

# LIFESTYLE OF UNIVERSITY STUDENTS IN THE CZECH REPUBLIC

---

**LUDMILA MIKLÁNKOVÁ**  
**ZDENĚK RECHTIK**

*Department of Primary and Pre-primary Education,  
Faculty of Education  
Palacký University Olomouc*

ludmila.miklankova@upol.cz  
zdenek.rechlik@upol.cz

---

UDK: 316.62-057.875:378  
(437.3)=111  
Prethodno priopćenje  
Primljen: 8. 2. 2021.  
Prihvaćen: 26. 11. 2021.

## ABSTRACT

Data from various national and international surveys show that people in developed countries do not perform enough physical activity, even though it is an essential part of a healthy lifestyle. University students tend spending their free time inactively by watching TV, using IT-tools, including computer games (e-sports), etc. This research was part of the international project called: Research network for cooperation in the field of sports, recreation and health promotion (ID: EFOP-3.6.2-16-2017-00003). The project was aimed on leisure activities, lifestyle and sports habits of young people. The aim of research was exploration of some aspects of the lifestyle of students in study programs focused on teaching primary and pre-primary aged children. The research group consisted of 503 respondents. The research results indicate that Czech university students have relatively a lot of free time, which a huge part is spend inactively by watching TV or using the Internet on different devices. The main motivation for participating in sports are friends and the basis students received mostly in their families or from their friends. The research revealed some barriers for doing sports. Therefore, our recommendation is to focus on reducing the barriers that students' experience that may impact their participation on

## KEYWORDS:

*lifestyle, physical activity, university  
students, sports*

physical activity and give them a huge spectrum of opportunities and options how and where to provide sport activities, because the knowledge about healthy behavior and lifestyle is pretty solid, unlike in other researched countries.

## INTRODUCTION

Human health is understood as a complex of physical, mental, social and emotional well-being (WHO, 2017). Currently, however, activities associated with lower physical activity are gradually beginning to predominate in the lifestyle of the population. With changes in living conditions and environment, lifestyle, nature of human work and leisure-time physical activity, the level of general fitness of the population also changes (Eisenmann, Bartee & Wang, 2002; Atoum & Al-Hourani, 2004; Aceijas, Waldhäusl, Lambert, Cassar & Bello-Corassa, 2017). Therefore, the issue of lifestyle is currently very discussed area. The sense of responsibility for the quality of life of future generations leads experts in the field to strive to better eliminate negative trends in the lifestyle of the population (Martin, Saunders, Shenkin & Sproule, 2014; Teixeira, Carraca, Markland, Silva & Ryan, 2012; Bolotin & Bakayev, 2015; Romero-Blanco, Rodríguez-Almagro, Onieva-Zafra & Parra-Fernández, 2020;).

In the Czech Republic, the support of a healthy lifestyle for the youngest generation is enshrined as an integral part of curricular documents for education in kindergartens and primary schools (FEP PE, 2018; FEP BE, 2017). The school is a place where teachers increase the health literacy of children and adolescents. They are introduced not only to the principles of a healthy lifestyle, but also should be aware of the prevention of risk factors that can cause damage and threaten health in all its aspects. Schools have information programs to support nutrition and food safety, physical education and physical activity and recreation, and counseling, social and mental health support. Institutions have several projects available, which can help schools to create a healthy school environment and learning opportunities. The future teacher should be prepared for the possibilities of passing on knowledge in this area, promoting a healthy lifestyle and exciting his/her students for it. The teacher's positive attitude towards a healthy lifestyle provides the basis for his/her subsequent purposeful and planned work with children and students in schools. Therefore, the research focused on the lifestyle of future kindergarten and primary school teachers.

## AIM

Exploration of some aspects of the lifestyle of students in study programs focused on teaching primary and pre-primary aged children.

Within the presented project we focused on three main research problems.

The first was about motivation and strategies for doing (or not) sports in Czech university students of faculties aimed on education – future teachers. The second problem dealt with content of regular working days and weekends. And last but not least problem was connected to the perceived quality of life.

