

Sports motivation and sports opportunities of people with physical disability: The case of Hungary

BERNADETT TÓTH^{1,3*}  and TÜNDE MÁTÉ²

¹ Institute of Management, Corvinus University of Budapest, Budapest, Hungary

² Institute of Engineering, Alba Regia Faculty, Óbuda University, Székesfehérvár, Hungary

³ Rajk College for Advanced Studies, Budapest, Hungary

Received: March 27, 2024 • Revised manuscript received: August 6, 2024 • Accepted: October 29, 2024



© 2024 The Author(s)

ABSTRACT

This article examines the sports motivation and sports opportunities of people with physical disability in Hungary, filling a gap in the research area. A total of 122 people (76 athletes) participated in the questionnaire research. We supplemented the quantitative research with qualitative research, in which we assessed the experiences of sports leaders through expert interviews. As a result of the research, we have shown that gender affects participation in sports, but has no role in sports motivation. Furthermore, we have established that for athletes with reduced mobility, mostly external motivational factors are different. Intrinsic motivation is strongest in the case of paralympic athletes. The main reason for amotivation among non-athletes with reduced mobility is the lack of adequate sports facilities close to the place of residence. Most athletes get to the venue of their sporting activity by car alone. Lack of peers has also been found to be a common reason for amotivation among respondents. Organising inclusive and mixed sports events could be a solution to the problem, promoting involvement in sport and social integration.

KEYWORDS

sports motivation, social integration, athletes, disability

JEL

Z20, I14, J10, L83

* Corresponding author. E-mail: bernadett.toth3@stud.uni-corvinus.hu

1. INTRODUCTION

Since 2010, sport has been a strategic priority for the Hungarian government, the goals for which have included supporting people with disabilities and increasing their participation both in leisure and professional sports. In 2017, Parliament declared February 22 to be Hungarian Parasport Day. Promoting the sport of people with disabilities and increasing the number of paralympic competitors are among the long-term goals of both the International and the Hungarian Paralympic Committees ([International Paralympic Committee 2011, 2015, 2019; Urr 2022; Sygall 2022](#)). The present research aims to examine the sports motivation and opportunities of the physically disabled in and through sport, using a sports motivation scale ([Paic et al. 2017; Sabaliauskas 2019](#)), as well as to identify the external factors that affect sports motivation. Sport business research in Hungary is developing fast, but this is nonetheless the first study on the subject area described ([András et al. 2019](#)).

The Convention on the Rights of Persons with Disabilities (CRPD) recognises that “disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others” ([United Nations 2006](#)).

Consequently, this paper focuses on the role of sport in social integration, from the social level to the level of the individual, where sport is more than just sport: it is an opportunity. Time spent in active sport improves health and the value of education for all people ([Szabó 2013; Szabó et al. 2021](#)). In addition, sport contributes to the social integration and welfare of disabled people: it modifies society’s views of people with disabilities and, in turn, their own views of themselves ([Dimitrova 2017](#)).

The International Paralympic Committee’s long-term goal is to make the Paralympic Games elite sport, a self-contained social vacuum where only athletic performance matters, not disability ([Purdue – Howe 2012](#)). The media would be a good instrument for this endeavour, but [Purdue and Howe \(2013\)](#) write, among other things, that the media forms an “elite” layer of para-athletes who are media-capable and through their sports performance “cease” to be disabled for society. In some cases, this form of elitism can have a demotivating effect on people with disabilities who are not as successful in sports.

On a related note, [Purdue and Howe \(2012\)](#) also created the paradox of the Paralympics. The importance of the Paralympic paradox appears in the efforts to transform sports events which are interpreted as symbolic capital into economic capital. However, this is also accompanied by subordination and a power imbalance among the stakeholders of the Paralympic Movement, regardless of whether they have the cultural capital that arises from being a Paralympian. “The Paralympic Paradox is highly significant in understanding the socio-cultural context in which disability and sport are articulated in the Paralympic Games” ([Purdue – Howe 2012: 15](#)).

