

EXAMINATION OF SPORTS HABITS IN DISADVANTAGED SETTLEMENTS

Ákos Lukács, Andrea Lenténé Puskás

University of Debrecen, Institute of Sport Sciences, Debrecen, Hungary

Abstract:

The study aims to explore sporting habits and sporting opportunities among the young and middle-aged adult population living in disadvantaged settlements.

Method: As secondary research, we reviewed the literature related to the topic, studied the legislation on the classification of settlements, and analyzed the CSO data. As primary research, we conducted an online questionnaire survey among adults aged 18 to 60 living in 6 disadvantaged settlements. The questionnaire was shared in specific groups on a community site accessible to 870 people. One hundred sixty-one people completed the questionnaire.

Results: Our study found that most regular athletes perform intellectual work; however, they typically perform sports activities only once a week. Most traditional athletes have a high school diploma, and the proportion of university graduates is relatively low. The research results also revealed that most people living in disadvantaged settlements prefer individual sports over team sports; however, this shows a significant difference in gender breakdown between men and women. The proportion of women who like individual sports is significantly higher, while this is reversed in the case of team sports.

Keywords: *disadvantaged settlement, sports habits, type of work, educational attainment*



THEORETICAL BACKGROUND

Nowadays, preventive leisure activities play an increasingly important role in developing a healthy lifestyle. Which is also the subject of more and more domestic and international research (KINCZEL et al., 2021; VERGHESE et al., 2003; LAW et al., 2006; FLETCHER et al., 2003; AGAHI - PARKER, 2008; LENTÉNÉ et al., 2018a, b, 2019; BOCSI, 2019, BODA et al., 2019). Research focusing on leisure trends concentrates primarily on leisure activities that provide experience and challenge. The research results reveal that playful activities mainly dominate consumers (MEZŐ et al., 2018). Fitness-wellness and outdoor trends related to sports also appear as essential and health-determining activities in spending their free time (MÜLLER et al., 2019a; MÜLLER et al., 2019b; MOLNÁR, 2019).

Surveys show that an increasing proportion of the young adult population (18-25 years old) and the middle-aged adult population (26-60 years old) are living inactive lives with advancing age. It is essential to increase the number of people living an active life to build a healthy society (BODA et al., 2015; JUHÁSZ et al., 2015). This requires regular examination of the lifestyle of the adult population (PERÉNYI, 2011). Let's compare the research conducted among the Hungarian population with the surveys conducted in the Scandinavian countries. A negative trend can be observed in Hungary, as the proportion of those who engage in regular sports activities is extremely low (FÖLDESINÉ et al., 2010). Unfortunately, most of the negative factors for developing public health risks are related to sport. At the same time, research results reveal that consciously constructed reactive programs can positively affect the healthy development of the adult population (KERESZTES et al., 2011; 2014; KISS et al., 2011; RÁZSÓ, 2011, SZILÁGYI et al., 2013).

People living in disadvantaged settlements are in a challenging position regarding health promotion. The complex indicator of these settlements was lower than the average of the complex indicators of all micro-regions when classifying them based on socio-economic and infrastructural aspects. The calculated unemployment rate indicator also exceeded 1.75 times the national average (67/2007. (VI.28) OGY). The willingness and sporting opportunities of the people living here are strongly limited by social gender, education, age, marital status, and geographical location. In Hungary, many economically and infrastructural disadvantaged settlements are an important area of research to explore the differences between social inequalities in the frequency of leisure-time physical activity (DONELLY, 1996).

Leisure activities and sports habits

According to a survey conducted by the CSO in 2019, 11% of men in Hungary do heavy physical work at work, compared to 3.3% of women. Surveys have also found that women work in standing positions in the workplace more than men. Regarding the frequency of sports, the data obtained during the study revealed that 43% of the adult population surveyed exercise only for a minimum of 10 minutes once a week. 45% of men surveyed and 40% of women exercise that requires a minimum of 10 minutes, showing a significant decrease with age. According to the survey, 79% of 15 to 17-year-olds exercise regularly. With the introduction of daily physical education, 45% of those aged 35-64 and 58% of



those aged 65 and over exercise less than 150 minutes per week. Regarding gender, women spend less time on activity in all age groups (CSO, 2019).