## METHODS

This research was part of the international project called: Research network for cooperation in the field of sports, recreation and health promotion (ID: EFOP-3.6.2-16-2017-00003). The project was aimed on leisure activities and sports habits of young people. When it comes to term sports, it applies following definition within this project: it is a physical activity outside school physical education lessons that lasts more than half an hour. The part of the research was done in the Czech Republic in students of humanities. Primarily was the research group created by university students aimed on education of primary and pre-primary aged children (80 %). The research group was created in overall by 503 students. The research group mainly consisted of full-time students from first year to graduation year (ages 19 - 24), but also from part-time students over 30 years (bachelor pre-primary education, master – pre-primary education, master – primary education). The questionnaire had 10 pages containing 47 questions (both closed or open) with possible subquestions. For this paper we picked only the most relevant questions to this topic. The participation in the research was voluntary, without reward and no benefits for participants. The anonymity of obtained data was declared. The completed questionnaires were processed with the EvaSys software. When presenting any data, the mean  $\pm$  SD is shown in all cases.

## RESULTS

Out of the total number of 503 respondents – university students in the Czech Republic, 82.2 % of respondents have included physical education in their study program, but 1.7 % do not participate in it. It is probably an optional subject, or a compulsory optional subject, which students do not have to include in their study plan as part of their studies. On weekdays, students have relatively enough free time ( $4.7 \pm 1.6$  hours/day<sup>-1</sup>), but on average  $1.8 \pm 0.9$  hours/day<sup>-1</sup> they spend

watching television. Surfing the Internet using a PC, mobile phone or tablet is also reported in high range of  $3.7 \pm 1.6$  hours/day<sup>-1</sup>. On weekends there is more free time ( $6.9 \pm 1.9$  hours/day<sup>-1</sup>), but also longer time spent watching TV ( $2.7 \pm 1.2$  hours/day<sup>-1</sup>) or surfing the Internet ( $4.0 \pm 1.7$  hours/day<sup>-1</sup>). If we take into account the study time (on working days  $4.0 \pm 1.7$  hours/day<sup>-1</sup>, on weekends  $1.5 \pm 0.3$  hours/day<sup>-1</sup>) spent in the classrooms and outside the classrooms (on working days  $3.1 \pm 1.3$  hours/day<sup>-1</sup>, on weekends  $3.3 \pm 1.5$  hours/day<sup>-1</sup>), it is obvious that a large part consists of inactive activities (sedentary activities). As part of expanding physical literacy and supporting and promoting a healthy lifestyle in the Czech Republic, the population is presented with so - called movement pyramids, which instruct children, youth and adults about the recommended volume, intensity and type of physical activities suitable for implementation within each day (Fig. 1). From this point of view, physical activity with low intensity in the range of  $2.9 \pm 1.2$  hours/day<sup>-1</sup> on working days and even  $4.3 \pm 1.6$  hours /day<sup>-1</sup> on weekends is reported for the monitored persons. These are mostly gardening work, household cleaning, washing and keeping clothes clean, food preparation, etc.

An integral part of human life is participation in cultural events (visiting cinemas, theaters, concerts, libraries, exhibitions, reading books, etc.). The research group spends relatively little time on this activity (only  $2.2 \pm 1.1$  hours/day<sup>-1</sup> on working days,  $3.1 \pm 1.3$  hours/day<sup>-1</sup> on weekend days). Relatively little time is spent by students on health care (baths, sauna, recreational swimming, etc.)

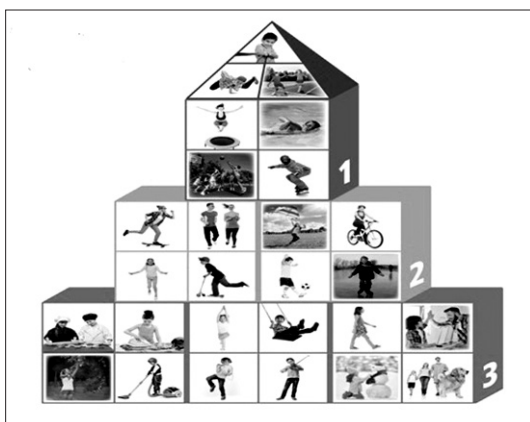


FIGURE 1 Recommended volume and intensity of physical activity for the population in the Czech Republic, edited (Retrieved from World Wide Web: <https://kulibrasek.eu/pyramida-pohybu/> [1.2.2021])