2. THEORETICAL FRAMEWORK

The theoretical framework of social integration studies is provided by Parson’s AGIL model: the elements of adaptation (A), goal attainment (G), integration (I), and latent pattern maintenance (L) are applicable in sport as well, since the values of knowledge, motivation and developing skills drive the individual to make efforts ([Delaney 2015](#)). Research into social integration in the



specific case of sports must handle the five external constraint factors of involvement in sports: interpersonal constraints, lack of equipment, transport and location constraints, economic and financial limitations, and the lack of an adequate infrastructure (Darcy et al. 2016).

There are several studies in the sports science literature about disabled people's physical activity, but these mostly only examine sport from the perspective of the labour market (Lins et al. 2019). However, Blauwet and Willick (2012) combine the study of paralympic movements and health. They argue that "the promotion of health, disability rights, and social integration through sports has the power to transform the lives of those who participate and to further stimulate the expansion of opportunities available to the next generation of athletes with disabilities" (Blauwet – Willick 2012: 1).

2.1. Sports motivation scale

As Ryan and Deci point out, motivation has always been a crucial issue in psychology, as it is at the nexus of biological, cognitive, and social regulation. Today, it is even more highly valued due to its consequences, because "motivation produces" (Ryan – Deci 2000: 69).

The Self-Determination Theory (SDT) developed by Ryan and Deci defines SDT as "an approach to human motivation and personality that uses traditional empirical methods while employing an organismic metatheory that highlights the importance of humans' evolved inner resources for personality development and behavioural self-regulation" (Ryan – Deci 2000: 1). Over the years, the motivation theory has been repeatedly extended. The latest version, which sports motivation scales (SMS) apply, establishes six factors of regulation (Ryan – Deci 2000). In sports motivation research, we analyse the intrinsic and extrinsic factors that affect it. Intrinsic motivation means that athletes practise sport because it is pleasurable and interesting, and there is room for their improvement and extrinsic motivation means that the athlete is engaged in a sport under external pressure in order to achieve something.

Based on the Self-Determination Theory, Pelletier et al. (1995) used the results of a French-Canadian research project to elaborate an English language SMS scale. They set up seven subscales, measuring three types of intrinsic motivation, three forms of regulation for extrinsic motivation, plus amotivation.

Intrinsic motivation means that athletes practise sport because it is pleasurable and interesting, and there is room for them to improve. Pelletier et al. (1995) define the following types:

1. *Intrinsic motivation to know*: exploration, curiosity, learning goals and a desire to learn and understand are the athlete's driving forces." Pelletier et al. (1995) give the example of the intrinsic motivation of athletes who try to discover new training techniques for the sheer pleasure of the experience.
2. *Intrinsic motivation toward accomplishments* means being task-oriented. The person is engaged in an activity in order to achieve something; it encourages creativity.
3. *Motivation to experience stimulation*: Athletes who participate in their sport in order to live exciting experiences are intrinsically motivated to experience stimulation.

Extrinsic regulation means that the athlete is engaged in a sport under external pressure in order to achieve something.

1. *External regulation*: in this case, the athlete is engaged in sport for a reward (money) or to avoid negative consequences (parents' disapproval).



2. *Introjection*: the main driving force is that the person wishes to feel valuable and does sport in order to avoid guilt and shame.
3. *Identification*: sport is a part of the personal development of athletes who are engaged because sport is important for them.

The third dimension is amotivation, i.e., the lack of motivation. Amotivated athletes are neither intrinsically nor extrinsically motivated to continue to train.

The scale is made up of seven factors and 28 questions (Csóka – Töröcsik 2019). Mallett et al. (2007) were the first to use integrated regulation in the sports motivation scale (SMS-6). (In the case of *integrated regulation*, the individual's sport activity is in line with the individual's ambition in life and needs.) The primary aim of their research was to develop a new version of SMS which fits the answers given in the Australian sample. The outcome of their research was a questionnaire of six factors and 24 questions (Mallett et al. 2007).