The willingness to play sports is also influenced by educational attainment. Among the participants in the survey conducted by the CSO, 67.5% of adults with a higher education (university) degree engage in sports activities at least once a week. This proportion is lower for those with lower education (49%). This is likely due to the nature of the work, as the interviewed respondents with low education mainly do hard or light physical work. According to the survey, sedentary workers play more sports than adults doing physical work. The results of the study carried out by the CSO also showed that there is a correlation between the increase in educational attainment and the willingness of the sexes to play sports and that men and women with higher educational attainment have higher levels of physical activity and time spent in sports (Figure 1).



Figure 1: Proportion of athletes weekly by gender and educational attainment, 2019

Source: Own study, 2022

Legend:

Férfi / Men

Nő / Women

Legfeljebb 8 általános / Up to 8 grades of primary school

Középfokú, érettségi nélkül / Secondary education, without graduation

Középfokú, érettséggel / Secondary education, with graduation

Felsőfokú / Higher education

The income situation also influences leisure habits and the willingness to play sports. According to a survey by the CSO, higher-income people carry out some sports activities at least once a week. According to income, 61% of those in the top fifth play sports at least once a week, compared to only 30% in the bottom fifth. Slightly more than half (56%) of the respondents asked by CSO exercise for at least 150 minutes in their free time, which aligns with the WHO recommendation.



The results thus showed that women's lifestyles are more sedentary than men's and that educational attainment, place in the labor market, and income can significantly impact sporting habits.

PURPOSE

The purpose of our study was to examine the relationship between the type of work, the level of educational attainment, the willingness to play sports, and the frequency of sports in the chosen settlement. We also examined, whether what types of sports and places are the most popular among them.

METHOD

Our study was carried out in disadvantaged settlements in Hajdú-Bihar County. In our research, we performed both primary and secondary data collection. We first reviewed the international and domestic literature related to the topic. In addition, we examined the legislation on the classification of settlements. We analyzed the CSO's surveys on sports, healthy lifestyles, and the Hungarian population's health status and eating habits, especially regarding the age group studied.

During our primary research, we conducted an online questionnaire survey of people living in six disadvantaged settlements - Báránd, Földes, Nagyrábé, Sáp, Sárrétudvari, and Tetétlen. The questionnaire we compiled contained four main groups of questions, the first of which related to demographic data, the second to the relationship of the subjects to a healthy lifestyle and current sports activity. The third group of questions was aimed at assessing motivation for sport, and finally, in the last group of questions, we asked about active time spent in the past with sport.

The questionnaire contained closed-ended questions, which included simple multiple-choice and Likert-scale questions. For Likert scales, a four-point scale was used to avoid responses to the mean (FÓNAI et al., 2002).

STATISTICAL ANALYSES

Quantitative data from the questionnaires were processed using the SPSS statistical program. Descriptive statistics, cross-tabulation analyses, and a Chi-square test were also performed to analyze the data (BABBIE, 2001).

PRESENTATION OF THE SAMPLE

The online questionnaire survey was conducted among adult residents (aged 18 to 60) living in selected settlements. The questionnaire was shared in specific groups on a social site accessible to 870 people. One hundred sixty-one people completed the questionnaire. Regarding gender distribution, 75.2% of respondents were women, and 24.8% were men. The highest proportions of adults in the sample were in the 26-45 age group (44.7%), 28% in the 46-60 age group, and 27.3% in the 18-25 age group.



The distribution of the respondents by settlement showed that most of them live in Földes (47.8%), 19.9% of the respondents live in Tetétlen, 9.3% in Báránd, 8.1% in Sárrétudvari and Sáp respectively, and 6.8% in Nagyrábe.

According to educational attainment, most have a high school diploma (31.7%), 24.2% of respondents have completed a post-secondary course, 19.9% have a college or university diploma, 16.8% have completed vocational training, and 7.5% have completed eight grades of primary school.

Regarding sports habits, 37.3% of the respondents do not engage in any sports activities, 34.2% do sports regularly, and 28.6% do sports on an occasional basis.

RESULTS

The CSO's survey of the Hungarian adult population in 2019 showed that the willingness to play sports and sports habits in economically and infrastructural disadvantaged settlements are also influenced by education and their place in the labor market. In these settlements, the willingness to play sports was very low, so we examined the relationship between the desire to play sports and the type of work.

