

THE EVOLUTION OF SPORTING CONSUMPTION HABITS AMONG SOCIOECONOMICALLY DISADVANTAGED CHILDREN AND ADULTS

Židek Péter ¹

¹Selye János University, Department of Primary and Pre-School Education, Komarno, Slovakia

Keywords:

socioeconomically disadvantaged individuals,
sporting consumption habits,
inhibitory factors

Abstract

In the manuscript, grounded in secondary research, I present literature reviews and statistics outlining the benefits and constraining factors related to the engagement in sports among socioeconomically disadvantaged individuals. Sports serve as a highly effective tool for facilitating social integration and ensuring equal opportunities. It is crucial to examine the sporting consumption habits of the disadvantaged target group and identify inhibitory factors to assist decision-makers in supporting measures for promoting equal opportunities. To alleviate social disparities, it is essential to establish conditions that guarantee long-term participation for everyone in economic and social life. Recognizing and promptly addressing disadvantages that manifest early in life are key factors for success in later life. Providing support to needy children, expanding their opportunities, and reinforcing a comprehensive system of child protection and well-being are fundamental for their successful integration into society.

1. Introduction

The advancement of technology has brought comfort to humanity on one hand; however, on the other hand, it has resulted in health issues stemming from a sedentary lifestyle. Various studies conducted in different countries support the assertion that the number of individuals engaging in regular physical activity and recreational sports is declining across all age groups, while sedentary, sedentary lifestyles are becoming increasingly dominant [53][5][23][24][25][15].

All of these induce changes that are palpable in the daily societal and economic impacts, as evidenced by the increasing prevalence of lifestyle-dependent diseases, alterations in leisure time activities [49][1][19], and health economic analyses[11][66].

The negative effects of a sedentary lifestyle are not only manifested in the growing prevalence of diseases, but also in the decline of well-being, life satisfaction, and, in the case of adults, a decrease in work performance. Meanwhile, in the case of children, deteriorating academic performance, declining fitness levels, inadequate bone development, obesity, and postural disorders are observed [54].

It is well-established that physical activity is one of the most effective primary prevention tools in mitigating lifestyle-dependent diseases [10][4]. The World Health Organization [65] identifies physical inactivity as a leading global risk factor for the development of diseases. Physically active individuals exhibit a reduced risk of cardiovascular diseases, type 2 diabetes,

¹ Kapcsolattartó szerző. Tel.:
E-mail cím: zidekp@ujs.sk

osteoporosis, colorectal cancer, stress-related illnesses, and obesity. They are also less likely to experience accidents resulting in falls, hip fractures, or postural disorders [3][22][64], and are more successful in weight management [33][50][55].

The health-economic impact of engaging in sports is undeniable. Numerous studies have confirmed the positive effects of regular physical activity on maintaining physical, mental, and social well-being and fostering holistic health [7][58].

For young children and adolescents, a physically active lifestyle is particularly crucial as it facilitates neurological maturation, supports the development of cognitive functions, and contributes to the attainment of motor maturity, as reported in several studies [28][52][57]. Sport participation helps reduce the prevalence of obesity or maintain optimal body weight. Physical activity contributes to the establishment of a healthy skeletal system, improves physical fitness (cardiorespiratory fitness and muscle strength), enhances cardiometabolic health (blood pressure, dyslipidemia, glucose, and insulin resistance), and plays a stress-reducing role, thereby positively impacting mental health.

For socioeconomically disadvantaged children and adults, engagement in sports not only plays a crucial role in disease prevention but also aids in the process of socialization, societal integration, and the development of personal competencies. These aspects, in turn, contribute to their overall skill set, proving beneficial in their future endeavors within the labor market.

2. Literary Review

According to international research findings, sedentary lifestyle and obesity resulting from high caloric intake begin to manifest between the ages of 3-7 in preschool-aged children, posing a significant risk factor for adult obesity [8]. Boda et al. [6] and Müller et al. [50] examined the health behavior and physical activity habits of preschool-aged children, emphasizing the importance of initiating primary prevention of obesity at an early age. Establishing a holistic health perspective and habit system is advisable during the preschool years. The study confirmed that fostering healthy lifestyle elements and incorporating regular physical activity into the daily routine of young children is crucial for obesity prevention. The family, as a secondary socialization venue, plays a significant role in shaping children's health status through parental role modeling. The researchers demonstrated that among preschoolers, children of parents who engage in sports were significantly more likely to participate in sports, and the prevalence of obesity was significantly lower among preschoolers who were actively involved in sports.

Research also indicates that in shaping the health behavior of preschool-aged children, influences extend beyond the school and parents, involving the impact of community media (TV) and peer groups [6][40][51][50].

Studies conducted with school-aged [42][61], university-level [1], and workforce samples [26] have consistently reinforced the influential role of parental role models, peer groups, and educators in shaping sporting habits.

While numerous studies explore the sporting habits of individuals across all age groups living under normal or favorable economic conditions [18][62][19][1], research focused on socioeconomically disadvantaged groups lacks uniformity and is relatively scarce. Nevertheless, due to the health-protective role of sports, it can contribute to promoting equal opportunities for disadvantaged individuals and fostering inclusivity within communities [37].

