal experience of the researchers, a test battery was prepared in the project and the data from the measured indicators were analyzed based on basic descriptive statistics parameters using excel program. The study was conducted with students willing to participate in the experiment, who were not actively involved in training process of selected sports, but only participated in the activities of "Sports". The study was conducted at the beginning of the academic year 2015/2016 by more than 1,000 students, particularly 1055 students practicing various sports disciplines practiced at the Sofia University.

Obtained results were analyzed using basic descriptive statistics. Results were presented using percent's (%) and show graphically.

RESULTS AND DISCUSSION

The data were collected from total, 1055 students that participated in the study. From them, the highest percentage were students attending volleyball and fitness sports. For these sports, Sofia University has its own material sport base. The distribution of the study sample by gender is presented in Figure 1, while the distribution of participants by participating sports is presented in Figure 2.

As presented in Figure 1., the distribution by gender is as follows: 47 % or 472 students are males and 53% 583 are females. This puts them on an equal footing. Age distribution is as expected, as we

examine young people aged 18 and over. The number of students under the age of 23 is 95.9% and 62.7% up to 20 years, which is also indicative of the fact that the students who are practicing are basically in the first and second courses.

It is noteworthy in the distribution of Body Mass Index data that women show that their condition is normal but tends to underweight, with the highest values being under 21 and in most sports 19 - basketball, athletics and fencing. (Figure 3.)

In men, BMI is also in the norms, except in the sport of swimming, where the value is 26.5, which is a predisposition indicator. The data of the Flexibility Quality Development Indicator (Figure 4.) is not typical of the sport but is generally identical to the data for this age from other studies. (Slanchev (Слънчев)1992; Yaneva (Янева), 2009a; 2012).

Comparison of blast strength data on lower limbs through the "Lack of Seed for 30 Seconds" test shows that women's sports scores are highest in judo and climbing, as well as tennis and soccer (Figure 5.).

For men, the average data values are the same for all sports, the highest being for judo-sporting students and the lowest for students practicing swimming. The biggest difference is the development of the quality of the explosive force of the abdominal musculature. Val-

ues are measured by the "Leg lift for 30 sec" test or the so-called "crunches" (Figure 6.).

Most push-ups are made by students from sports where they run as athletics and football and in power sports - judo and fitness.

For men, the values are the same for all sports, except for sports fencing students. It is also noteworthy that women have the same values for men as this indicator.

From the data presented in the figures, it is clear that the distribution is strictly specific, such as body mass index, depth of inclination, squat to seating for 30 s, lifting from a bed leg for 30 s.

CONCLUSION

Our expectations regarding the different distribution of the indicators were justified given that the living conditions and the physical activity of the students are different. Students did not practice before entering the Sofia University and did not participate actively in organized and purposeful sports activities. Many have not been able to practice such sporting disciplines offered by the Sports Department.

The study raises the conclusion that, although specific to the sport, the data of the students practicing different sports are similar, which allows general guidance to be given to improve the organization and methodology of training.

REFERENCES

Наумовски, А. (1999). Прилог за условеност на екзактноста на заключенията од применетите методи за обработка на податоците во истражувањата на спортските активности. [Conditionality attached to the exactness of the conclusions of the applied methods for data processing in research on sport activities. In Macedonian]. Физичка култура, 27(1-2), 19-21.

Недкова, М. (2014). Нови подходи за усъвършенстване на спортните занимания във ВУ в Р България. [New approaches to improve sporting activities in universities in Bulgaria. In Bulgarian.] Unpublished doctoral dissertation at National Sport Academy, Sofia, Bulgaria.

Рачев, Кр., Матеева, Н., Дражева, Ц., Алипијева, В., Маринов, Б., Петров, Л., Христосков, П., & Стоев, В. (1984). Теория и методика на физическото възпитание. [Theory and methods of physical education. In Bulgarian.] София: МФ.

Слънчев, П. (1992). Физическо развитие, физическа дееспособност и психофизическа реактивност на населението на България. [Physical development, physical ability and psychophysical reactivity of the population of Bulgaria. In Bulgarian.] София: ИПБ-НСА.

Янев, Б., Щерев, П., Боев, П., Генов, Ф., Сепетлиев, Д., Попов, И., Захариев, Б. (1982). Физическо развитие, физическа дееспособност и нервно-психическа реактивност на населението. [Physical development, physical ability and neuro-psychological reactivity of the population. In Bulgarian.] София: ИПБ-НСА.

Янева, А. (2008a). Хуманизирането и демократирането на процеса на обучение по спорт в Софийския университет "Св. Климент Охридски". [Humanization and democratization of the learning process in a dispute at Sofia University "St. Kliment Ohridski". In Bulgarian.] In Eds Rangelova et al "Humanization and democratization in the educational process in terms of university education" (pp: 105-110)

Янева, А. (2008b). Игровият метод в обучението по джудо - възможност за оптимизация на учебно-възпитателния процес [Application of method of play in teaching judo - possibility to optimize the educational process. In Bulgarian.] In proceeding "Физическото възпитание и спортът в образователната система"(pp: 228-233), ЮЗУ, Благоевград.