The results showed that 34.2% of the respondents play sports regularly and 28.6% occasionally. According to a survey conducted by Földesiné and her colleagues in 2010, the proportion of those who do not engage in any sporting activities is very high (37.2%). Most of the regular athletes do intellectual work (40%), the proportion of those who do physical work is slightly lower (36.4%), while only 23.6% of the non-workers (students) do regular sports. Interestingly, the proportion of adults who do physical and intellectual work is the same among athletes who engage in irregular and occasional sports (43.5%). In comparison, 13% of students do some sports. 50% of those who do physical work, 35% of those who do mental work, and 15% of students do not play sports at all (Table 1).

Table 1: Sports habits by type of work (%) n = 161

Type of work	Sports habits (%)		
	Plays sports	Plays sports occasionally	Does not play sports
Physical workers	36.4	43.5	50.0
Non-workers or students	23.6	13.0	15.0
Intellectual workers	40.0	43.5	35.0

Source: Own studies, 2022

Examining the frequency of sports, we found that most respondents play sports one day a week (30.3%) and the last four or more days a week (18%). For once-weekly athletes, we found no difference in whether the respondent performed intellectual or physical



work (45.9%). 26.2% of all respondents do sports three times a week, 46.8% make an academic career, and 25% do physical work at the workplace. 28.1% of 3-times-a-week athletes do not work or study. Sports activities performed four times a week was the least common among the adult population in the sample, only 18% of those surveyed play sports with this frequency. An interesting result is that most of them do physical work (45.4%), the proportion of those doing intellectual work was slightly lower (36.4%), while 18.2% of respondents do not work or study (Figure 2).

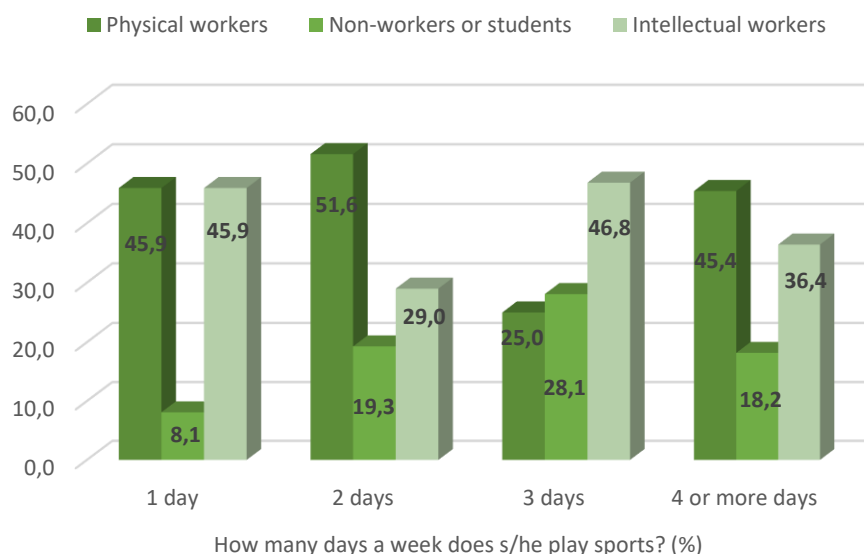


Figure 2: Weekly sports activity by type of work (%) n = 122

Source: Own studies, 2022

We also studied the propensity to play sports in the context of the highest educational attainment. We first examined the education of those who engage in regular sporting activities. 34.2% of those surveyed play sports regularly, with a high school diploma (36.3%), 21.8% with a college or university degree, and a slightly lower proportion with a post-secondary course (20%). 7.3% of regular athletes completed eight grades in elementary school.

We were also curious about the distribution of educational attainment of non-athletes. We found that most respondents have a high school diploma (35%), a quarter (25%) have completed post-secondary courses, and 18.3% have completed vocational training. Only 13.3% of the inactive have a college or university diploma, and 8.3% have only completed eight grades.

We did not find any difference between occasional athletes. Most (28.2%) completed a post-secondary course, 26.1% had a college or university diploma, and 21.7% had a high school diploma. The proportion of those who completed vocational training (17.4%) or eight grades of primary school (6.5%) was deficient. The results did not show a significant difference depending on the educational attainment of the respondent (Figure 3).