This research prompted Pelletier et al. (2013) to develop the original sports motivation scale further, supplementing it with integrated regulation. In addition, they merged the three types of intrinsic motivation. Thus, the SMS-II scale looks at sports people's motivation, using 18 questions in six dimensions.

The Hungarian H-SMS scale developed by Paic et al. (2017) offers two novelties. Firstly, the questionnaire includes not only the final questions of SMS-II, but the entire so-called 'item pool'. The item pool comprises the preliminary and controlled questions for compiling the final version of the scale, which typically differ in the way they are posed rather than in their content. The final questionnaire has six dimensions and 19 questions. The second novelty of the scale is that intrinsic motivation is divided into two subfactors: perceived competence (effective) and motivation to increase self-efficiency (cognitive).

The present research context is closest to the sports motivation scale of Sabaliauskas (2019), who validated the scale to Lithuanian paraspports people. He has found that athletes with disabilities tend to be more process oriented, meaning that their intrinsic motivation is more dominant. His results are significant because they enable us to view athletes' needs and motivations from a different perspective. For example, the "motivation to learn" subscale of the original SMS focuses on improvement as an objective fact, while according to Sabaliauskas' results, motivation to learn is due to personal improvement and gaining experience; therefore, there is an overlap with questions addressing motivation to gain experience. The scale Sabaliauskas used was considerably different from the ones we have introduced so far. It uses a five-step Likert scale rather than the previous seven-step one. In his analysis, he establishes four factors: "(1) intrinsic motivation to discover, (2) feel improvement, (3) extrinsic motivation – need for social dependency, and (4) signs of amotivated behaviour" (Sabaliauskas 2019: 31). The scale comprises 20 questions but is valid and reliable.

3. OVERVIEW OF SPORTS MOTIVATION RESEARCH

The design of our research began with an overview of relevant research. In Table 1, we have collected 16 relevant studies, and we then summarise the results of the most important ones. Based on relevant research area, two categories were defined: *sports motivation and sports consumption habits*, as well as *sports opportunities and challenges*.



Table 1. Sports motivation research

Authors	Issues	Location	Keywords	Methodology
Perreault (2007)	Sport motivation and coping skills	Canada	SDT, amotivation, motivation, wheelchair basketball players with (out) disability	Questionnaires (n = 72)
Riley et al. (2008)	Approach for improving the accessibility of fitness and recreation environments	America	Fitness facilities, environment, physical activity	Systematic review
Jaarsma et al. (2014)	Overview of the literature on barriers to and facilitators of sports participation for people with physical disabilities	International	Personal barriers, environmental barriers	Systematic review (n = 52)
Di Palma et al. (2016)	Demonstrates that sport can generate socio-economic benefits for disabled people	International	Inclusion, Integration, Prisma, social-economic	Systematic review (n = 9)
Zhou et al. (2016)	Reasons why are disabled people engage in sport	China	Para table tennis players, gender differences, relations in sport and in the family	Questionnaires and interviews (n = 83)
Devine et al. (2017)	Tools for fighting negative prejudices concerning abilities of disabled people	Five Pacific countries	Gender differences, local communities, role models	Interviews (n = 60)
Paic et al. (2017)	Validation of the H-SMS	Hungary	Gender differences, differences according to age	Questionnaires (n = 500)
Abdullah et al. (2017)	Investigation of motivations for disabled people's active participation in sport	Malaysia	Gender differences, young people - adults, health preservation	Questionnaires (n = 100)
Blauwet (2019)	Examination of the known barriers to physical activity of disabled people in the case of different disabilities	International	Disability, Physical Activity, Exercise	Data analysis

(continued)