3. The evolution of the number of socioeconomically disadvantaged children and young adults in Hungary

In Hungary, the classification as socioeconomically disadvantaged (HH) is based on the eligibility for Regular Child Protection Allowance (RGYK). Individuals who have reached the age of 18, or young adults, are considered socioeconomically disadvantaged if at least one of

the following circumstances can be identified: the parent or the foster parent has a low level of education, is underemployed, or the child/young adult lives in inadequate living conditions or housing.

Those designated as multiply disadvantaged (HHH) are individuals for whom at least two of the circumstances identified as HH can be identified. Furthermore, young individuals receive a 3H classification if they have been removed from their families and placed in institutions providing specialized care, or if they are in a student status receiving post-care support.

Since September 1, 2013, the Child Protection Act regulates the concept of 2H and 3H children (or young adults), allowing for the compensation of socio-economic disadvantages up to the age of 24.

To reduce social inequalities, it is necessary to create conditions that enable every individual to participate in social and economic life in the long term. Identifying and promptly addressing disadvantages that arise in early life is essential for future success. The comprehensive system of measures supporting socioeconomically disadvantaged children, improving their opportunities, and the child welfare and protection measures assisting them are crucial for promoting their successful social integration. Figure 1 illustrates the evolution of the number of children classified as 2H and 3H in Hungary between 2014 and 2020.

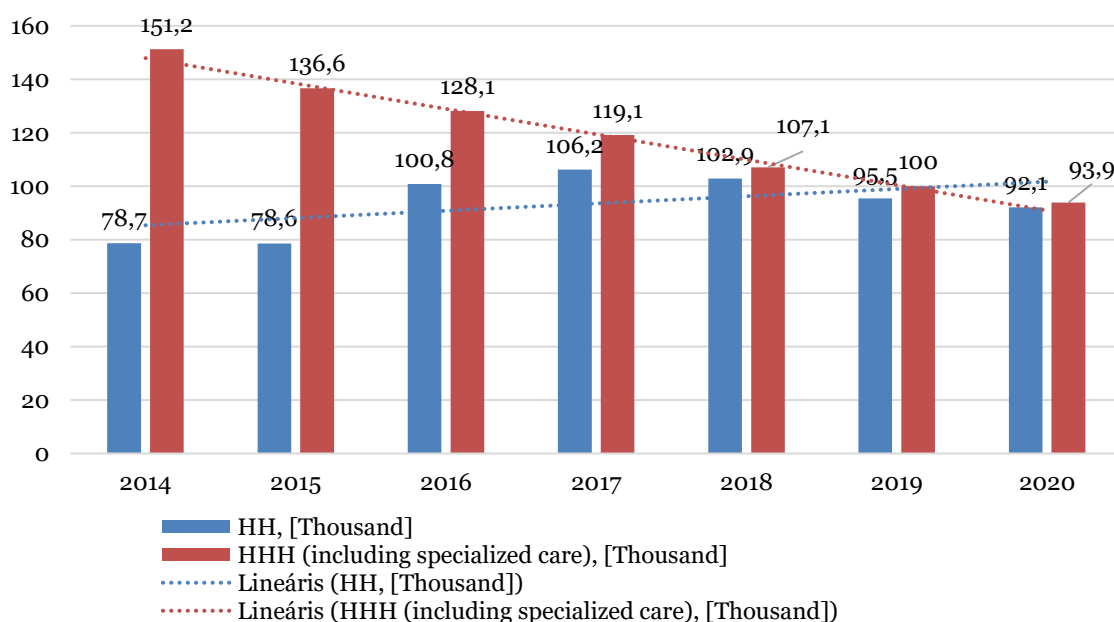


Figure 1. Evolution of the Number of Socioeconomically Disadvantaged and Multiply Disadvantaged Children Determined by the Notary in Hungary between 2014-2020 (Based on KSH, [34])

The first year following the introduction of the registration of socioeconomically disadvantaged and multiply disadvantaged individuals in 2013, 2014, witnessed the highest number of children and young adults with 2H and 3H classifications. In this year, the situation affected 230,000 individuals aged 0–24. In 2016, the number of those in socioeconomically disadvantaged and multiply disadvantaged situations reached this high level again, but the proportions significantly changed. The number of multiply disadvantaged individuals, which was nearly twice as high in the previous period, now exceeded that of socioeconomically disadvantaged individuals by only 25%. After 2016, the number of individuals classified as socioeconomically disadvantaged continuously decreased, and by 2020, the difference between the two categories was nearly eliminated. Several factors contribute to this trend, including an 8% decrease in the number of individuals receiving regular child protection

allowance between 2019 and 2020 and an improvement in the situation of less employed parents due to public work programs.

Figure 2 and 3 illustrate the percentage development of the disadvantages forming the basis for socioeconomically disadvantaged and multiply disadvantaged classifications in Hungary in the year 2020.