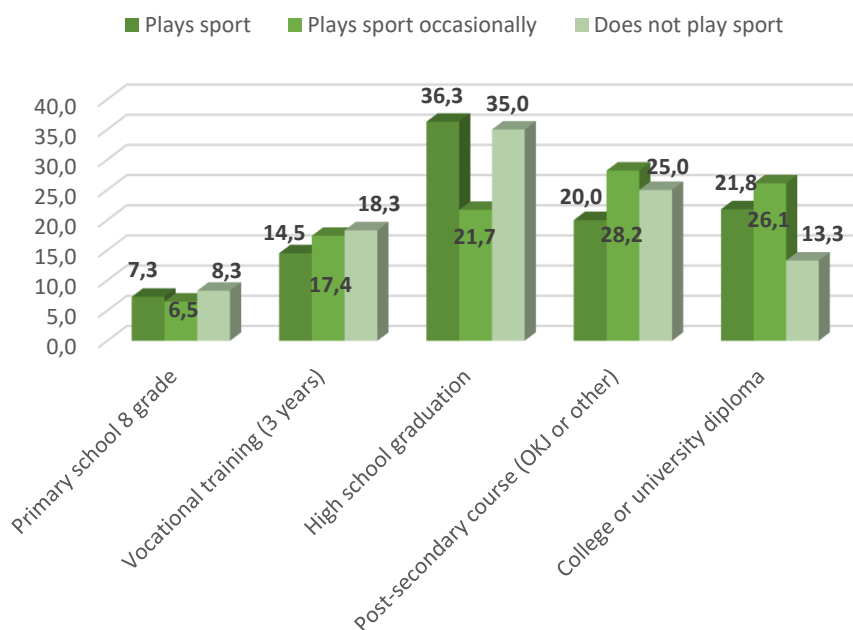


Figure 3: Propensity to play sports by educational attainment (%) n = 161

Source: Own studies, 2022

In our research, we analyzed whether there is a correlation between respondents' time spent on sports per week and educational attainment. The results showed that most respondents (30.3%) exercise only once a week, of which 27% have completed post-secondary courses, 21.6% have a high school diploma, and 18.9% have a vocational qualification. Almost a quarter (24.3%) of athletes who have a weekly degree have a higher education. 26.2% of the respondents play sports three days a week, most have a high school diploma (37.5%), and 21.8% have completed post-secondary courses. Among 3-day-a-week athletes, the same proportion were those with a college or university diploma and a vocational qualification (15.6%), and 9.3% had eight grades in primary school. 18% of respondents do four or more days of sports a week, of which 36.3% have a college or university degree, and 27.2% have a high school diploma. The proportion of regular athletes with a lower level of education was relatively low (Table 2).

Table 2: Examination of weekly sports frequency by educational attainment (%) n = 122

Highest level of education	How many days a week do you play sports? (persons)			
	One day	Two days	Three days	Four or more days
Primary school 8 grade	8.1	6.4	9.3	4.5



Vocational training (3 years)	18.9	16.1	15.6	13.6
High school graduation	21.6	35.5	37.5	27.2
Post-secondary course (OKJ or other)	27.0	25.8	21.8	18.1
College or university diploma	24.3	16.1	15.6	36.3
Total	30.3	25.4	26.2	18.0

Source: Own studies, 2022

During our study, we wanted to investigate the types of sports favored by the adult population living in a disadvantaged settlement. Based on the results, it can be stated that most of the respondents (64.4%) play individual sports, and 24.6% of the respondents like team sports. Only 11% of respondents indicated that they would like to pursue both types. An interesting result is that individual sports are more prevalent in all the settlements we surveyed, and the proportion of those who enjoy team sports or are happy to do both sports is much lower. Football was the most popular sport among team sports, while spinal training, cycling, walking, and dancing were the most popular sports.

We were also curious about the types of sports preferred by men and women who engage in some form of sport, either occasionally or regularly (118 people). Based on the results, it can be stated that there are significantly more respondents who engage in individual sports (64.4%), of whom a significant majority (88.2%) are women, compared to a substantially lower proportion of men (11.8%). In the case of team sports, however, we found that the ratio of men (76%) was significantly higher than that of women (24.1%). 11% of respondents to the questionnaire also like to do individual and team sports, with a similar proportion of men and women. Thus, the obtained results showed a significant correlation between gender and the nature of sports ($p < 0.05$). The results also showed that individual sports are more prevalent among women, and team sports are more popular among men (Figure 4).