Table 1. Continued

Authors	Issues	Location	Keywords	Methodology
Laoues-Czibalmos et al. (2019)	Sports motivational factors among the 8-to-18-year-olds	Northern Hungary	Gender differences, amotivation, health preservation	Questionnaires (n = 100)
Sabaliauskas (2019)	Validation of the SMS and its results with parasports people	Lithuania	Social integration, development, persons with partial vision and hearing	Questionnaires (n = 66)
Balaton - Varga (2020)	The development of sports opportunity among people who living with physical disability	International	Parasport, motivation, infrastructure, active lifestyle	Systematic review
Mitić et al. (2020)	Examines the existence of differences in self-efficacy between wheelchair basketball players and non-wheelchair basketball players	Six Balkans countries	Self-Efficacy, Goalball, Wheelchair Basketball, visual impairment	Questionnaires (n = 52)
Çelenk (2021)	Effects of motivation on physically disabled people's engagement in sport and quality of life	Turkey	Physically disabled people who are and are not engaged in sport,	Questionnaires (n = 732)
McKenzie et al. (2021)	To understand the attitudes, barriers, and facilitators to physical activity participation for young people and adults with childhood-onset physical disability.	International	social and physical environment, barriers, attitudes, young people and adults with childhood-onset physical disability	Systematic review (n = 19)
Szabó - Kajos (2023)	Examine of sports motivation factors at workplace based on H-SMS	Hungary	Workplace physical activity programme; value drivers; motivation	Questionnaires (n = 728) and interviews

Source: authors.



Based on the review by [Di Palma et al. \(2016\)](#), investing in disability sport is a valuable resource that requires various socio-economic support policies. Engaging in sports empowers disabled athletes, enabling them to attain higher levels of self-esteem and autonomy than those who do not participate, which means it promotes social and economic inclusion.

Based on [Perreault's \(2007\)](#) research, SDT can also be used to understand the motivations of athletes with disabilities. He came to the conclusion that self-determined forms of motivation positively help coping both in and outside of sport, while amotivation negatively affects coping.

The study by [Riley et al. \(2008\)](#) presents a conceptual framework for improving the accessibility of fitness and recreation facilities for people with disabilities. The framework includes three levels of accessibility: (1) physical accessibility, (2) programmatic accessibility, and (3) attitudinal accessibility. The authors emphasise the importance of creating an inclusive environment that accommodates the needs of people with disabilities and provides them with equal opportunities to participate in physical activity. The study concludes that addressing all three levels of accessibility is necessary to improve the participation and quality of life of people with disabilities. The systematic review conducted by [Jaarsma et al. \(2014\)](#) identified various barriers and facilitators that affect the sports participation of people with physical disabilities. Barriers included personal factors such as fear of injury and lack of confidence, environmental factors such as lack of accessible facilities and transportation, and social factors such as stigma and discrimination. Facilitators included personal factors such as positive self-image and motivation, environmental factors such as accessible facilities and transportation, and social factors such as social support and inclusive policies. Sports participation may serve as an important factor in developing self-efficacy in people with disabilities, which could lead to improved physical and psychological outcomes ([Mitić et al. 2020](#)). [Blauwet \(2019\)](#) meanwhile emphasises that promoting sports and physical activity for people with disabilities is not only a matter of health but also a matter of social justice and equity.

Facilitators of physical activity participation include social support, positive attitudes towards physical activity, and access to adapted equipment and facilities ([McKenzie et al. 2021](#)). The low sports participation rate of persons with disabilities is largely due to the lack of information ([Balatoni – Varga 2020](#))

The United Nations' Sport for Development programme (S4D) enables encounters between people with and without disability in a positive social environment that promotes inclusion and helps in breaking down negative prejudices about the capabilities of disabled people. For the success of the project, local communities, champions, and role models, as well as sensitivity to gender issues are needed ([Devine et al. 2017](#)). The researchers did interviews in five Pacific countries, trying to make their sample representative based on residence. They interviewed 60 people between March and May 2015 ([Devine et al. 2017](#)). Their findings are presented in [Table 2](#), organised according to topics.