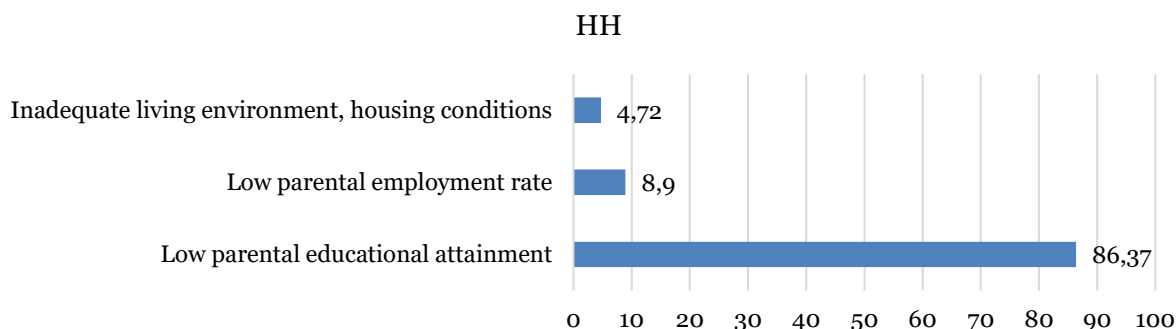


Figure 2. Evolution of Disadvantages among Socioeconomically Disadvantaged Children and Young Adults in Hungary in 2020 (%)

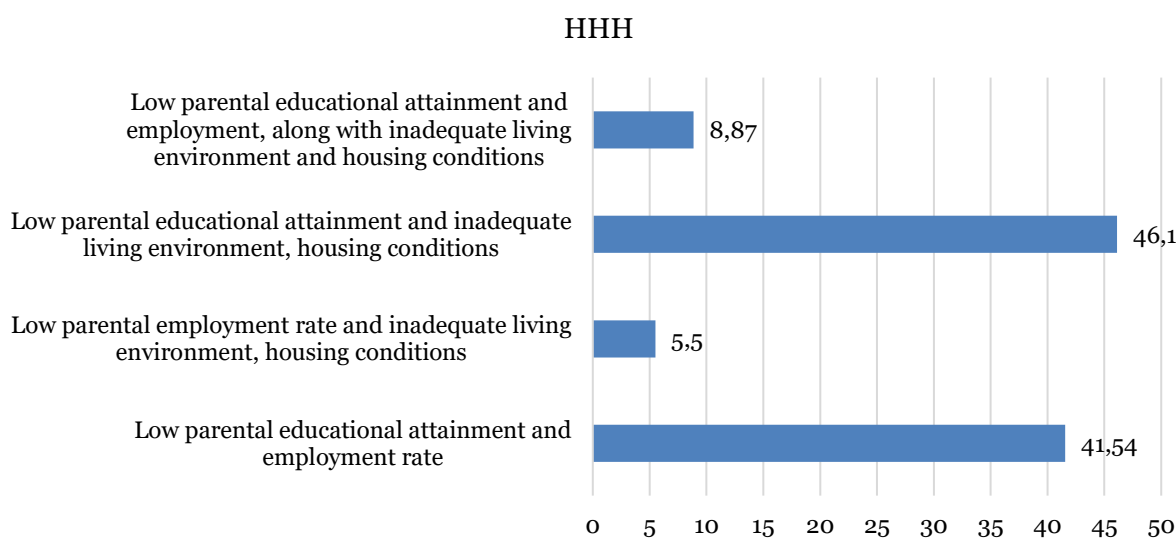


Figure 3. Evolution of Disadvantages among Multiply Disadvantaged Children and Young Adults in Hungary in 2020 (%)

In 2020, in Hungary, the determination of the socioeconomically disadvantaged status was predominantly influenced by the low educational attainment of parents, as it was detectable in 86% of socioeconomically disadvantaged children/young adults that either the parent or the foster guardian had a low educational background. The low employment rate of parents accounted for 8.9% of socioeconomically disadvantaged cases, while inadequate housing conditions led to socioeconomically disadvantaged status in only 4.7% of cases (see Figure 2).

For multiply disadvantaged children and young adults, the most common challenges included low parental educational attainment and inadequate living conditions (46%), closely followed by low employment rates and low educational attainment (42%). The proportion facing low employment rates and inadequate living conditions simultaneously was significantly lower (5.5%), as well as those confronting all three difficulties simultaneously (6.9%), as illustrated in Figure 3.

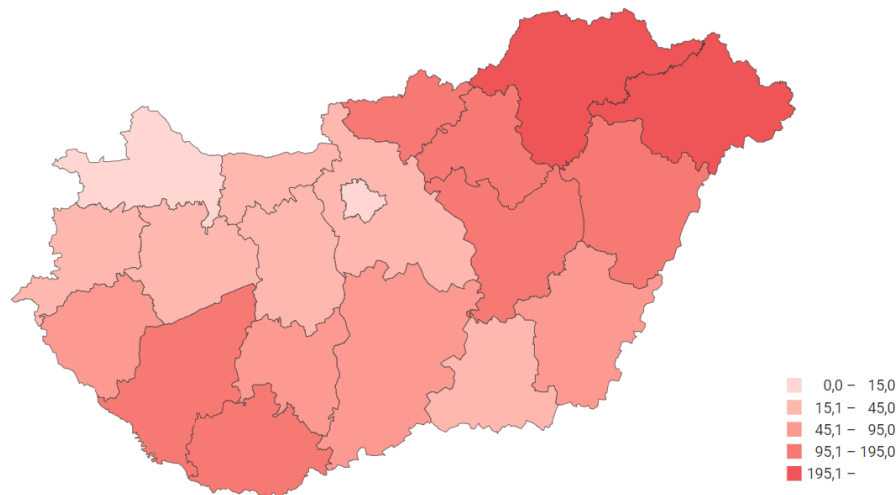


Figure 4. Evolution of the Ratio of Children and Young Adults with SD or MSD Classifications per Thousand Age-Matched Population (Source: KSH, [34])

The overall ratio of children and young adults with socioeconomically disadvantaged (SD) or multiply disadvantaged (MSD) classifications per thousand age-matched population was 76.6 individuals. This ratio varies nationwide, with particularly high rates in Borsod-Abaúj-Zemplén and Szabolcs-Szatmár-Bereg counties, where the number of children and young adults with SD or MSD classifications is nearly three times higher than the national average. In this region, the majority of parents have low educational attainment, low employment rates, and often face poor living conditions, which prevent them from providing suitable living conditions for their children. Moreover, in Northern Hungary, Northern Great Plain, Southern Transdanubia, and Békés county, this ratio is higher than the national average. Residents of Budapest and Győr-Moson-Sopron county are in the best situation, where only 7 and 10 individuals, respectively, out of a thousand individuals aged 0–24, are classified as socioeconomically disadvantaged or multiply disadvantaged children or young adults.