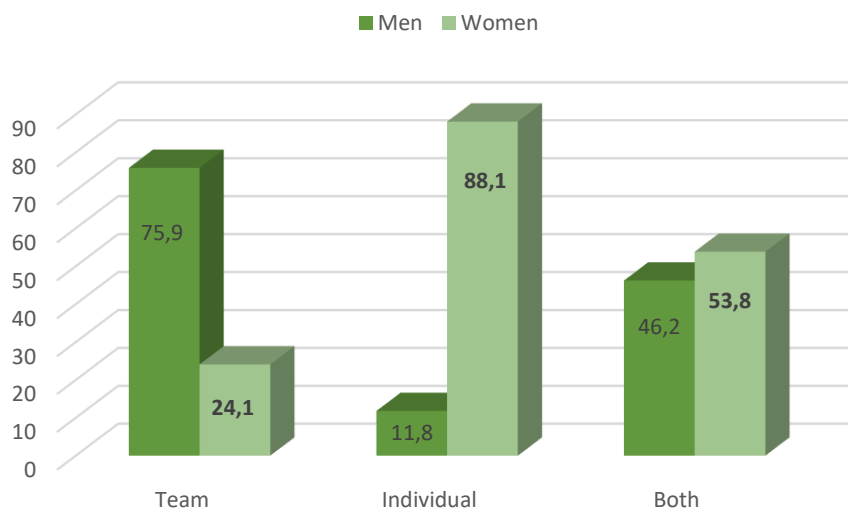


Figure 4: Distribution of the nature of sports activity by gender (%) n = 118

Source: Own studies, 2022

Given that people living in disadvantaged settlements typically prefer individual sports over team sports, we examined which venue they choose to play the most. The results showed that almost half of the respondents (47.8%) play sports mostly outdoors, in nature, in outdoor facilities, and 32% at home. 19.3% of respondents prefer indoor facilities. The previous result explains that people living in a disadvantaged settlement are looking for a sports opportunity that can be performed individually, regardless of facility and equipment.

The chosen location of the sport was also analyzed by gender. Based on the results, it can be stated that significantly more respondents like to play outdoors (48.3%) than in sports facilities. More than half of women (56.2%) and 43.8% of men chose this option. Slightly more than a third of the respondents answered that they prefer to play sports at home (32.2%); among them, the proportion of women (89.5%) is significantly higher than that of men (10.5%). 19.5% of respondents played sports in indoor facilities, of which 60.9% were women, and 39.1% were men. It is not typical for the respondents to have sports activities in all three venues. It can be concluded that men prefer to play sports in outdoor facilities, while most women do sports in their homes. The results showed a significant correlation between the sexes and the sporting location ($p < 0.05$).

DISCUSSION

The present study aimed to explore the sports habits and opportunities of the adult population living in disadvantaged settlements, particularly regarding the relationship between the willingness to play sports and the type of work and educational attainment. We aimed to examine what kinds of sports the adult population in the sample enjoys and what venue they choose to play sports.

The results of our research confirmed that, similarly to the survey conducted among the Hungarian population (FÖLDESINÉ et al., 2010), the proportion of those who do not



engage in any sports activities is very high in the settlements we examined (37.2%). The ratio of those doing intellectual work is higher among regular athletes, and respondents typically play sports only once a week. Most traditional athletes have a high school diploma, and the proportion of university graduates is relatively low.

Based on the research results, it can also be stated that most people living in disadvantaged settlements prefer sports that can be practiced individually, with less demanding equipment and facilities, than team sports. There is a significant difference between the sports choices of the sexes, the proportion of women who like individual sports is significantly higher, while this was reversed in the case of team sports.

The research was supported by: EFOP-3.6.1-16-2016-00022 Debrecen Venture Catapult Programme.



REFERENCES

Agahi, N. & Parker, M. G. (2008). Leisure activities and mortality: does gender matter? *Journal of Aging and Health*, 20 (7), 855–871. DOI: <https://doi.org/10.1177/0898264308324631>

Babbie, E. (2001). *A társadalomtudományi kutatás gyakorlata* (Kende G. és Szaitz M. ford.) Balassi Kiadó. Budapest, ISBN: 978-963-506-764-0, 564. p.