Using a sample of 732 physically disabled individuals in Turkey, with 327 engaged and 405 not engaged in sport, [Çelenk \(2021\)](#) concludes that there are major differences between the quality of life of those that do and those that do not do sports. These findings underline the positive role of sports motivation in improving disabled people's quality of life ([Çelenk 2021](#)). Furthermore, engagement in sport has a positive effect on cognitive learning processes, increasing activity and social integration.

[Zhou et al. \(2016\)](#) investigated gender-based differences in sports motivation among disabled Chinese table tennis players. In the case of both women and men, their living standards and



Table 2. Summary of the S4D project findings

Improvement in the quality of life of disabled people	Constraints to the social integration of the S4D project	Integration of the S4D project activities into sport
Improvement in self-worth and empowerment	Prejudice and discrimination	P2P stimulation and modelling
Improvement in wellbeing and health	Lack of family support	Disabled people's involvement in management
Improvement in social inclusion	Limited access to the project	Involvement of disabled people into every aspect of the programmes
Improvement in financial standing	Lack of information about sport	Encouragement and support from the state, sports organisations, and the family
The community's attitude to disabled people	Lack of options and competitive pathways, disability-specific barriers (e.g., transport)	Possibility of participation mainstream sport

Source: authors, based on [Devine et al. \(2017: 8–15\)](#).

social integration improved with active participation. However, there were differences as well. According to the results, male athletes tend to be more rational, more serious, and more responsible, and hope to be able to contribute to their family's standard of living and create value for society; in contrast, due to their family background and emotional psychological characteristics, women with disability show a stronger tendency to expect external rewards.

Besides gender-based differences, [Zhou et al. \(2016\)](#) have identified additional factors of motivation. In respect of age, they have found that for minors (14-to-18-year-olds), immediate reward is the important incentive, while for adults, knowledge and experience are more dominant. In terms of place of residence, the study shows that for respondents from rural areas internal motivation is much stronger than for people living in cities. Concerning education, university graduates demonstrate stronger internal motivation than less educated people. According to the questionnaire survey, internal motivation is strongest after 5–10 years of engagement in sport.

Based on analysing the motivation of athletes living with disability in Malaysia, [Abdullah et al. \(2017\)](#) have also spotted major differences between men and women. They identify five motivating factors of participating in sports. Their ranking for men is as follows: social integration, followed by fitness, social effective motives, task-orientation, and ego-orientation. In the ranking for women, fitness was the leading motive followed by social integration, task-orientation, social effective motives, and finally ego-orientation.

An investigation of 8-to-18-year-olds in Northern Hungary carried out by [Laoues-Czibalmos et al. \(2019\)](#) found that boys' need to participate in sport is 12.7 per cent higher than that of girls. Nevertheless, for both girls and boys, sport means health preservation, friendship, going out, having a good time, and relaxation. "Among the reasons for abstention from sport, the two that stand out are 'I am not familiar with the possibilities' and 'access is difficult'" ([Laoues-Czibalmos et al. 2019: 129](#)).



With the help of the H-SMS, Paic et al. (2017) explored Hungarian athletes' motivation. They found that in the case of men, extrinsic regulation and amotivation are stronger than with women. Regarding the relationship between motivational factors and age, they have established that with the passing of years, intrinsic motivation is falling and that the cognitive factor of intrinsic motivation is higher in every age group than the effective factor. Concerning extrinsic regulation, they have found that it first increases, then decreases, and over the age of 35, it starts increasing again. Szabó and Kajos (2023) also used the H-SMS scale for workplace sport motivation, where introjected and identified motivators were found to be the strongest.

4. RESEARCH DESIGN – DATA COLLECTION AND DATA ANALYSIS

In our empirical research, we applied both qualitative and quantitative methods. The “Completeness” approach, that we used, “implies that the gaps left by one method (for example, a quantitative one) can be filled by another (for example, a qualitative one) (Bryman 2012: 637).

