

RELATIONSHIP TO SPORTS AND ACTIVE MOVEMENT ACTIVITIES OF STUDENTS OF THE PEDAGOGICAL FACULTY OF COMENIUS UNIVERSITY IN BRATISLAVA

^aMARIÁN MERICA, ^bRÓBERT OSADAN,
^cLILLA KOREŇOVÁ, ^dJÁN GUNČAGA

*Comenius University in Bratislava,
Faculty of Education
Račianska 59, 813 34 Bratislava
Slovakia*

*email: ^america@fedu.uniba.sk, ^bosadan@fedu.uniba.sk
^ckorenova@fedu.uniba.sk, ^dguncaga@fedu.uniba.sk*

Abstract: The authors in their contribution describe the issue of attitude and relation to sport and active physical activity of university students of the Pedagogical Faculty of Comenius University in Bratislava, who study in the study program - pre-school and elementary pedagogy. The aim of the contribution is to present and evaluate the answers of 101 students of bachelor and master study concerning their attitudes and relation to sport as a part of their student and private life based on a questionnaire consisting of 26 questions. In the quantitative research the results of the questionnaires of the studied students were analyzed by statistical methods of mathematical induction. Based on the evaluation of questionnaires by means of percent-frequency analysis and obtained results from testing of 10 hypotheses using the Chi-square test, we can conclude that the evaluated university students in their value perception are mostly positively related to active physical activity. Most of the students (61.9%) know the influence of physical exercise on their organism and therefore they do recreational sports. They learned most about the importance of movement for their health at school and from their parents. Most of the students have been engaged in sports or recreational physical activity since pre-school and school age because of the desire to move and to compensate stress. Most students evaluate their health status as good, but they would like to increase the weekly 2-hour physical education during the week to more hours. An interesting finding was that more than 46% of the surveyed students did not perform any physical activity outside physical education lessons realized during their studies at the Faculty of Education. However, most of the students do irregular skiing sports in winter. The negative finding was that in case of possibility to represent their faculty in some selected sports, most of the students were not interested in this representation because of the high workload during their studies and active participation in temporary work.

Keywords: Sport, active movements activities, university students, health condition, representation of the faculty, ski sports, swimming, hiking.

1 Introduction

Adequate physical activity is an important part of every individual's life, including the university population. Not every individual has the potential to become a top athlete. We believe that much more important than becoming a top athlete is to achieve a lasting lifelong relationship with sports and active recreational activities performed regularly during their studies, later during employment until older age. Physical activity is a basic biological need of most living organisms and it is as important to them as food and sleep. Exclusion or limitation of physical activity usually affects human activities negatively: physical fitness decreases, various diseases develop, and aging processes are accelerated. Active recreational physical activity helps by activating the cerebral cortex, creating improved conditions for the development of thinking, creating, interaction and feeling. This is also why it is very often recommended to use appropriate physical activity against the undesirable consequences of a tense mental activity such as: sports recreational activities, physical work, movement-related hobbies, and other activities. Several researches by physical education doctors and pedagogical experts confirm that employed people who are physically fit have more vitality and feel better than those whose condition is inadequate. Physically fit individuals are able to suppress the fatigue of the monotony of life, as good fitness allows them to retain much more energy and therefore interest in their work.

However, the beneficial effect of sports and recreational activities is not only to reduce fatigue or to improve the physical and mental fitness of the body. The secretion of hormones-endorphins, which have a positive effect on mood, well-being, pleasant feelings - these are the so-called "endorphins of happiness", is very important. By speeding up the blood circulation during exercise, brain tissue is better perfused what is important for everyone, but especially for students and mentally working individuals. Recommendations of physical activities as part of a healthy lifestyle are encountered in the work of several

authors, e.g. Bence (1999, 2008), Rybárik-Bence (2000), Kalečík (2000), Murgová (2001), Šimonek (2003), Novotná-Merica (2007), Gregor (2007, 2013), Dahlke (2008), Horáková (2009), Hřčka et al. (2011), Merica (2012), Antala et al. (2014), Argaj (2016) and others. These authors emphasize, in particular, the need for recreational but regular movement as an inevitable necessity for every individual.

It is important to emphasize that teachers have a significant influence on the development of education and training. The importance of the teaching profession extends to all areas of society. The teacher influences the nature and quality of the relationship with the pupils, determines the atmosphere in the classroom, stimulates the interest of the pupils - including their relation to sport and active physical activity, their life in school, development of their knowledge and their personality: Belešová (2018), Čavojský (2015), Nemcová (2016). This topic as it is elaborated opens possibilities further to qualitative research, e.g. Kostrub (2016), Severini-Kostrub (2018).

