



# Behavioral effects of sports experience on the physical activity of students in the process of studying at a higher educational institution

UDC 796.83

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Received by the editorial office on 21.04.2025

## Abstract

**Objective of the study** is to identify the dependence of students' motor activity during university studies on previous experience in sports activities.

**Methods and structure of the study.** The data was collected through an anonymous survey in which 165 students (75 young men and 90 girls) participated. The questionnaire included 52 questions aimed at studying the experience and duration of a particular sport, the level of physical activity, the main reasons for the decrease in motivation to engage in physical education, as well as participation in mass sporting events during the first academic semester.

**Results and conclusions.** Upon admission from a school to a higher education institution, there is a decrease in the number of young people involved in physical culture and sports activities. An important aspect of motivating students for sports activities is taking personal interests into account when planning sports events.

**Keywords:** *high school students, university education, physical education, physical exercises, motor activity, behavioral motives.*

**Introduction.** Systematic physical exercise is a significant factor in improving physical and psychological performance, mood, well-being, and cognitive functions. Studies show that approximately 40-60% of higher education students do not receive the recommended amount of physical activity [4]. Statistics indicate a significant decrease in physical activity in the 18-24 age group [2]. Due to the transition of young people from secondary school (adolescence) to higher education (adolescence), the decrease in physical activity is due to an increase in the educational load and a limitation of physical education and sports activities [6]. Since healthy lifestyle competencies are formed during the period of study, a decrease in students' physical activity is negative [5]. The first step in involving higher education students in physical education and sports activities is to gain knowledge about the models and key determinants of independent [3] physical activity of students. Knowledge and understanding of behavioral motives in the field of physical

activity and its determinants provide a fundamental basis for improving physical fitness and improving the general health of students [1].

**Objective of the study** is to identify the dependence of students' physical activity during their studies at a university on their previous experience in sports activities.

**Methods and structure of the study.** The representative sample consisted of 165 students (75 boys and 90 girls) aged  $20.5 \pm 0.5$  years. The selection of subjects was carried out using a stratified multi-stage sampling procedure with proportional distribution. Depending on the year of study, 1st-year (34.7%), 2nd-year (26.4%) and 3rd-year (25.1%) students took part in the study. Data collection was carried out using an anonymous questionnaire consisting of 52 questions regarding experience and length of service in a particular sport, level of physical activity, main reasons for decreased motivation to exercise, participation in physical education and mass events in the first aca-



demic semester. Statistical data analysis was carried out using Statistica 14.0.

**Results and conclusions.** Based on the analysis of involvement in physical education and sports activities, it was found that 8.8% of students had never been involved in school sports sections. As the reasons for reduced motivation for sports activities, respondents most often indicate the lack of educational and material base for practicing the desired sport in their hometown. Before entering the university, 56.7% of students participated only in recreational forms of physical activity. During their studies in high school, male students were mainly interested in football (12.4%), basketball (9.1%) and table tennis (9.2%). Female students were more often involved in cycling (22.8%), roller skating (11.3%), volleyball (8.9%), dancing (18.3%), aerobics (17.4%) and badminton (7.6%). Among active recreational activities, students mostly prefer aerobics and dancing, cycling, jogging in the park, and playing volleyball.

Of the respondents, 33.6% of students are actively involved in sports, of which 20.5% competed in interuniversity student events, and 12.4% participated in competitions at the city and regional levels. The 2 indicator shows statistically significant differences between the sexes: 21.6% of boys and 12.8% of girls play sports.

An analysis of previous experience in sports activities shows that most students began playing sports at the age of 8-9 (12.5%) and at the age of 10-11 (8.7%). The number of classes per week ranged from three to five, training sessions lasted from one to two hours (19.1%) and 2-3 hours (11.6%). However, cessation of sports activities occurs at the age of 13-14 (3.6%), from 15 to 16 years this figure increases to

9.4%, at 17 years 15.7% of young athletes stop playing sports. In general, by the time of entering university, 27.8% of respondents decided to stop playing sports, which shows that by the time of entering university, less than 5.8% of students continue to play sports. Common reasons for stopping active sports activities, according to students, were the inability to combine schoolwork and sports training (8.7%), injuries (7.7%) and an inconvenient training schedule (5.7%) (see table).