Based on Hungarian data from 2020, it can be concluded that one in every nine minors has received either a socioeconomically disadvantaged or multiply disadvantaged classification.

4. The Evolution of Sporting Consumption Habits Among Socioeconomically Disadvantaged Children and Adults

Among socioeconomically disadvantaged adults and children, studies have emerged examining specific groups such as the Roma population, where a higher percentage of low education, low employment status, and low income is observed compared to the general population. Among children in Roma families, a significant proportion falls into disadvantaged categories [12][27].

Another area of study involves individuals with disabilities, as numerous research efforts highlight the unfavorable impact of socioeconomic status (SES) on their sporting habits [39]. The level of educational attainment can influence an individual's inclination toward sports. According to a study by the Central Statistical Office, individuals with a university degree engage in sports at least once a week at a rate of 67.5%, while this percentage drops to 49% among those with lower educational qualifications.

Economic conditions also significantly affect people's sporting habits. According to data from the Central Statistical Office, individuals in higher-income groups are more likely to

participate in regular sports activities. Those in the highest income group reported engaging in sports at least once a week at a rate of 61%, whereas this percentage was only 30% in the lowest income bracket.

A study by Lukács –Lenténé [47] examined the sporting habits of adults aged 18-60 living in socioeconomically disadvantaged areas in Hajdú-Bihar county. The results indicated that those who do not engage in regular leisure sports activities mostly had a high school diploma (35%), followed by 25% who completed higher education, and 18.3% who attended vocational training. Only 13.3% of inactive individuals held a university degree, while 8.3% completed only 8 years of schooling. Considering that individuals in disadvantaged environments tend to prefer individual sports activities over team sports, the study also investigated the preferences for sporting environments among respondents in a disadvantaged area. Results showed that nearly half (47.8%) preferred outdoor or natural environments for sports activities, while 32% chose to exercise at home. Only 19.3% preferred indoor facilities. This preference may be rooted in the fact that individuals in disadvantaged areas seek sports activities that can be pursued independently, regardless of facilities and equipment.

Laoues' [45] survey, which involved 1297 children with disabilities, found that low parental education levels influenced their employment status and income. The survey revealed that 21.4% of mothers and 18.1% of fathers had completed only eight years of elementary school. Secondary education (high school diploma) was reported by 19.7% of fathers and 24.7% of mothers. Vocational training was completed by 6.6% of mothers and 29.5% of fathers. Higher education, such as a university or college degree, was held by 22.5% of women and 15% of men. The majority of participating parents (60.6%) indicated that housing costs were "occasionally burdensome," and more than one-fifth (20.7%) found housing costs "very burdensome," while approximately 19% (18.7%) felt that these costs were "not burdensome at all."

Laoues' [45] survey, which was based on 1297 children with disabilities, supports the notion that passive leisure activities such as listening to music (37.2%) and watching television (29.0%) dominate among these children. The study also highlights gender differences in the frequency and intensity of sports activities among children with disabilities. Boys participate more often (61.4%) and more frequently ("more than 3 times a week" 4.3%) in sports than girls (56.9%; "more than 3 times a week" 2.9%). Boys also show greater enthusiasm for sports, as evidenced by higher percentages expressing a love for sports (77.8% boys; 71.7% girls), a desire for sports (76.6% boys; 73.1% girls), and feeling capable of engaging in sports activities (88.2% boys; 85.9% girls). The study also reveals that organized sports within the school environment (41.5%) are popular among children with disabilities due to the lack of accessibility and more challenging accessibility elsewhere.

Table 1 summarizes the limiting factors influencing the sporting or sports consumption habits of disadvantaged individuals and their literature background. Studies highlight that financial constraints, stemming from low employment status, low educational attainment, and low income, are major barriers to sports consumption. Access limitations to sports clubs and gyms are also mentioned, as are the costs of travel or accessing sports opportunities further away from home. In disadvantaged areas, lack of neighborhood safety, road conditions, high crime rates, or, in the case of people with disabilities, lack of accessibility, can be limiting factors for sports participation. Several studies report that social prejudices and stereotypes negatively affect disadvantaged children, limiting their access to sports and hindering their participation.