Adequate physical activity is also related to rational nutrition, drinking regime and sufficient sleep. More and more often, doctors recommend relaxation techniques, sports and recreational activities, changes in lifestyle, improvement of physical and mental fitness, meditation et cetera to release stress. Sports nutrition was mainly dealt by authors: Clarková (2000), Konopka (2004), Fořt (2005), Grotto (2009), Piřha-Poledne (2009) and others. According to some authors, up to 90% of all diseases are diet-related, disregarding infectious diseases and injuries. Clarková (2000) emphasizes on the importance of natural nutrition, where fruits and vegetables contain 70-85% water and should be the main, i.e. ideal food. At the same time, she attributes an important place to carbohydrates for faster recovery of recreational athlete after exercise. She emphasizes that muscles can refill glycogen stores at a rate of about 5% per hour. Therefore, it takes at least 20 hours to fully refilled stocks. Ideally, it is advisable to eat high carbohydrate foods within 15 minutes after exercise. More precisely, the total intake is 1 g per 1 kg of weight every 2 hours during six to eight hours. Konopka (2004) formulated 10 principles of healthy and full nutrition for recreational as well as top athletes. They are: varied diet but not eating much, less fat and fat products, spicy but not salted, less sweets, more whole grain products, enough vegetables, potatoes, and fruit, less animal and more vegetable protein, skip alcohol consumption, eat more often but less, prepare everything tasty and pretty for the eyes. Fořt (2005) emphasizes the link: nutrition - sport - health.

2 Methodology

The aim of the contribution is to find out attitudes and relationship to sport and active physical activity of 101 university students of bachelor and master studies at the Pedagogical Faculty of Comenius University in Bratislava, who study in the study program - pre-school and elementary education.

Tasks. Based on our goal, we set the following tasks: to choose a university in Bratislava to solve our issue, to compile a questionnaire from 26 questions and to gain knowledge of attitudes and relation to sport and active physical activity among university students. Achieved results statistically processed and evaluated based on percentage-frequency analysis and Chi-square test.

Hypotheses. Based on the goal and tasks of the contribution, we created 10 hypotheses, which we approach in the results of the work.

Methods. Our research was attended by 101 students from the Pedagogical Faculty of Comenius University in Bratislava, of which 44 were bachelor students and 55 were master students.

These students attend study program of pre-school and elementary education. In quantitative research, the results of the questionnaires of the studied students were analyzed by statistical methods of mathematical induction. The results are presented in graphs with an opinion about the individual 10 hypotheses. From the hypothesis testing using the Chi-square test we confirm or do not confirm the existence of statistically significant dependence on the significance level of 0.05.

Statistical Processing. In this quantitative research (Stockemer, 2019), testing hypotheses were performed by using non-parametrical test of Fisher. The Fisher test (Sprent, 2011) or its modifications (Barot and Krpec, 2019) is an option for data processing in contingency tables where multiple choices appear in the questionnaire and where two categorical variables are considered. The significant level was determined as value of 0.05 in this paper. Following data processing was provided using the software PAST Statistics version 2.17 proposed by (Hammer, et.al., 2001).

3 Results and discussion

Statistical method of the mathematical induction was realized for following determined hypotheses (zero and alternative hypotheses):

1H0: "There are not statistically significant dependences between an effect of a physical exercise in favor of a body and type of study of respondents (Bachelor/Magister)."

1H1: "There are statistically significant dependences between an effect of a physical exercise in favor of a body and type of study of respondents (Bachelor/Magister)."

2H0: "There are not statistically significant dependences between a season of realized sporting activity and type of study of respondents (Bachelor/Magister)."

2H1: "There are statistically significant dependences of a season between realized sporting activity and type of study of respondents (Bachelor/Magister)."

3H0: "There are not statistically significant dependences between a reason for the realization of sporting activities and type of study of respondents (Bachelor/Magister)."

3H1: "There are statistically significant dependences between a reason for the realization of sporting activities and type of study of respondents (Bachelor/Magister)."

4H0: "There are not statistically significant dependences between a number of hours devoted to physical activity and type of study of respondents (Bachelor/Magister)."

4H1: "There are statistically significant dependences between a number of hours devoted to physical activity and type of study of respondents (Bachelor/Magister)."

5H0: "There are not statistically significant dependences between an interest in Physical activities in physical education and type of study of respondents (Bachelor/Magister)."

5H1: "There are statistically significant dependences between an interest in Physical activities in physical education and type of study of respondents (Bachelor/Magister)."

6H0: "There are not statistically significant dependences between frequency of winter sports and type of study of respondents (Bachelor/Magister)."

6H1: "There are statistically significant dependences between frequency of winter sports and type of study of respondents (Bachelor/Magister)."

7H0: "There are not statistically significant dependences between interest in representing the faculty in sports and type of study of respondents (Bachelor/Magister)."

7H1: "There are not statistically significant dependences between interest in representing the faculty in sports and type of study of respondents (Bachelor/Magister)."

8H0: "There are not statistically significant dependences between in active sports in a club for a period of study and type of study of respondents (Bachelor/Magister)."

8H1: "There are statistically significant dependences between in active sports in a club for a period of study and type of study of respondents (Bachelor/Magister)."

9H0: "There are not statistically significant dependences between respondent's approach to active physical activity within a study and type of study of respondents (Bachelor/Magister)."

9H1: "There are statistically significant dependences between respondent's approach to active physical activity within a study and type of study of respondents (Bachelor/Magister)."

10H0: "There are not statistically significant dependences between assumption of realization of respondent's physical activity after graduation and type of study of respondents (Bachelor/Magister)."

10H1: "There are statistically significant dependences between assumption of realization of respondent's physical activity after graduation and type of study of respondents (Bachelor/Magister)."