Bocsi, V. (2019). Romafiatalok szabadidős és magaskulturális mintázatai = High culture and leisure time patterns among Roma youth. In: Biczó G.(szerk.): *Terepek és elméletek = Fields and Theories: A Lippai Balázs Roma Szakkollégium válogatott romológiai tanulmánygyűjteménye = Selected Essayes from the Field of Romology by Lippai Balázs Romani College*. Debrecen: Didakt Kft. pp. 65–82.

Boda, E., Honfi, L., Bíró, M., Révész, L. & Müller, A. (2015). A szabadidő eltöltésének és a rekreációs tevékenységek vizsgálata egri lakosok körében. *Acta Academiae Paedagogicae Agriensis Nova Series: Sectio Sport*, 42, 49–62.

Boda, E. J., Bácsné, Bába É., Laoues-Czimbalmos, N. & Müller, A. (2019). Rekreációs fogyasztói szokások vizsgálata magyar fiatal felnőttek körében. *Különleges Bánásmód*, 5. (4). 33–44. DOI 10.18458/KB.2019.4.33

Donelly, P. (1996). Approaches to social inequality in the sociology of sport. *Quest*, 48: 221-242.

Fletcher, A. C., Nickerson, P. & Wright, K. L. (2003). Structured leisure activities in middle childhood: Links to well-being. *Journal of community psychology*, 31 (6), 641–659. DOI: <https://doi.org/10.1002/jcop.10075>

Fónai, M., Kerülő, J. & Takács, P. (2002). *Bevezetés az alkalmazott kutatómódszertanba*. Pro Educatione Alapítvány, Nyíregyháza, 183 p. (ISBN:978-963-7166-96-9)

Földesiné, Sz. Gy., Gál, A. & Dóczi, T. (2010). *Sportszociológia*. Semmelweis Egyetem

Juhász, I., Kopkáné, Plachy J., Kiszela, K., Bíró, M., Müller, A. & Révész, L. (2015). Időskorúak rekreációs fizikai aktivitásának hatása a kardiorespiratorikus rendszerre. *Magyar Sporttudományi Szemle*, 16 (63), pp. 4–8.



Keresztes, N., Szilágyi, N., Kiss, B., Rácz, R., Rázsó, Zs., Bondor, T., Balogh, L., László, F. & Varga Cs. (2011). Kérdőíves panelvizsgálat eredményei. Sportolási szokások. TÁMOP-4.2.2-081-2008-0006 projekt záró konferencia, Szeged

Kinczel, A., Bácsné, Bába É., Molnár, A., Laoues-Czimbalmos, N. & Müller, A. (2021). Magyar Fialat felnőttek sportolási szokásai és a sport motivációjuk alakulása, *Acta Carolus Robertus*, 11 (1), 27–39. (2021), DOI: <https://doi.org/10.33032/acr.2573>

Kiss, B., Keresztes, N., Szilágyi, N. & Balogh, L. (2011). Az egészség pszichés és pszichoszociális dimenzióinak változása mozgásprogramra önkéntesen jelentkezettek körében. VIII. Országos Sporttudományi Kongresszus, Győr

KSH: Egészségi állapot és egészségmagatartás, 2016-2017. Statisztikai Tükör. 2018. július 23. URL: <https://www.ksh.hu/docs/hun/xftp/stattukor/egeszsegallapot1617.pdf?fbclid=IwAR0HrDIszinvLvUm2zD5NDA-mcvjMe0b9QhEhtT4J9DsK9CMvBjEicqBX8>

KSH: KSH (2019), Tehetünk az egészségünkért – ELEF 2019 gyorsjelentés URL: https://www.ksh.hu/docs/hun/xftp/idoszaki/elef/te_2019/index.html

Law, M., King, G., King, S., Kertoy, M., Hurley, P., Rosenbaum, P. & Hanna, S. (2006). Patterns of participation in recreational and leisure activities among children with complex physical disabilities. *Developmental Medicine & Child Neurology*, 48 (5), 337–342. DOI: <https://doi.org/10.1017/s0012162206000740>

Lenténé, P. A., Hidvégi, P., Tatár, A., Pucsok, J. M. & Biró, M. (2018a). Recreational potential of the northern great plain region in Hungary. In: Jaromír, Šimonek; Beáta, Dobay (szerk.) *Sport science in motion: Proceedings from the scientific conference. Športová veda v pohybe: recenzovaný zborník vedeckých a odborných prác z konferencie. Mozgásban a sporttudomány: Válogatott tanulmányok a konferenciáról.* Komárno: Univerzita J. Selyeho. pp. 218–226.