Table 1. Studies Examining Sporting and Sports Consumption Habits Among Socioeconomically Disadvantaged Individuals

<i>Possible constraints on Sports Participation</i>	<i>Description of the constraints</i>	<i>Literatures</i>
Financial constraints	The acquisition of sports gear and equipment, as well as the membership fees of sports clubs, can pose a financial burden on families with low income.	[16][42]
Prioritizing the satisfaction of basic needs	Parents sometimes find it challenging to prioritize sports when the family has other immediate needs, such as food, housing, or education	[41][45][21]
Accessibility and transportation	Sports clubs and fitness centers may be far from the place of residence, and the lack of public transportation options or high costs may hinder children from regular participation.	[47][45][43][44]
Social Environment	In some disadvantaged neighborhoods, environmental challenges such as crime or a lack of safety can prevent children from freely and safely participating in sports activities. For individuals with disabilities, the absence of accessible facilities can hinder sports participation.	[40][35][9][21]
Related stereotypes	Social prejudices and stereotypes can influence the access of disadvantaged children to sports and hinder their participation.	[59][63][21]

Physical activity has numerous positive effects on both children and adults. Supporting sports activities, especially for disadvantaged children, is particularly crucial for various reasons. Engaging in sports can provide them with advantages such as facilitating social integration through sports or enhancing self-confidence and perseverance. Sports contribute to their healthy physical, mental, and social development, reducing health inequalities and ensuring better academic performance. Additionally, sports serve as a protective factor against deviant behavior or substance abuse. The literature background summarizing these benefits is presented in Table 2.

Table 2. Benefits of sports

<i>Benefits</i>	<i>Description</i>	<i>Literatures</i>
Social Integration	Sports provide children with the opportunity to establish and strengthen social connections, regardless of their background.	[30][56][20][2]
Self-esteem and Perseverance	Participation in sports activities can promote the development of self-esteem and perseverance, which can be beneficial in other areas of life later on.	[13][18]
Healthy Lifestyle	Engaging in sports can contribute to the adoption of a healthy lifestyle and help prevent chronic diseases.	[17][60]
Learning Skills	Team sports, competitions, and other sporting events can promote learning skills such as problem-solving and teamwork development.	[32]
Supportive Community	The support provided by sports clubs and coaches can help children build positive and supportive community relationships.	[14][46]
Protective Factor Against Deviance	Sports participation serves as a protective factor against substance use, crime, or other deviant behaviors.	[30][48][29]

Supporting sports activities for socioeconomically disadvantaged children requires active involvement from the government, educational institutions, and non-governmental organizations in developing measures to promote equal opportunities.

5. Conclusions

Participation in sports and leisure activities is crucial for socioeconomically disadvantaged adults and children, as these activities promote health improvement, social integration, and contribute to reducing health inequalities. Physical activity enhances cardiovascular health, reduces the risk of chronic diseases, and helps maintain mental health, which is particularly important for individuals living in stressful or challenging circumstances. Supporting participation in sports provides an opportunity for disadvantaged groups to engage in community activities, enhancing their social skills and self-confidence while strengthening relationships and networks.

Supporting involvement in recreational sports not only benefits individuals' health and well-being but also contributes to reducing societal inequalities, ensuring that everyone has access to the tools and opportunities necessary for a healthy lifestyle. Therefore, it is crucial for decision-makers, educational institutions, non-governmental organizations, and communities to collaborate in facilitating access to sports for socioeconomically disadvantaged adults and children, thereby contributing to narrowing the gap between healthier and less healthy populations.

References

- [1] Balatoni, I. – Varga Szépné, H. – Müller, A. – Kovacs, S. – Kosztin, N. – Csernoch, L. (2019): Sporting Habits of University Students in Hungary. *Baltic Journal of Health and Physical Activity*, 11(6), 5.
- [2] Becker, S. – Häring, A. (2012): Social Integration and Sport? An Analysis of The Relationship Between Physical Activity and Social Integration. *Sportwissenschaft*, 42, pp. 261-270.
- [3] Bendíková, E. – Rozim, R. – Marko, M. – Müller, A. (2018): Effect of Targeted Health Exercises Within Physical and Sport Education on Postural System of Pupils. In: Popović, S. – Antala, B. – Bjelica, D. – Gardašević, J. (Ed.) *Physical Education In Secondary School: Researches – Best Practices – Situation*. Nikšić, Of Montenegro, Faculty For Sport And Physical Education pp. 11-21.
- [4] Biró, M. – Müller, A. – Lenténé Puskás, A. – Pucso M. J. – Czeglédi, H. O. (2020): The Role of Swimming in Preserving Health. *Slovak Journal of Sport Science*, 6(2).
- [5] Boda, E. – Honfi, L. – Biró, M. – Révész, L. – Müller, A. (2015): A szabadidő eltöltésének és a rekreációs tevékenységeknek a vizsgálata egri lakosok körében. *Acta Academiae Agriensis. Sectio Sport*, (42) pp. 49-62.
- [6] Boda, E. J. – Müller, A. – Biró, M. – Széles-Kovács, Gy. – Nagy, Zs. – Ráthonyi-Ódor K. – Lengyel, H. A. – Dobay, B. – Hidvégi, P. (2016): A Study on Attitude to Health Among Kindergarten Children. In: Bendíková, E. – Mičko, P. (Ed.) *Physical Activity, Health and Prevention: International Scientific Conference: Conference Textbook of Invited Lectures*. 106 P. Konferencia Helye, Ideje: Banská Bystrica, Szlovákia, pp. 15-24.
- [7] Borbély, A. – Müller, A. (2008): *A Testi-Lelki Harmónia Összefüggései és Módszertana*. Budapest, Magyarország: Professzorok Az Európai Magyarországiért Egyesület, 211 p.
- [8] Börnhorst, C. – Tilling, K. – Russo, P. – Kourides, Y. – Michels, N. – Molnár, D. – Rodríguez, G. – Moreno, L. A. – Krogh, V. – Ben-Shlomo, Y. – Ahrens, W. – Pigeot I. (2016): Associations Between Early Body Mass Index Trajectories And Later Metabolic Risk Factors In European Children: The IDEFICS Study. *European Journal Epidemiol*, (31) pp. 513–525.
- [9] Collins, M. F. – Collins, M. – Kay, T. (2014): *Sport And Social Exclusion*. London: Routledge.
- [10] Czeglédi, H. O. – Lenténé Puskás, A. – Müller, A. – Biró, M. (2020): Az úszás, mint az egészség megőrzésének és megtartásának eszköze. *Különleges Bánásmód-Interdiszciplináris Folyóirat*, 6(2), pp. 35-47.