Table 1 Assignment of Particular Items in Questionnaire and Considered Hypotheses

Hypothesis	Categorical Item	Categorical Item
1H	Item 3	Type of Study (Bachelor/Magister)
2H	Item 5	
3H	Item 7	
4H	Item 11	
5H	Item 12	
6H	Item 15	
7H	Item 19	
8H	Item 20	
9H	Item 23	
10H	Item 26	

For each hypothesis, a contingency table (Table 2-11) was constructed and then hypothesis testing was performed. These results are based on p-values (Table 12). If p-value is greater or equal as the significance level 0.05, than the zero hypothesis is filled to reject (dependences are not proved). In other case, the zero hypothesis would be rejected in favour of the alternative hypothesis (dependences are proved). Each testing hypothesis is complemented by descriptive plot of absolute frequencies (Fig. 1-10) achieved for corresponding categories of the type of study of respondents.

Table 2 Contingency Table for Data of Item 3 in Hypothesis 1H

Option:	Bachelor	Magister
a	9	6
b	14	17
c	3	8
d	9	5
e	0	1
f	1	0
ab	1	1
ac	0	1
af	2	1
bc	0	2
bd	1	2
bf	2	5
cd	2	4
cf	2	0
df	0	2
Sum	46	55
	101	

Table 3 Contingency Table for Data of Item 5 in Hypothesis 2H

Option:	Bachelor	Magister
a	16	22
b	3	2
c	19	22
d	2	4
ac	1	3
ad	0	1
bc	2	1
cd	3	0
Sum	46	55
	101	

Table 4 Contingency Table for Data of Item 7 in Hypothesis 3H

Option:	Bachelor	Magister
a	13	20
b	2	5
c	2	0
d	2	8
e	3	1
f	4	5
ab	6	5
ac	3	0
ad	5	5
ae	3	1
af	1	2
bd	1	3
cf	1	0
Sum	46	55
	101	

Table 5 Contingency Table for Data of Item 11 in Hypothesis 4H

Option:	Bachelor	Magister
a	22	25
b	5	14
c	10	9
d	9	7
Sum	46	55
	101	

Table 6 Contingency Table for Data of Item 12 in Hypothesis 5H

Option:	Bachelor	Magister
a	5	4
b	21	20
e	1	2
ab	17	25
bc	0	1
be	2	3
Sum	46	55
	101	

Table 7 Contingency Table for Data of Item 15 in Hypothesis 6H

Option:	Bachelor	Magister
a	8	12
b	20	24
c	10	13
d	1	1
ad	2	2
bd	5	3
Sum	46	55
	101	

Table 8 Contingency Table for Data of Item 19 in Hypothesis 7H

Option:	Bachelor	Magister
a	15	19
b	31	36
Sum	46	55
	101	

Table 9 Contingency Table for Data of Item 20 in Hypothesis 8H

Option:	Bachelor	Magister
a	5	3
b	32	40
c	7	11
ac	2	1
Sum	46	55
	101	

Table 10 Contingency Table for Data of Item 23 in Hypothesis 9H

Option:	Bachelor	Magister
a	29	35
b	14	15
c	3	4
Sum	46	55
	101	

Table 11 Contingency Table for Data of Item 26 in Hypothesis 10H

Option:	Bachelor	Magister
a	10	14
b	20	23
c	2	2
d	4	6
e	9	8
ad	0	2
bc	1	0
Sum	46	55
	101	

Table 12 Achieved Results of Testing Considered Hypotheses

Hypothesis	p-value	Conclusion
1H	0.36168 > 0.05	1H ₀ is failed to reject on the significance level.
2H	0.46977 > 0.05	2H ₀ is failed to reject on the significance level.
3H	0.22937 > 0.05	3H ₀ is failed to reject on the significance level.
4H	0.26288 > 0.05	4H ₀ is failed to reject on the significance level.
5H	0.79001 > 0.05	5H ₀ is failed to reject on the significance level.
6H	0.93861 > 0.05	6H ₀ is failed to reject on the significance level.
7H	0.83747 > 0.05	7H ₀ is failed to reject on the significance level.
8H	0.60981 > 0.05	8H ₀ is failed to reject on the significance level.
9H	0.95100 > 0.05	9H ₀ is failed to reject on the significance level.
10H	0.73583 > 0.05	10H ₀ is failed to reject on the significance level.