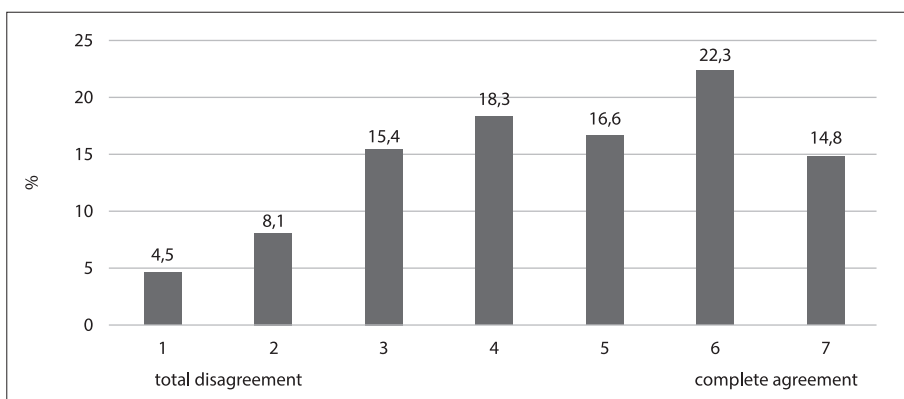
on working days ( $1.9 \pm 0.8$  hours/day<sup>-1</sup>), but on weekends the time is extended to  $2.3 \pm 0.9$  hours/day<sup>-1</sup>. On the contrary, the time spent on sports (physical activity was reported outside the school physical education hours, which lasted more than half an hour) are almost identical on working days and weekends (working days  $2.6 \pm 1.4$  hours/day<sup>-1</sup>, weekend days  $2.9 \pm 1.4$  hours/day<sup>-1</sup>). If a student tends to a physically active lifestyle, we can assume

that physical activities are probably an integral part of everyday (29.7 % of respondents state that they have been doing sports 1-2 times a week for more than 10 years). A positive finding is that most students report the possibility of sports in the range of more than half an hour a day (outside of school physical education) (78.3 %). Unfortunately, a fifth of the research group do not have this opportunity (21.7 %). These students consider the lack of time (71.5 %) and the difficulty of the studies (40.6 %) to be the cause of the low volume of physical activity in their daily routine. The lack of suitable sports grounds state 34.2 % of respondents as problematic and 23.2 % of students point out the lack of adequate sports equipment. Out of the total number of 17.3 % of non-sporting students, state their poor health status and 20.5 % family circumstances as the cause of the low volume of physical activity. A positive finding is that the relatively low percentage of non-sporting students state lack of interest in physical activity as the cause (5.1 %).

Although, within the characteristics of the research group 74.4 % of respondents stated the average month income in their families, 65.4 % of the respondents mention the lack of funds for sports (to a greater or lesser extent). Lack of motivation for greater integration of physical activities into the daily routine is evident in 34.2 % students, lack of sparing partners/friends for doing sports together is the cause of an inactive lifestyle in a third of respondents (30.6 %). Most students do sports outdoors (outdoor sports grounds, nature, etc.) (47 %), but many of them use paid sports grounds outside the “parent” university (29.8 %). Although physical activities undoubtedly play an important socializing role and contribute to the development of positive social relationships, a relatively high percentage (28.6 %) of respondents do sports on their own. However, we consider positive finding that almost half of the students who participated in the research do sports with friends (47.3 %). A total of 63.8 % of people mentioned their parents or their friends as a role model that led them to do sports. And 60.3 % of students want to spend their free time in physical activities with their friends. Most of them are aware of the positive effects of regular implementation of physical activities for health, thus maintaining their good health and want to improve the level of their physical skills or achieve greater success in their popular sports.

When assessing their health status, 15.8 % of respondents report frequent headaches and 23.6 % of people have frequent back pain. Only 8.5 % of participants suffer from sleep disorders. A relatively high percentage of students (73.6 %) often or very often experience feelings of weakness and fatigue, with digestion

problems mentioned by 16.4 % of them. A faster or irregular heartrate is often perceived by 9.1 % of people from the research group. In the overall assessment of quality of life, 86.3 % of respondents stated satisfaction with their own living conditions. Similarly, 86.7 % of students are satisfied with their lives. It is worth thinking about the respondents' answers on the last statement: "If I could live my life again, I would practically not change anything (on it)." There is a large variability in the answers; categories 1 and 2 can be considered as categories with a low frequency of respondents, expressing almost or completely "complete disagreement" (12.6 % of persons). The further representation of the answers is surprisingly almost balanced (Figure 2).