- [11] ELEF (2019): Európai lakossági egészségfelmérés, https://www.ksh.hu/docs/hun/xftp/idoszaki/elef/te_2019/index.html
- [12] Farkas, P. (2013): Rosszabbodó Szociális Helyzet és a Kirekesztettség Magyarországon a Válság Időszakában. *Eszmélet*, 22(87), pp. 23-32.
- [13] Feltz, D. L. (2007): Self-Confidence and Sports Performance. *Studies*, 33(41), pp. 50-66.
- [14] Fraser-Thomas, J. L. – Côté, J. – Deakin, J. (2005): Youth Sport Programs: An Avenue To Foster Positive Youth Development. *Physical Education & Sport Pedagogy*, 10(1), pp. 19-40.
- [15] Gabnai, Z. – Müller, A. – Bács, Z. – Bácsné, Bába É. (2019): A Fizikai Inaktivitás Nemzetgazdasági Terhei. *Egészségfejlesztés*, 60(1), pp. 20-30.
- [16] Gombás, J. (2017): Budapesten Élő, 18-65 Év Közötti Látássérült Személyek Szabadidő-Sportolási Szokásainak, És A Szabadidősport Látássérültek Számára Akadálymentes Hozzáféréseinek Vizsgálata (Doctoral Dissertation, Testnevelési Egyetem).
- [17] Griban, G. – Yavorska, T. – Tkachenko, P. – Kuvaldina, O. – Dikhtiarenko, Z. – Yeromenko, E. – Prontenko, K. (2020): Motor Activity As The Basis Of A Healthy Lifestyle Of Student Youth. *Wiad Lek.* 73(6) pp. 1199-1206.
- [18] Herpainé Lakó, J. – Simon, I. Á. – Nábrádi, Z. – Müller, A. (2017): Családok Sportolási Szokásainak Szocioökonómiai Háttérére. *Képzés És Gyakorlat: Training And Practice*, 15(4), pp. 37-52.
- [19] Hőnyi, D. – Kinczel, A. – Váci, P. – Müller, A. (2021): Fiatalok Rekreációs Tevékenységeinek Vizsgálata. *Különleges Bánásmód*, 7(2) pp. 105-110.
- [20] Hylton, K. (2010): Sport and Social Integration. In *Routledge Handbook of Sports Development*, London: Routledge, pp. 100-113.
- [21] Katona, P. M. (2019): „Egy Rögös Út A Csillagokig” A Szegénység, Mint Motivációs Tényező A Sport Világában. In: *Sport és Társadalom*, pp. 59-79.
- [22] Kinczel, A. – Fülöp-Pipó, M. – Pálincás, R. – Židek, P. – Laoues-Czimbalmos, N. – Lengyel, A. – Müller, A. (2023): The Experiences of Physiotherapy in Preschools in the Light of a Kindergarten Research In Hajdúböszörmény. *Különleges Bánásmód-Interdiszciplináris Folyóirat*, 9(3), pp. 27-34.
- [23] Kinczel, A. – Laoues-Czimbalmos, N. – Müller, A. (2020a): A Fiatalok Szabadidősporttal, Sportmotivációjával Kapcsolatos Kutatások Tapasztalataiból. *Acta Carolus Robertus*, 10(2), pp. 97-116.
- [24] Kinczel, A. – Maklári, G. – Müller, A. (2020b): Recreational Activities And Motivation Among Young People. *Geosport For Society*, 12(1), pp. 53-65.
- [25] Kinczel, A. – Müller, A. (2020): Aktivitás, Szabadidősport. *Különleges Bánásmód-Interdiszciplináris Folyóirat*, 6(2), pp. 49-58.
- [26] Kinczel, A. – Müller, A. (2022): Study on Travel Habits and Leisure Activities in the Light of Covid-19 Triggered Changes In Romania And Hungary. *Geo Journal Of Tourism And Geosites*, 41(2), pp. 440-447.
- [27] Kiss, A. – Laoues-Czimbalmos, N. (2022): Az Egészség Szerepe Hátrányos Helyzetű Romák Körében. *Oxipo: Interdiszciplináris E-Folyóirat* 4(4), pp. 35-46.
- [28] Kórik, V. – Kinczel, A. – Pálincás, R. – Molnár, A. – Müller, A. (2022): Leisure Opportunities for Families With Small Children That Make The Preschool Admission Period Easier And Promote The Love Of Preschool Life. *Gradus*, 9(2).
- [29] Kovács, K. – Müller, A. (2019): Rizikó-Magatartással Jellemezhető Hallgatók Tanulmányi Kockázatai. *Acta Medicinæ Et Sociologica*, 10(28), pp. 63-78.
- [30] Kovács, K. (2016): Közép-Kelet-Európai Hallgatók Sportolásának Szociokulturális Jellemzői. In: *Értéktérítő Testnevelés: Tanulmányok A Testnevelés És A Sportolás Szerepéről A Kárpát-Medencei Fiatalok Életében. Oktatókutatás A 21. Században* (1). Debreceni Egyetemi Kiadó, Debrecen, Pp. 175-186. ISBN 978-963-318-597-1
- [31] Kovács, K. (2016): Sport és Inklúzió. In: *Semsei, I. – Kovács, K. (Ed.) Inkluzív Nevelés - Inkluzív Társadalom*. Debrecen, Magyarország: Debreceni Egyetemi Kiadó, Pp. 294-316.