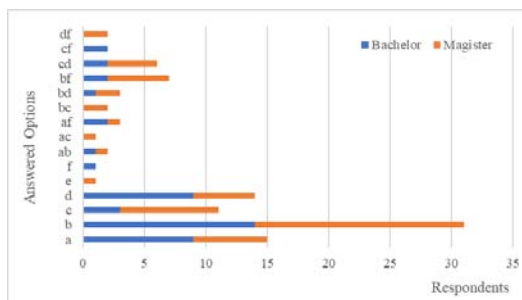


Figure 1 Distribution of Answered Options for Data of Item 3 in Hypothesis 1H

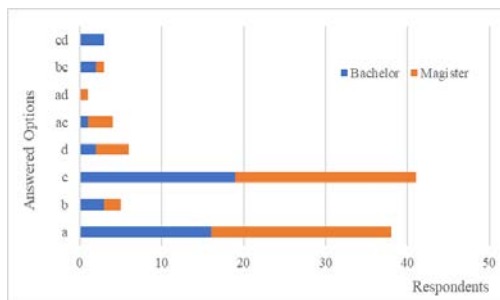


Figure 2 Distribution of Answered Options for Data of Item 5 in Hypothesis 2H

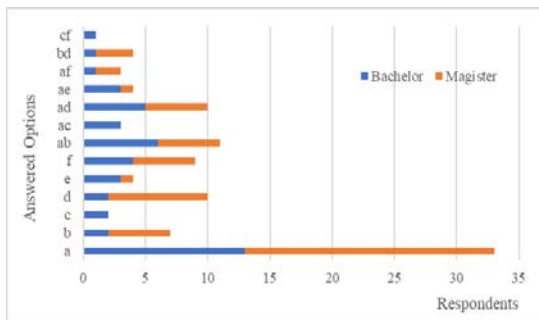


Figure 3 Distribution of Answered Options for Data of Item 7 in Hypothesis 3H

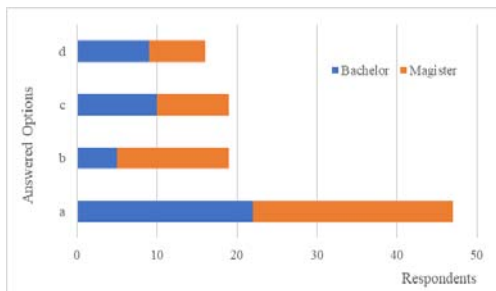


Figure 4 Distribution of Answered Options for Data of Item 11 in Hypothesis 4H

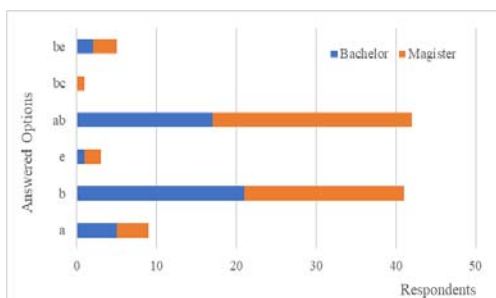


Figure 5 Distribution of Answered Options for Data of Item 12 in Hypothesis 5H

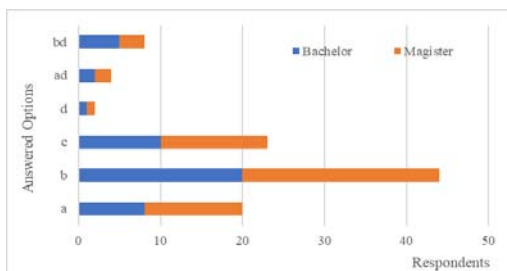


Figure 6 Distribution of Answered Options for Data of Item 15 in Hypothesis 6H

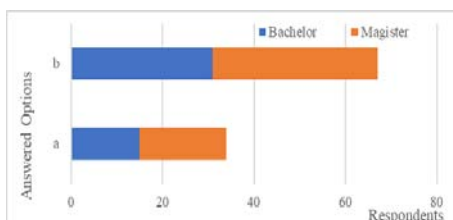


Figure 7 Distribution of Answered Options for Data of Item 19 in Hypothesis 7H

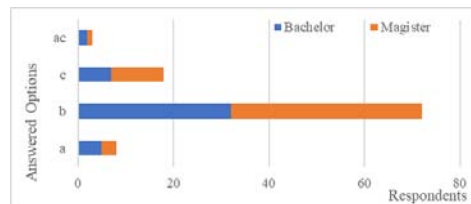


Figure 8 Distribution of Answered Options for Data of Item 20 in Hypothesis 8H

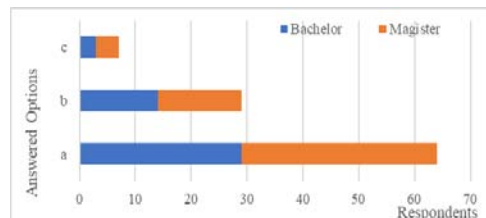


Figure 9 Distribution of Answered Options for Data of Item 23 in Hypothesis 9H

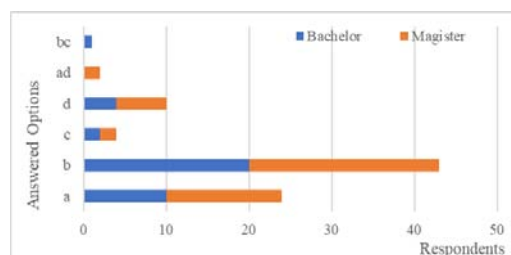


Figure 10 Distribution of Answered Options for Data of Item 26 in Hypothesis 10H

3.1 Conclusions of Hypotheses

1H: "There are not statistically significant dependences between an effect of a physical exercise in favor of a body and type of study of respondents (Bachelor/Magister)."

2H: "There are not statistically significant dependences between a season of realized sporting activity and type of study of respondents (Bachelor/Magister)."

3H: "There are not statistically significant dependences between a reason for the realization of sporting activities and type of study of respondents (Bachelor/Magister)."

4H: "There are not statistically significant dependences between a number of hours devoted to physical activity and type of study of respondents (Bachelor/Magister)."

5H: "There are not statistically significant dependences between an interest in Physical activities in physical education and type of study of respondents (Bachelor/Magister)."

6H: "There are not statistically significant dependences between frequency of winter sports and type of study of respondents (Bachelor/Magister)."

7H: "There are not statistically significant dependences between interest in representing the faculty in sports and type of study of respondents (Bachelor/Magister)."