Янева, А. (2009a). Развитие на общофизическите качества на студентите спортувачи в часовете по спорт в Софийския университет. [Development of General physical qualities of students athletes in sports classes at Sofia University. In Bulgarian.] Sofia University Yearbook ISSN 0205-0692, Volume 85, Sofia: SIP "St. Kliment Ohridski".

Янева, А. (2009b). Хуманизация и демократизация на учебно-тренировъчния процес по джудо и самоотбрана за жени в Софийския университет „Св. Климент Охридски“. [Humanization and democratization of the educational and training process in judo and self-defense for women at Sofia University "St. Kliment Ohridski". In Bulgarian.] In Eds Rangelova et al, "Humanization and democratization in the educational process in terms of university education" (pp: 140-144) Sofia: Status.

Янева, А. (2010a). Изследване на отношението на активно спортуващите студенти от Софийския университет „Св. Кл. Охридски“ към спорта и резултатите от практикуването му [Exploring the attitudes of athletes students from Sofia University "St. Kliment Ohridski" "for the

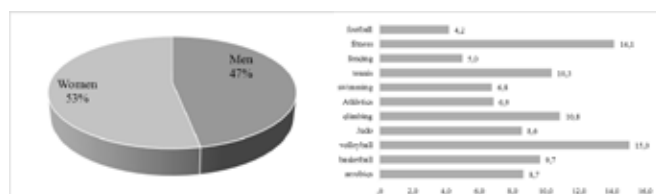


Fig. 1. Distribution of students by gender Fig. 2. Distribution of students by selected sport

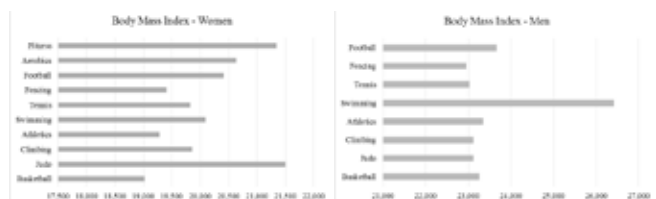


Figure 3. Distribution of body mass data (TM index)

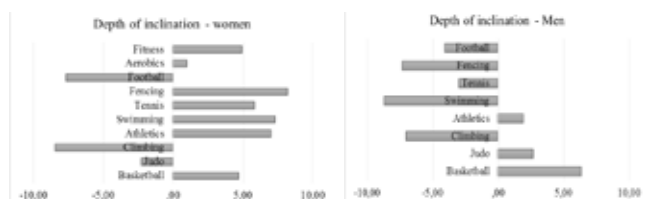


Figure 4. Distribution of Flexibility Data



Figure 5. Explosive force of the abdominal musculature

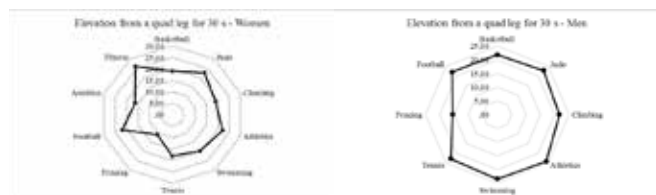


Figure 6. Explosive force of the abdominal musculature

sport and the results of his practice. In Bulgarian.] In proceeding book „Оптимизация и иновации в учебно-тренировъчния процес“, (pp: 9-19) ISSN 1314-2275, София: УИ „Св. Климент Охридски“.

Yaneva, A. (2010b). Judo jako uniwersytetcka dyscyplina ksztalcenia. Paedagogica at utilitatem disciplinae. ISSN 1895-6459, Rocznik 6, PL, 77 – 81.

Янева, А. (2012). Изследване на някои показатели за физическо развитие на студентки, посещаващи фитнеса за жени в Софийския университет. [A study of some indicators of physical development of students attending the gym for women at Sofia University’s Department.

Correspondence:
Sports Department,
University of Sofia “St. Kliment Ohridski”
15 Tzar Osvoboditel Blvd
tel./fax: +3592 9433818, GSM +359 888 434 880, GSM2 +359 879 600 12
E – Mail: anji@abv.bg

In Bulgarian.]. In proceeding book from International Scientific conference “Modern trends physical Education and Sports” ISSN 1314-2275, Sofia: SIP

Янева, А., Недкова, М., & Туманова, Б. (2015). Статистическа извадка на данни от изследване по научен проект за физическото развитие и дееспособността на студентите в Софийски университет. [Study of physical development and activity students practice various sports disciplines at Sofia University. Sofia. In Bulgarian.] София: УИП “Св. Климент Охридски”