**FIGURE 2** Statement "If I could live my life again, I would practically not change anything (on it)." (n = 493)

## DISCUSSION AND CONCLUSIONS

The different research aimed on physical activity of Czech university students (Sigmundová, Chmelík, Sigmund & Frömel, 2013) confirmed lower level of physical activity during the weekends, like in our case students spend this time rather with watching TV and using the Internet on their devices. But we can see also some positives in extended time spent on health care (baths, sauna, recreational swimming, etc.) during the weekends  $2.3 \pm 0.9$  hours/day<sup>-1</sup>. Most favorite sports among students are running, skiing, swimming, cycling, etc. Also Polish research confirmed low levels of healthy lifestyle behaviors, especially regarding diet, coping with stress, physical activity and preventive behavior (Rogowska,

Kuśnierz & Pavlova, 2020). Almost half of our research group prefer to sport with friends, which is in concordance with research from Hungary (Vári, Katona, Sajben, Pálhidai & Meszlényi, 2019), where 50 % of the questioned students were doing sports, most of them did as a hobby and with friends. As a result of sport activities more than 50 % of those students changed also their eating habits in a positive direction. And interesting is also the fact, that nearly 75 % of students consider their eating habits healthy. In our case friends and family members are also the main reason for beginning with some sport, too. We can also see similarity in motivation for doing sports, which are mostly connected with health issues and healthy lifestyle of the students. We see similarity in Romania (Bichescu, 2014), where main factor that impacts students' decision to practice sports activities is their financial situation, 43.41 % of the students have ranked this factor first. While 37.94 % have indicated the pleasure of doing exercise and 18.65 % the free time available as factors that can influence their involvement in sports activities during their free time. Another research from Spain (Carballo-Fazanes et al., 2020) revealed that 69.6 % students (from 608) indicated that they performed physical activity and the main reasons given were to maintain fitness and for health, while a lack of time and laziness were the principal reasons given for abandoning or not taking up physical exercise. Our finding that relatively high percentage of students (73.6 %) often or very often experience feelings of weakness and fatigue can be compared to finding from Bosnia I Hercegovina (Brankovic, Pilav, Cilović-Lagarija, Pašalić & Mahmutović, 2017), where over 60 % from 410 participants experienced stress occasionally. The importance of physical activity is also confirmed by Olmedilla, Ortega Toro & Abenza (2016), who concluded that college students who exercise or practice sport have better physical and emotional self-concept. And this can lead to lower levels of stress or feeling of weakness. We can say that the presented results are more or less similar across the European countries, although researches covered differently aimed universities.

But we also tried to compare our results to some countries behind the European borders. On the results from Kenya (Rintaugu & Ngetich, 2012), which showed that main motives for participation in PA were weight management, enjoyment and revitalization, but reported constraints to PA were lack of motivation, and lack of time and injuries, we can see the two different aspects. In our research was none of the answers connected to injuries and also the main reasons were not connected to weight management. Similar situation about the fear of injuries



was spotted in Pakistan (Memon, Ali, Aur, Ahmed & Feroz, 2018), where only 22 % of respondents were regularly physically active. Another curious finding in comparison is from South Africa (Nxumalo & Beetge, 2017), where safe access to sporting facilities and the poor state of university sporting facilities were factors for not participation in PA. Alarming numbers according to our research come from Saudi Arabia (Awadalla et al., 2014), where 58.0 % of the students were physically inactive. Also, more than half of the students reported as a barrier to physical activity time limitations (51.3 %), which is not case of most of European students. Again, in comparison with our results, relatively high percentage of Colombia students (47 %) does not do at least 30 minutes of physical activity per day in a week (De Souza Martins, Molina Pinzon & Zea Robles, 2015). On the other hand, Canada (Thomas, Beaudry, Gammage, Klentrou & Josse, 2019) reported solid participation in physical activities with gender differences, but also significant interpersonal barriers included lack of friends and peer influence; and significant structural barriers included homework, class schedule, and overcrowded facilities. Here we can see, that in our research we actually did not register overcrowded facilities, so we can say that Czech university students have many opportunities from which to choose. We can conclude that students from our research group have relatively good knowledge about healthy lifestyle, participate in various sports and in concordance with other researches main reasons for not participating in PA are lack of finances and lack of motivation rather than safety issues or unsatisfactory facilities. Our recommendation is therefore to focus on reducing barriers that may negatively affect students' participation in physical activity, provide them with a wide range of sports opportunities and expand the range of physical activities in terms of affordability. At the same time, it is necessary to gradually modernize the existing sports grounds in order to better support students' interests in various physical activities.