8H: "There are not statistically significant dependences between in active sports in a club for a period of study and type of study of respondents (Bachelor/Magister)."

9H: "There are not statistically significant dependences between respondent's approach to active physical activity within a study and type of study of respondents (Bachelor/Magister)."

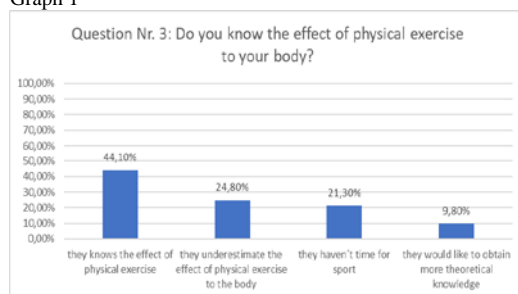
10H: "There are not statistically significant dependences between assumption of realization of respondent's physical activity after graduation and type of study of respondents (Bachelor/Magister)."

Due to achieved results of testing hypotheses, only 2H indicated an existence of statistically significant dependences on the significance level 0.05. In other cases, there were not confirmed existences of statistically significant dependences on the significance level 0.05.

Furthermore, we will present some of the results from the questionnaire, based on percent-frequency analysis and on the basis of the assessment in the form of zero alternative hypotheses of the Chi-squared test with simultaneous opinion on the ten hypotheses (1 H, 2 H, 3 H, 4 H, 5 H, 6 H, 7 H, 8 H, 9 H, 10 H). To these hypotheses, some selected questions from the questionnaire are included in the text, which contained 26 questions in total.

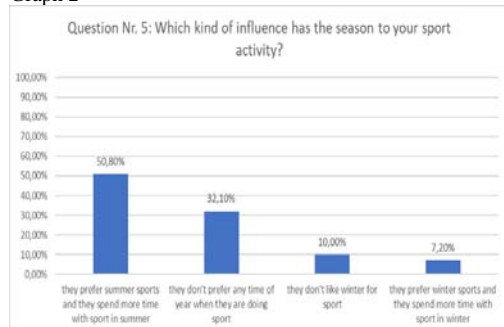
1 H (Question 3: Do you know the effect of physical exercise to your body?) We found that most students (44.1%) know the impact of physical exercise on their organism and therefore they do recreational sports. However, 24.8% of students admit that they underestimate the impact of physical exercise on the body, despite they are aware of its positive impact. Other students (21.3%) state that they know the positive impact of physical exercise, but they do not have time to do sports. The remaining 9.8% of students say they want to gain more theoretical knowledge of this issue during their studies at the Faculty of Education - (Graph 1). Based on the assessment in the form of zero and alternative hypotheses Chi-square test, we conclude that when assessing the knowledge of the impact of physical exercise on their organism among students of bachelor and master studies in assessing in the form of zero hypothesis, there are not statistically significant dependencies, but in assessing in the form of alternative hypothesis, there are statistically significant dependencies.

Graph 1



2 H (Question 5: How do seasons affect your sports activity?). We found that most female students (50.8%) report that they prefer summer sports and spend more time moving during this period. Students who do not care about the season during their sports are represented by 32.1%. Another 10.0% of students say they do not like winter for sport and they would prefer it to be still summer. This is followed by female students (7.2%) who prefer winter sports and spend more time moving in this period - (Graph 2). At the same time, we note that when assessing the impact of the season on sport activities among bachelor and master students in assessing in the form of a null hypothesis there are not statistically significant dependencies, but in assessing in the form of an alternative hypothesis there are statistically significant dependencies.

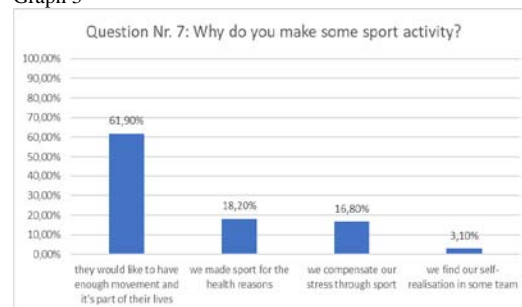
Graph 2



3 H (Question 7: Why do you do sports?). We discovered that the largest percentage (61.9%) are students who are engaged in sports activities because they want to have enough exercise and

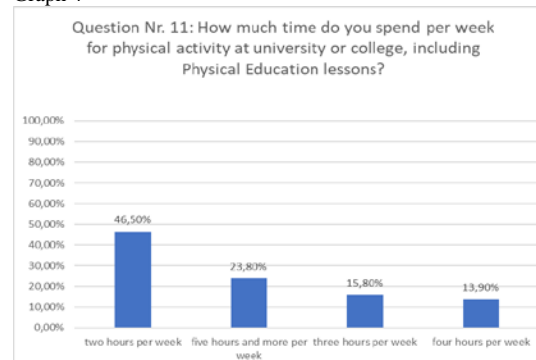
it is part of their lives. They were followed by students who replied: we do sports for health reasons (18.2%). This is followed by students doing sports because they compensate their stress load (16.8%) and then students who said: I find myself engaged in the team (3.1%) - (Graph 3). At the same time, we note that there are no statistically significant dependencies in assessing the null hypothesis when answering the question why do you engage in sports activities among bachelor and master students, but in assessing in the form of an alternative hypothesis there are statistically significant dependencies.