- [32] Kovács, K. (2018): A Sportolás és a Perzisztencia Összefüggésének Vizsgálata Öt Ország Hallgatóinak Körében. *Magyar Pedagogia*, 118(3), pp. 237-254.
- [33] Kruk, J. (2007): Physical Activity in the Prevention of the Most Frequent Chronic Diseases: An Analysis of the Recent Evidence. *Asian Pacific Journal of Cancer Prevention*, 8(3), pp. 325-338.
- [34] KSH (2021): Hátrányos helyzetű és halmozottan hátrányos helyzetű gyermekek. <https://www.ksh.hu/sdg/1-22-sdg-1.html>
- [35] Laoues-, Czimbalmos N. – Dobay, B. – Müller, A. (2019b): Examination Of The Leisure Time-Related Consumption Habits Of Young People With Disabilities With Special Emphasis On Sports. *Selye E-Studies*, 10(2), pp. 34-45.
- [36] Laoues-C., N. – Müller, A. – Mező, K. – Mercs, E. – Molnár, A. (2019): A Környezeti Nevelés És Az Egészséges Életmód Értékpreferenciáinak Vizsgálata A "Zöld" És "Nem Zöld" Óvodába Járó Gyermekek Szülei Körében. *Acta Carolus Robertus*, 9(2) pp. 89-108.
- [37] Laoues-C., N. – Müller, A. (2018): Az Integráció-Szegregáció Helyzete Egy Kutatás Tükrében. Különleges Bánásmód, 4(4), pp. 19-31.
- [38] Laoues-C., N. – Szerdahelyi, Z. – Müller, A. (2021): Development Of Leisure And Sports Consumption And Sports Motivation Among Children With Disabilities. *Applied Studies In Agribusiness And Commerce*, 15(1-2).
- [39] Laoues-Czimbalmos, N. – Bácsné Bába, É. – Mező, K. – König-Görögh, D. – Müller, A (2020a): Fogyatékos Tanulók Szabadidős Preferenciarendszerének Elemzése Egy Kutatás Tükrében. *IJEMS - International Journal Of Engineering And Management Sciences*, 5(1), pp. 98-115.
- [40] Laoues-Czimbalmos, N. – Müller, A. – Bácsné, Bába É. (2019a): Fogyatékossággal Élő Gyerekek Sportfogyasztási Szokásainak Vizsgálata Az Akadálymentesített Kínálati Elemek Tükrében. *Economica (Szolnok)*, 10(1), pp. 21-29.
- [41] Laoues-Czimbalmos, N. – Pogácsás, G. – Müller, A. (2020b): A család szerepe az egészséges életmód elemeinek kialakításában egy hátrányos helyzetűeket vizsgáló kutatás tükrében. In: Vargáné, Nagy A. (Ed.) *Családi Nevelés: Generációk Közötti Konfliktusok És Megoldási Stratégiák*. Budapest, Magyarország : Forstag Nonprofit Közhasznú Kft., pp. 81-96.
- [42] Laoues-Czimbalmos, N. – Szerdahelyi, Z. – Müller, A. (2021): Development of Leisure and Sports Consumption and Sports Motivation Among Children with Disabilities. *Apstract - Applied Studies in Agribusiness and Commerce*, 15(1-2), pp. 75-82.
- [43] Laoues-Czimbalmos, N. (2021a): Az Észak-Alföldi És Észak-Magyarországi Régiókban Fogyatékossággal Élő Tanulók Szabadidő-Eltöltési Szokásai. *Acta Carolus Robertus*, 11(1), pp. 51-59.
- [44] Laoues-Czimbalmos, N. (2021b): A Köznevelésben Résztvevő Fogyatékos Tanulók Sportolási Szokásainak Vizsgálata. *Gradus*, 8(1), pp. 71-79.
- [45] Laoues-Czimbalmos, N. (2023): A Fogyatékossággal Élő Diákok Szabadidő-És Sportfogyasztási Szokásai És Azokat Meghatározó Tényezők Vizsgálata. *Phd Disszertáció, Debreceni Egyetem*, 210.p.
- [46] Lin, Y. C. – Chalip, L. – Christine Green, B. (2016): The Essential Role Of Sense Of Community In A Youth Sport Program. *Leisure Sciences*, 38(5), pp. 461-481.
- [47] Lukács, A. – Lenténé Puskás, A. (2022): Examination of Sports Habits in Disadvantaged Settlements. *Stadium – Hungarian Journal of Sport Sciences*, 5(1), pp. 1-13.
- [48] Mikulán, R. – Pikó, B. (2012): Iskoláskorú Sportoló Fiatalok Káros Szenvedélyeinek Vizsgálata Sportmotivációik És A Sportáguk Típusa Tükrében. *Iskolakultúra*, 22(4), pp. 35-49.
- [49] Mosonyi, A. – Könyves, E. – Fodor, I. – Müller, A. (2013): Leisure Activities and Travel Habits of College Students In The Light Of A Survey. *Apstract - Applied Studies in Agribusiness and Commerce*, 7(1), pp. 57-61.
- [50] Müller, A. – Bendíková, E. – Herpainé Lakó, J. – Bácsné Bába, É. – Łubkowska, W. – Mroczek, B. (2019): Survey of Regular Physical Activity and Socioeconomic Status in Hungarian Preschool Children. *Family Medicine and Primary Care Review*, 21(3), pp. 237-242.
- [51] Müller, A. – Bíró, M. – Boda, E. – Herpainé, Lakó J. (2017): Az óvodások testtömegének és sportolási szokásainak összefüggései egy egri kutatás tükrében. *Acta Academiae Paedagogicae Agriensis Nova Series: Sectio Sport* 44 Pp. 191-203.