## REFERENCES

- ACEIJAS, C., WALDHÄUSL, S., LAMBERT, N., CASSAR S., BELLO-CORASSA, R. (2017). Determinants of health-related lifestyles among university students. *Perspect Public Health*, 137(4), 227-236. doi: 10.1177/1757913916666875.
- ATOUM, M. F. & AL-HOURANI, H. M. (2004). Lifestyle related risk factors for breast cancer in Jordanian females. *Saudi Med. J.*, 25(9), 1245–1248.
- AWADALLA, N. J., ABOELYAZED, A. E., HASSANEIN, M. A., KHALIL, S. N., AFTAB, R., GABALLA, I. I. & MAHFOUZ, A.A. (2014). Assessment of physical inactivity and perceived barriers to physical activity among health college students, south-western Saudi Arabia. *Eastern Mediterranean health journal = La revue de sante de la Mediterranee orientale = al-Majallah al-sihhiyah li-sharq al-mutawas-sit*, 20(10), 596-604, ISSN 10203397.
- BICHESCU, A. (2014). Leisure Time Sport Activities of the Students at Resita University. *Procedia - Social and Behavioral Sciences*, 117, 735-740, ISSN 18770428. doi:10.1016/j.sbspro.2014.02.291.
- BOLOTIN, A. & BAKAYEV, V. (2015) Structure and content of the educational technology of managing students' healthy lifestyle. *Journal of Physical Education and Sport*, 15(3), 54, 362 - 364., online ISSN: 2247 - 806X; p-ISSN: 2247 - 8051.
- BRANKOVIC, S., PILAV, A., CILOVIĆ-LAGARIJA, Š., PAŠALIĆ, A. & MAHMUTOVIĆ, J. (2017). Lifestyles of university students in Bosnia and Herzegovina. *Journal of Health Sciences*, 7(1), ISSN 22327576. doi:10.17532/jhsci.2017.441.
- CARBALLO-FAZANES, A., R. BARCALA-FURELOS, C. ABELAIRAS-GÓMEZ, J. RICO-DÍAZ, J.E. RODRÍGUEZ-FERNÁNDEZ, E. REY & C. VARELA-CASAL. (2020). Physical activity habits and determinants, sedentary behaviour and lifestyle in university students. *International Journal of Environmental Research and Public Health*, 17(9), ISSN 16604601. doi:10.3390/ijerph17093272
- DE SOUZA MARTINS, M., MOLINA PINZON, A. & ZEA ROBLES, C. A. (2015). Analysis of the Lifestyle of Students of Pontificia Javeriana University Colombia. *Medicine and science in sports and exercise*, 47(5), 915-915, ISSN 01959131. doi:10.1249/01.mss.0000479210.08097.3c
- EISENMANN, J. C., BARTEE, R. T., WANG, M. Q. (2002). Physical activity, TV viewing, and weight in U. S. youth: 1999 youth risk behavior survey. *Obes. Res.*, 10(5), 379–385.
- Framework Educational Program for Basic Education (FEP BE - Rámcový