Graph 3



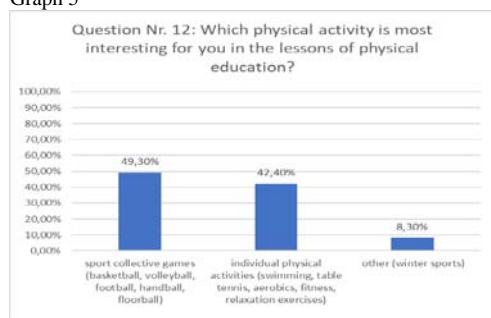
4 H (Question 11: How much time do you spend per week for physical activity at university including physical education lessons?). We found out that most students (46.5%) are involved in physical activity at university only for two hours, which means that they do not do sports outside physical education lessons. However, another group of students (23.8%) are engaged in physical activity 5 hours or more per week. They are followed by female students (15.8%) who are engaged in physical activity 3 hours per week and then female students (13.9%) who are engaged in physical activity 4 hours per week including physical education hours - (Graph 4). At the same time, we observe that there is no statistically significant dependence in the assessment of the null hypothesis when monitoring - how much time is spent on weekly physical activity at a university, including physical education lessons - when assessing in the form of a alternative hypothesis, there are statistically significant dependencies.

Graph 4



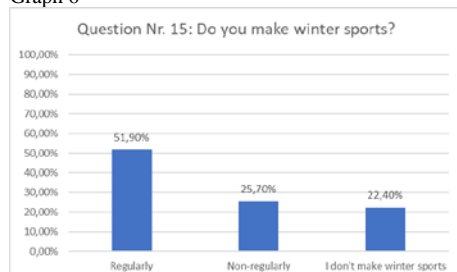
5 H (Question 12: Which physical activities in Physical Education lessons would you be most interested in?). We found out that most students (49.3%) are interested in sports games (basketball, volleyball, football, handball, floorball). Another group of female students (42.4%) would be interested in individual physical activities (swimming, table tennis, aerobics, fitness, relaxation exercises) and female students interested in other (winter sports) are represented by 8.3% - (Graph 5). At the same time we state that when examining which physical activities in Physical Education lessons are the most interesting among bachelor and master students there are not statistically significant dependencies for the assessment in the form of the null hypothesis, but in the assessment in the form of the alternative hypothesis, there are statistically significant dependencies.

Graph 5



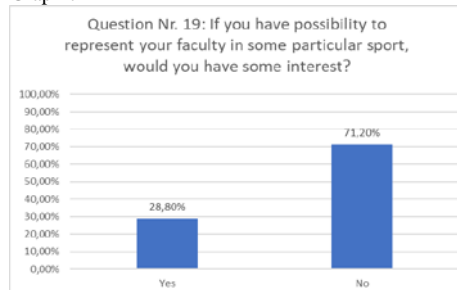
6 H (Question 15: Do you do winter sports?). We found that most students (51.9%) are engaged in winter sports, but irregularly. Only 25.7% of students do regularly winter sports and 22.4% of students do not attend winter sports - (Graph 6). At the same time, we observe that there are no statistically significant dependencies when assessing whether the bachelor and master students of our group are engaged in winter sports - when assessing in the form of a null hypothesis, but when assessing in the form of an alternative hypothesis, there are statistically significant dependencies.

Graph 6



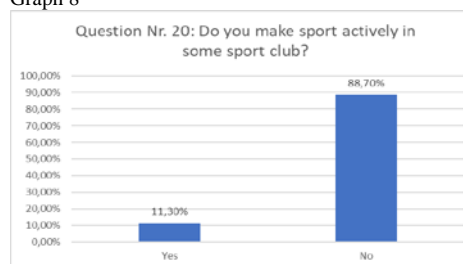
7 H (Question 19: If you were able to represent your faculty in a particular sport, would you be interested?). We found that most students (71.2%) would not be interested in representing their faculty in a particular sport. 28.8% of students would be interested in representing the Faculty of Education in a particular sport (volleyball, basketball, athletics, swimming, table tennis, football, handball, floorball) - (Graph 7). At the same time we state that, if there was a possibility to represent the Faculty of Education of Comenius University in certain sport among bachelor and master students in the assessment in the form of a null hypothesis, there are no statistically significant dependencies, and also in the assessment in the form of an alternative hypothesis, there are no significant dependencies.

Graph 7



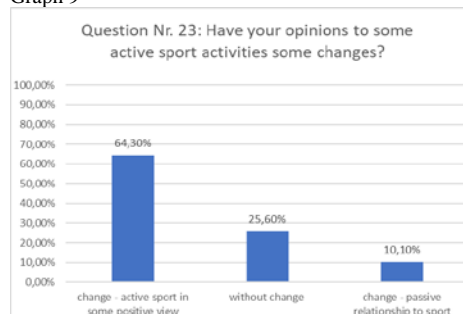
8 H (Question 20: Are you active in any sport clubs?). We found that most students (88.7%) do not play in any sports club and 11.3% of students do sports in sports clubs (volleyball, zumba, ballroom dances, folk dances) - (Graph 8). At the same time, we find during examination of whether bachelor and master students do active sports in clubs - there are no statistically significant dependencies in form of null hypothesis, but there are statistically significant dependencies when assessing in the form of an alternative hypothesis.