An analysis of physical education and sports activities for the current month before the survey shows that 8.7% of students did not participate in any form of physical education. As a rule, among them, there were predominantly students who did not participate in sports during their secondary school studies or who completed sports training at a younger age. Only 21.4% of students participate in sports at least three times a week for at least 30 minutes, 68.7% of students believe that they are not sufficiently involved in physical education and sports activities.

The results of the study indicate the importance of motivating students to participate in physical education and sports activities. Given that students are exposed to a number of social conditions and norms of behavior, higher education institutions have the ability to model a special environment that promotes the formation of a healthy lifestyle through physical education.

The results of the study show that, compared to male students (20.4%), female students (36.1%) prefer recreational forms of physical education and sports activities. As a means of sports activities, male students mainly choose sports games – football, basketball, table tennis. Girls prefer dancing, aerobics,

*Ratio of the percentage of students participating in sports during their studies in high school and at university*

Sport	Participation percentage		t	p
	In high school	At the university		
Football	12,4	10,6	2,2	< 0,05
Basketball	9,1	10,3	4,4	< 0,05
Table tennis	9,2	8,2	3,6	< 0,05
Cycling	22,8	6,9	3,7	< 0,05
Roller skating	11,3	3,9	2,4	< 0,05
Volleyball	8,9	12,8	3,1	< 0,05
Dancing	18,3	16,4	3,5	< 0,05
Aerobics	17,4	16,8	3,7	< 0,05
Badminton	7,6	5,3	4,8	< 0,05



rollerblading and cycling, badminton. Junior students are more active in sports and mass events.

**Conclusions.** When moving from high school to university, there is a decrease in the number of young people involved in physical education and sports activities. The high percentage of low physical activity of students depends on the socio-cultural environment in which they lived before entering the university. Taking into account individual preferences when organizing sports and mass events is a significant factor in motivating students to participate in physical education and sports activities.

### References

1. Verkhoshansky, Yu.V. Programmirovaniye i organizatsiya trenirovochnogo protsessa. 2-e izd., ster. M.: Sport, 2019. 184 p.
2. Zyukin, A.V., Ponimasov, O.E., Gabov, M.V., Ryzhkin, N.V. Neytralizatsiya neblagopriyatnykh urbanisticheskikh faktorov sredstvami ekologo-didakticheskoy sredy vuza. Teoriya i praktika fizicheskoy kultury. 2021. No. 10. Pp. 108–109.
3. Kiryanova, L.A., Ponimasov, O.E., Kolesnikov, N.V., Vinogradova, O.P. Polifunktsionalnaya fitnes-tehnologiya fizicheskogo vospitaniya studentov upravlencheskih spetsialnostey. Teoriya i praktika fizicheskoy kultury. 2023. No. 7. Pp. 74–76.
4. Lubyshcheva, L.I. Fenomen samostoyatelnosti v fizicheskoy trenirovke studencheskoy molodezhi. Teoriya i praktika fizicheskoy kultury. 2024. No. 1, p. 105.
5. Mironov, A.O., Ponimasov, O.E., Morozova, L.V., Melnikova, T.I. Antikrizisnaya strategiya realizatsii fizicheskogo vospitaniya studentov v usloviyah ogranicheniya zhiznedeyatelnosti. Teoriya i praktika fizicheskoy kultury. 2023. No. 3. Pp. 60–62.
6. Spiridonov, E.A., Mironov, A.O., Ponimasov, O.E., Sayganova, E.G. Sportivnaya deyatel'nost kak sredstvo formirovaniya antistressovoy us-toychivosti studentov v obrazovatel'noy srede. Teoriya i praktika fizicheskoy kultury. 2024. No. 7. Pp. 70–72.