As part of the quantitative research, an online questionnaire was created using Qualtrics software. The questionnaire covered the four areas of the research, i.e. sport motivation, sport participant (active) sport consumption, amotivational factors, and media coverage of sport for people with reduced mobility.

The dissemination was carried out through different national organisations and social media platforms between 9 March 2022 and 30 March 2022. Snowball sampling was used for the sampling procedure. The online questionnaire for the survey was forwarded to associations with a valid email address and distributed through social media platforms.

The survey, which contains 25 questions based on H-SMS used by Paic et al. (2017) and Sabaliauskas (2019). The questions use a 7-point Likert scale based on Paic et al. (2017). The Likert scale is a symmetrical scale that basically measures the degree of agreement with the statements. One of the main purposes of its use is to be able to associate the same attributes and levels of agreement with different items, thereby creating indexes. In the case of the scale, we cannot assume and generalise the equal distance between the attributes, thus it can primarily be interpreted on an ordinal measurement level (Joshi et al. 2015). Furthermore, the questionnaire included questions about active sports consumption habits and amotivation. During exploratory factor analysis (EFA), using the maximum likelihood method, we specified a value in advance to form the factors accordingly. However, due to the low number of elements, the multicollinearity in the model was too high, which was confirmed by the Confirmatory factor analysis (CFA), so the model did not fit. As a result, we used the original H-SMS (7 factors and 19 questions), and its reliability was tested for Cronbach's alpha. The value of it is 0.839, so the scale can be reliably applied to the sample. The scale was analysed on the sample using the Mann-Whitney U test (Mann – Whitney 1947) and the Kruskal-Wallis test (Kruskall – Wallis 1952). Our hypotheses were based on the literature and justified by our own experiences and involvement. One of the limitations of the research is common methods variance (CMV). This type of measurement bias occurs when the variance in a set of measures is attributed to a common method, rather than to the constructs being measured (Lindell – Whitney 2001).



In connection with the application of the scale, a challenge arose that, although the H-SMS was validated on a Hungarian sample, it does not specifically address the specific motivations of people with limited mobility. In contrast, the research of Sabaliauskas (2019) validated the scale on para-athletes and a much smaller sample, but in Lithuania. This type of sports motivation scale is validated by country, therefore we decided that the specificity of the country is more decisive than the state. The non-parametric tests and the factor analysis were limited by the low number of items in the sample, as well as the targeted sampling, the application of which biased the sample in the direction of athletes. The bias of the quantitative results was offset by qualitative research. Here, the sports manager's point of view was given greater emphasis in order to better understand the environmental factors influencing the motivation of athletes.

In the qualitative research, we conducted eight semi-structured professional interviews, posing questions in five areas: *motivation, inclusion, influences, opportunities, and constraints*. Table 3 provides information on the interviewees.

5. LIMITATIONS OF THE RESEARCH

The validity of the results and conclusions is not guaranteed, as the research has many limitations. The analysis of the recorded data was made difficult by the low number of items. The sample size is good compared to the size of the target group, as the group of people with disabilities is a small part of society and the specific target group, athletes with disabilities, is even smaller. Snowball sampling was used in the sampling procedure, but this does not ensure the representativeness of the sample. The online questionnaire for the survey was sent to clubs

Table 3. Number and position of interviewees

	Position
I1	Member of European Paralympic Committee
I2	Member of Fédération Internationale de l'Automobile, European Rally Championship, 2WD champion
I3	Hungarian Paralympic silver medallist wheelchair fencer, Founder of Paraktív Foundation
I4	Founder of Paraktív Foundation
I5	Executive director of the National Student, Competitive and Leisure Sports Association of the Disabled
I6	Founder and trainer of Diswake SE
I7	Employee of Wildboars SE and special education teacher
I8	Member of the Board of Trustees of the 'Mozgásjavító' Student Sports Association

Source: authors.



with a valid e-mail address, but many of the sports organisations we contacted did not have one, which also made it difficult to data collection.