Graph 8



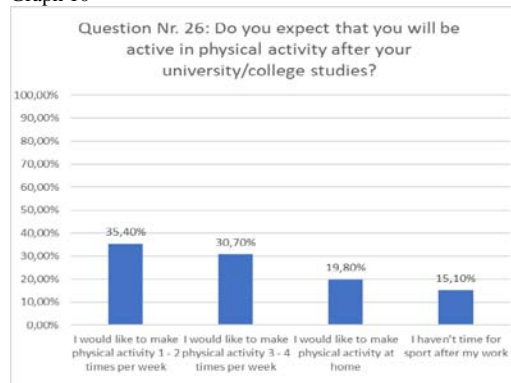
9 H (Question 23: Have your opinions changed about active physical activity?). We found that most students (64.3%) responded that their opinions about active physical activity have changed in a positive direction, other students responded that their attitudes remain unchanged (25.6%). Students whose attitudes towards active physical activity changed to physical passivity are represented by 10.1% - (Graph 9). At the same time, we note that the question - how have your opinions changed to active physical activity - among bachelor and master students in the assessment in the form of the null hypothesis are not statistically significant dependencies, but in the assessment in the alternative hypothesis there are statistically significant dependencies.

Graph 9



10 H (Question 26: Do you expect that you will be active in physical activity after your university studies?). We found that most female students (35.4%) assume that they will perform active physical activity 1 to 2 times a week after graduation. Other students (30.7%) assume that they will perform active physical activity 2 to 3 times a week. The students in percentage (19.8%) responded: I would like to do individual exercise at home at least. A group of female students (15.1%) said that: after work I will not have time to exercise - (Graph 10). Based on the assessment in the form of null and alternative hypotheses of Chi-square test, we conclude that there are no statistically significant dependencies of the null hypothesis in the assessment in terms of assuming among bachelor and master students, if they will be active after graduation, but when considering the alternative hypothesis, there are statistically significant dependencies.

Graph 10



4 Conclusion

In our contribution, we tried to approach the issue of attitude and relation to sport and active physical activity of university students of the Faculty of Education of Comenius University in Bratislava, who study in the study program - pre-school and elementary education. In a sample of 101 students, we used a questionnaire consisting of 26 questions to determine their attitudes and relationship to sport as part of their student and private life. Based on the results of the questionnaire evaluation by percentage-frequency analysis and the results of testing 10 hypotheses using the Chi-square test, we can conclude that the examined university students in their value perception have a mostly positive relationship to sport and to active physical activity.

We found that most of the students (61.9%) know the impact of physical exercise on their organism and therefore do recreational sports. They learned most about the importance of movement for their health at school and from their parents. Most of the students have been engaged in sports or recreational physical activity from pre-school and school age because of the desire to move and to compensate stress. Most students evaluate their health status as good, but they would like to increase the weekly 2-hour activity of physical and sports education during the week to more hours. Students showed interest (63.5%) in participation in the prepared ski and swimming course.

An interesting finding in our observation was that more than 46% of the surveyed students did not perform any physical activities outside physical education lessons realized during their studies at the Faculty of Education. However, most of them engage in irregular skiing sports in winter. A negative finding was that, if it was possible to represent their faculty in some selected sports, most of the students (71.2%) were not interested in this representation due to the high workload during their studies and active participation in temporary jobs. Only 11.3% of the surveyed students are actively involved in a sports club, comparing to over 35% in primary school. More than 63% of students expressed their positive opinion on the change of their attitude towards active physical activity during their university studies. In order to find out what kind of physical activities outside the classroom, students would be most interested in the following order: swimming, hiking, movement games, zumba. On the question - which group of young people would you join - most students favored the answer: with a positive belief in the need for active movement (45.6%). With the answer - doing occasional recreational physical activity, 41.3% of students presented themselves.

A positive finding was that after graduation, the biggest group of students 35.4% expected to perform regular physical activity at least 1 to 2 times a week.

Literature:

1. Antala, B. et al.: *Telesná a športová výchova a súčasná škola*. Bratislava: NŠC, FTVŠ UK, 2014. 343 p. ISBN 978-80-971466-1-0.
2. Argaj, G.: *Pohybové hry. Teória a didaktika*. Bratislava: FTVŠ UK, 2016. 128 p. ISBN 978-80-223-4022-9.
3. Barot, T., Krpec, R.: Alternatívny prístup k Fisherovmu exaktnému testu s aplikáciou v pedagogickom výskume. Výpočtové a štatistické metódy v inteligentných systémoch, pokroky v inteligentných systémoch a počítačoch. In: *Springer*, 2019. pp. 50-59. ISBN 978-3-030-00210-7.
4. Belešová, M.: *Primárne vzdelávanie v teórii a v praxi*. Bratislava: Vydavateľstvo Univerzity Komenského, 2018. 192 p. ISBN 978-80-223-4577-4.
5. Bence, M. Plavecká spôsobilosť študentov telesnej výchovy so zameraním na záchranu topiaceho sa. FHV UMB v Banskej Bystrici, 1999. In: *Tel. Vých. Šport*, 1999, roč. 9, č. 3-4, pp. 10-13.
6. Bence, M., Kalečík, L., Chebeň, D.: Porovnanie plaveckej výkonnosti uchádzačov o štúdium telesnej výchovy na Slovensku. In: *Telesná výchova a šport*, roč. 18, 2008, č.1, pp. 14-19. ISSN 1335-2245.
7. Clarková, N.: *Sportovní výživa*. Praha: Grada, 2000. 266 p. ISBN 80-247-9047-5.