- [52] Müller, A. – Laoues-Czibalmos, N. – Szerdahelyi, Z. – Boda, E. – Mező, K. (2021): A Gyógypedagógiai Mozgásfejlesztés Szerepe És Módszertani Aspektusai. Különleges Bánásmód-Interdiszciplináris Folyóirat, 7(3), pp. 101-112.
- [53] Müller, A. – Széles-Kovács, G. – Seres, J. – Kristonné Bakos, M. (2011): Főiskolai Hallgatók Rekreációs Tevékenységei. *Rekreacio.Eu*, 1(4), pp. 31-36.
- [54] Müller, A. (2018): Obesity and Overweight in Hungary, Focussing on Among High School Students. In: Bendíková, E. (Ed.) *Physical Activity, Health and Prevention III.: International Scientific Conference: Conference Textbook*. Zilina, Szlovákia: IPV Institute of Education, IPV Inštitút Priemyselnej Výchovy, pp. 6-16.
- [55] Müller, A. (2023): Development of Postural Defects and Deformities Among Primary and Secondary School Students Served by the Hajdú-Bihar County Pedagogical Professional Service and Their Prevention and Intervention Options with Recommendations. In: Bendíková, E. (Ed.) *Health-Oriented Fitness, Postural Health and Prevention in Pupils: Collection of Scientific Articles*. Usti Nad Labem, Csehország: University of Jan Evangelista Purkyně In Ústí Nad Labem, pp. 34-42.
- [56] Orbán-Sebestyén, K. – Farkas, J. – Sáringerné, Szilárd Zs. – Ökrös, Cs. (2021): Az Értelmi Fogyatékossgal Élő Emberek Inklúziójával Kapcsolatos Hazai Kutatások Összehasonlító Elemzése. *Magyar Sporttudományi Szemle*, 22(6), pp. 54-67.
- [57] Pálincás, R. – Kinczel, A. – Miklósi, I. – Váci, P. – Laoues-Czibalmos, N. – Müller, A. (2022): Lifestyle Education, Health Education, Environmental Education, Movement. *Acta Carolus Robertus*, 12(1), pp. 129-142.
- [58] Simon, I. Á. – Kajtár, G. – Herpainé, Lakó J. – Müller, A. (2018): A fizikai aktivitás és a mentális egészség jelentősége a 60 év fölötti korosztály életében. *Képzés És Gyakorlat: Training and Practice* 16(1), pp. 25-36.
- [59] Somerset, S. – Hoare, D. J. (2018): Barriers to Voluntary Participation in Sport for Children: A Systematic Review. *BMC Pediatrics*, 18(1), pp. 1-19.
- [60] Sopa, I. S. – Pomohaci, M. (2018): Developing A Healthy Lifestyle of Students Through the Practice of Sport Activities. *Land Forces Academy Review*, 23(3), pp. 207-218.
- [61] Szabó, D. – Kovács-Nagy, K. – Müller, A. (2022): Interrelations Between Sport and Leisure Activities Among High School Students. *Central European Journal of Educational Research*, 4(1), pp. 41-52.
- [62] Szabó, K. – Kinczel, A. – Molnár, A. – Müller, A. (2021): A táplálkozás és testmozgás kiemelkedő szerepe az egészséges életmódban. *Táplálkozásmarketing*, 8(2), pp. 49-60.
- [63] Tintori, A. – Ciancimino, G. – Vismara, A. – Cerbara, L. (2021): Sports As Education: Is This A Stereotype Too? A National Research On The Relationship Between Sports Practice, Bullying, Racism And Stereotypes Among Italian Students. *Cogent Education*, 8(1), pp. 1938385.
- [64] Tóvizi, A. – Kinczel, A. – Zidek, P. – Lengyel, A. – Pálincás, R. – Laoues-C. N. – Molnár, A. – Müller, A. (2023): The Role and Importance of Play In Physiotherapy. *Geosport For Society* 19(2), pp. 98-110.
- [65] WHO (2020): Guidelines on Physical Activity and Sedentary Behaviour. *British Journal of Sports Medicine*, 54, pp. 1451-1462.
- [66] WHO (2023): European Health for All Database, <https://gateway.euro.who.int/en/datasets/european-health-for-all-database/>