- vzdělávací program pro základní vzdělávání). (2018). Praha: MŠMT. Available from: <https://www.msmt.cz/file/45304/>.
- Framework Educational Program for Preschool Education (FEP PE - Rámcový vzdělávací program pro předškolní vzdělávání). (2017). Praha: MŠMT. Available from: [http://www.nuv.cz/uploads/RVP\\_ZV\\_2017.pdf](http://www.nuv.cz/uploads/RVP_ZV_2017.pdf).
- MARTIN, A, SAUNDERS, D. H., SHENKIN, S. D., SPROULE, J. (2014). Lifestyle intervention for improving school achievement in overweight or obese children and adolescents. *Cochrane Database Syst Rev.* 14;(3) doi: 10.1002/14651858.CD009728.pub2.
- MEMON, A. R., ALI, B., AUR, M., AHMED, I. & FERROZ, J. (2018). Motivation and factors affecting sports participation: a cross-sectional study on female medical students in Pakistan. *JPMA. The Journal of the Pakistan Medical Association*, 68(9), 1327-1333, ISSN 00309982.
- NXUMALO, S. A. & BEETGE, R. (2017). Sport participation of female university students. *South African Journal for Research in Sport, Physical Education*, 39(2), 163-179, ISSN 03799069.
- OLMEDILLA, A., ORTEGA TORO, E., & ABENZA, L. (2016). Self-concept, sport, and physical activity practice in university students. *Journal of Human Sport*, 11(4), 415-425, ISSN 19885202.
- RINTAUGU, E. G. & NGETICH, E. D. K. (2012). Motivational gender differences in sport and exercise participation among university sport science students. *Journal of Physical Education*, 12(2), 180-187, ISSN 22478051.
- ROGOWSKA, A. M., KUŚNIERZ, C. & PAVLOVA, J. (2020). Healthy behavior of physical education university students. *Health Problems of Civilization*, 14(4), 247-255, ISSN 23536942. doi:10.5114/hpc.2020.96392.
- ROMERO-BLANCO, C., RODRÍGUEZ-ALMAGRO, J., ONIEVA-ZAFRA, M. D., PARRA-FERNÁNDEZ, M. L., PRADO-LAGUNA, M. D. C, HERNÁNDEZ-MARTÍNEZ, A. (2020). Physical Activity and Sedentary Lifestyle in University Students: Changes during Confinement Due to the COVID-19 Pandemic. *Int J Environ Res Public Health*, 17(18):6567. doi: 10.3390/ijerph17186567.
- SIGMUNDOVÁ, D., CHMELÍK, F., SIGMUND, E., FELTLOVÁ D. & FRÖMEL, K. (2013). Physical activity in the lifestyle of Czech university students: Meeting health recommendations. *European Journal of Sport Science*, 13(6), 744-750, ISSN 17461391.
- TEIXEIRA, P. J., CARRACA, E.V., MARKLAND, D., SILVA, M, N., & RYAN, R. M. (2012). Exercise, physical activity, and self-determination theory: A systemat-

ic review. *International Journal of Behavioral Nutrition and Physical Activity*, 9 (78).

THOMAS, A. M., BEAUDRY, K. M., GAMMAGE, L., KLENTROU, P. & JOSSE, A. R. (2019). Physical Activity, Sport Participation, and Perceived Barriers to Engagement in First-Year Canadian University Students. *Journal of Physical Activity*, 16(6), 437-446, ISSN 15433080.

VÁRI, B., KATONA, Z., SAJBEN, R., PÁLHIDAI, A. & MESZLÉNYI, E. (2019). Eating and Sports Habits of University Students in Szeged. *Arena: Journal of Physical Activities*, (8), 50-65, ISSN 2285830X.

## STIL ŽIVOTA STUDENATA U ČEŠKOJ

### SAŽETAK

Podaci iz različitih nacionalnih i međunarodnih anketa pokazali su da ljudi u razvijenim zemljama ne provode dovoljno vremena baveći se tjelesnim aktivnostima, iako je to dio zdravog stila života. Studenti su skloni neaktivno provoditi svoje slobodno vrijeme gledajući televiziju, koristeći informatičke alate, uključujući kompjuterske igre (e-sportovi), itd. Ovo je istraživanje dio međunarodnog projekta pod nazivom: Istraživačka mreža za suradnju u području sporta, rekreacije i promocije zdravlja (ID: EFOP-3.6.2-16- 2017-00003). Projekt je bio usredotočen na djelatnosti vezane uz slobodno vrijeme, stil života i sportske navike mladih ljudi. Cilj istraživanja bio je ispitati neke aspekte stila života studenata na studijskim programima usmjerenim na poučavanje djece osnovnoškolske i predškolske dobi. Uzorak se sastojao od 503 ispitanika. Rezultati istraživanja ukazuju na to da češki studenti imaju relativno mnogo slobodnog vremena, od čega velik dio provode neaktivno, gledajući televiziju ili surfajući internetom koristeći razne uređaje. Glavna motivacija za bavljenje sportom su prijatelji, a temelj za to dobili su uglavnom od obitelji ili od svojih prijatelja. Istraživanje je otkrilo i neke prepreke za bavljenje sportom. Stoga je naša preporuka usredotočiti se na smanjenje prepreka kod studenata koje mogu utjecati na njihovo sudjelovanje u tjelesnoj aktivnosti te im pružiti ogroman spektar mogućnosti vezanih za sportske aktivnosti, u čemu nam pomaže znanje o zdravom ponašanju i načinu života, koje je prilično dobro za razliku od drugih istraživanih zemalja.

### KLJUČNE RIJEČI:

*stil života, fizička aktivnost, studenti, sportovi*