8. Čavojský, I.: Žiaci primárneho vzdelávania a ich vzťah k učiteľovi ako autorite In: *Integratívni prístup v primárnom vzdelávaní*. Liberec: Technická univerzita v Liberci, 2015. pp. 64-70. ISBN 978-80-7494-257-0.
9. Dahlike, R.: *Najlepšie tipy pre zdravie*. Bratislava: Eugenika, 2008. 168 p. ISBN 978-80-8100-110-9.
10. Fořt, P.: *Výživa pro dokonalou kondici*. Praha: Grada, 2005. 181 p. ISBN 80-247-1057-9.
11. Gregor, T.: Vplyv telesného pohybu na psychické zdravie. In: *Revue medicíny v praxi*, 2007, roč. 5, č. 1, pp. 29-38.
12. Gregor, T.: *Psychológia športu*. Bratislava: Mauro Slovakia, 2013. 400 p. ISBN 978-80-968092-7-1.
13. Grotto, D.: *Stojedna potravín, ktoré vám môžu zachrániť život*. Praha: LK, 2009. 405 p. ISBN 978-80-7309-688-5.
14. Görner, K., Starší, J.: *Postoje, vedomosti a názory žiakov II. Stupňa ZŠ na telesnú výchovu*. Banská Bystrica: FHV UMB, 2001, 160 p. ISBN 80-8055-565-6/7.
15. Hammer, O., Harper, D. A. T., Ryan, P. D. Past.: Paleontological statistics software pack-age for education and data analysis. *Palaeontologia Electronica*. 4(1). Palaeontological. As-sociation. http://palaeoelectronica.org/2001_1/past/issue1_01.htm.
16. Horáková, K.: *Umenie zdravo žiť*. Bratislava: Metro Media, 2009. 236 p. ISBN 978-80-969606-6-8.
17. Hřečka, J., Kovářová, M., Beňačka, J.: *Pohybová aktivita edukantov fyzioterapie vo voľnom čase a jej reflexia na vybraných zdravotných a zdravotných charakteristikách*. Trnava: UCM, 2011. 151 p. ISBN 978-80-8105-323-8.
18. Kalečík, L.: Zdravie a plávanie. In *Zdravie, výživa a pitný režim v športe: Zborník*. Bratislava: STU MTF, 2000. pp. 84-87. ISBN 80-227-1704-5.
19. Konopka, P.: *Sportovní výživa*. České Budějovice: KOPP, 2004. 125 p. ISBN 80-7232-228-1.
20. Kostrub, D.: *Základy kvalitatívnej metodológie – keď interpretované významy znamenajú viac ako vysoké čísla*. Bratislava: PdF UK, 2016. 161 s. ISBN 978-80-223-4166-0.
21. Merica, M.: Telovýchovné aktivity na vysokej škole. In: *Vedecké práce 2012*. Bratislava: STU, 2012. pp. 133-139. ISBN 978-80-227-3724-1.
22. Murgová, R.: *Tajomstvo zdravého života*. Prešov: Grafotlač Šoltýs, 2001. 152 p. ISBN 80-967523-5-9.
23. Nemcová, J.: Modernizácia vyučovania prostredníctvom informačných a komunikačných technológií. In: *MMK*, 2016. Hradec Králové: Magnanimitas, 2016. pp. 1085-1092. ISBN 978-80-87952-17-7.
24. Novotná, S., Merica, M.: Pohybové aktivity ako prostriedok pri zvládaní stresov vysokoškolákov. In: *Sport a kvalita života 2007: zborník z medzinárodnej konferencie*. Brno: MU FSS, 2007. p. 94. ISBN 978-80-210-4435-7.
25. Piřha, J., Poledne, R.: *Zdravá výživa pro každý den*. Praha: Grada Publishing, 2009. 144 p. ISBN 978-80-247-2488-1.
26. Rybárik, K., Bence, M.: Hodnotenie plaveckej spôsobilosti a výkonnosti študentov telesnej výchovy FHV UMB v Banskej Bystrici. In: *Acta Universitatis Mathiae Bellii. Telesná výchova a šport*. Banská Bystrica: UMB PF, 2000. pp. 93-98. ISBN 80-8055-424-2.
27. Severini, E., Kostrub, D.: *Kvalitatívne skúmanie v predprimárnom vzdelávaní*. Prešov: Rokus, 2018. 182 p. ISBN 978-80-895-1071-9.
28. Sprent, P.: Fisher Exact Test. In: Lovric M. (eds) *Medzinárodná encyklopédia štatistických vied*. Springer, 2011. Berlín, Heidelberg.
29. Stockemer, D.: *Kvantitatívne metódy pre spoločenské vedy*. Springer, 2019. doi: 10.1007/978-3-319-99118-4.
30. Šimonek, J.: Stav vyučovania telesnej výchovy a športu na slovenských vysokých školách. In: *Tel. Vých. Šport*, 2003, roč. 13, č. 3, pp. 2-5.

Primary Paper Section: A

Secondary Paper Section: AK