Lenténé, Puskás A., Biró, M., Dobay, B. & Pucsok, J. M. (2018b). A szabadidő sportolás kínálati elemeinek, és szolgáltatásainak vizsgálata Magyarország Észak-alföldi régiójának szállodáiban. *Selye E-Studies*, 9 (1), 13–21.

Lenténé, Puskás A., Tatár, A., Lente, L., Pucsok, J.M., Biró, M. & Hidvégi, P. (2019). A sport és wellness elemek megjelenése az Észak-alföldi régió három-, négy- és ötszillagos szállodáinak kínálatában. In: Bácsné Bába É. – Müller A. (szerk.): "Mozgással az egészségért" fizikai aktivitás jelentősége a jövő munkavállalóinak egészségmegőrzésében: Nemzetközi Konferencia és Workshop: Válogatott tanulmánykötet. Debrecen: Debreceni Egyetem. pp. 204–215.



Mező, F., Mező, K. & Mező, L. D. (2018). Képességfejlesztő játékok az IPOO-modell aspektusából: a fejlesztésbe integrált diagnosztika lehetősége. Különleges Bánásmód, IV. évf. 2018/2. szám, 55–66. DOI 10.18458/KB.2018.2.55

Molnár, A. (2019). Fitnessz trendek az egészség szolgálatában. In: Bácsné, Bába É., Müller, A. (szerk.) "Mozgással az egészségért" A fizikai aktivitás jelentősége a jövő munkavállalóinak egészségmegőrzésében: Nemzetközi Konferencia és Workshop: Válogatott Tanulmánykötet. Debrecen: Debreceni Egyetem.pp. 113-120.

Müller, A., Bácsné Bába É., Gabnai Z., Pfau, C. és Pető K. (2019a). A fitnessz trendek és új típusú mozgásformák társadalmi és gazdasági aspektusai. Acta Carolus Robertus. 9(2), 109-122. DOI: <https://doi.org/10.33032/acr.2019.9.2.109>

Müller A., Bácsné, Bába É., Pfau, C., Molnár, A. & Laoues-Czimbalmos, N. (2019b). Extrém sportfogyasztás vizsgálata egy kutatás tükrében. International Journal of Engineering and Management Sciences / Műszaki és Menedzsment Tudományi Közlemények,3 (4),135–142. DOI: <https://doi.org/10.21791/ijems.2019.3.13>.

Perényi, Sz. (2011). Sportolási szokások: Sportolási esélyek és változástrendek, In B. Bauer és A. Szabó (eds): Arcátlan Nemzedék, 159- 184. Nemzeti Család- és Szociálpolitikai Intézet: Budapest

Rázsó, Zs. (2011). Rekreatív csoportos mozgásprogramra jelentkezettek táplálkozási szokásainak jellemzője és összefüggése a pszichoszociális egészséggel. Szakdolgozat. SZTE JGYPK, Testnevelési és Sporttudományi intézet

Szilágyi, N., Keresztes, N., Kiss, B., Rácz, R., Rázsó, Zs. & Varga, Cs. (2013). Hungarian organized recreational sport program: Volunteers' social background, sporting habits and sport motivation ESA 11th Conference, Torino, Italy

Verghese, J., Lipton, R. B., Katz, M. J., Hall, C. B., Derby, C. A., Kuslansky, G. & Buschke, H. (2003). Leisure activities and the risk of dementia in the elderly. New England Journal of Medicine, 348 (25), 2508–2516. DOI: <https://doi.org/10.1056/nejmoa022252>

World Health Organization (1946). Constitution. Author. Geneva
240/2006. (XI.30) Korm.rendelet a társadalmi-gazdasági és infrastrukturális szempontból elmaradott, illetve az országos átlagot jelentősen meghaladó munkanélküliséggel sújtott települések jegyzékéről