The online questionnaire was distributed via social media platforms in addition to emails, and it is therefore necessary to mention that only those with access were able to complete the questionnaire. Furthermore, the specificity of the statistical methods, including the fact that the sample size is not sufficient for exploratory and confirmatory factor analysis, which only obtains reliable results with a number of items between 200 and 400, should be mentioned as a limitation of the research. Nevertheless, a number of conclusions can be drawn from the results of this research.

6. INTRODUCTION TO THE SAMPLE

We received a total of 154 answers; following data cleansing, the final sample comprised 122 people (69 physically disabled men and 53 women over the age of 14 years), including 76 former and current athletes. The possible reasons for non-completion might have been the sensitivity of the issue or the length of the questionnaire. 62.3 percent of the sample (76 persons) were disabled through accident or illness. The majority of respondents (71 persons) were over 41, which is due to the higher percentage of injuries suffered in adulthood. The sample is diverse in terms of residence, family and employment status, and level of education (Table 4).

Table 4. Sociodemographic characteristics of the sample

Items (N): 122								
Gender			Participation in sport			Employment status		
Female	53	43.44%	Yes	76	62.30%	Student	21	17.21%
Male	69	56.56%	No	46	37.70%	Employee	44	36.07%
Type of disability			Highest level of education			Entrepreneur	3	2.46%
Congenital	46	37.70%	Elementary	11	9.02%	Old age or disability pensioner	44	36.07%
Acquired	76	62.30%	Secondary	75	61.48%	Jobseeker	6	4.92%
			Higher	36	29.51%	Other	4	3.28%
Age group			Type of settlement			Family status		
14-18 years	6	4.92%	Budapest	49	40.16%	Single	52	42.62%
19-25 years	17	13.93%	Town	55	45.08%	Living with a partner	22	18.03%
26-40 years	28	22.95%	Village	15	12.30%	Married	36	29.51%
41-55 years	42	34.43%	Abroad	3	2.46%	Other	12	9.84%
Over 55 years	29	23.77%						

Source: authors.



7. PRIMARY RESULT: SPORTS MOTIVATION AND SPORTS CONSUMPTION HABITS

In our primary research, we examined 3 research questions based on the results of the online questionnaire. Q1: How does gender affect different motivational factors? Q2: What role does disability play in sports motivation? Q3: Why do people with reduced mobility not do sports? The quantitative responses to the research questions were also examined qualitatively through interviews.

Q1: How does gender affect different motivational factors?

H1: For women, external regulation is stronger, while for men, internal factors are more pronounced.

Regarding the relationship between gender and individual motivational factors, it can be said that gender has no effect on the motivation of athletes (Table 5). There is no significant difference between men and women for any of the motivational factors. At the same time, based on the sociodemographic data (Table 4), it can be established that men were in a significant majority both in the entire sample and among the athletes, while women were in a slight majority among the non-athletes, so gender influences participation in sports.

Q2: What role does disability play in sports motivation?

H2: The internal motivation would be the most dominant for athletes with limited mobility.

As can be seen on Fig. 1, identified and introjected regulation is more decisive. The degree of external regulation is influenced, among other things, by the occupational status (Table 6), the standard of sports (Table 8) and the origin of the disability. These three factors were examined as sub-hypotheses.

H2a: For those with active occupational status, intrinsic motivation is more dominant, while for those with passive occupational status, extrinsic motivation is more dominant.

Table 5. Relationship between motives and gender (the authors' research 2022)

Role of gender in sports motivation							
	Effective	Cognitive	Integrated	Identified	Introjected	Extrinsic	Amotivation
M (N = 47)	4.51	5.05	4.88	5.15	5.11	1.94	1.78
W (N = 29)	4.5	4.95	4.93	5.08	5.09	1.91	1.9
Z (p)	-0.359 (0.719)	-1.294 (0.196)	-0.065 (0.949)	-0.682 (0.495)	-0.367 (0.714)	-0.100 (0.920)	-0.679 (0.497)

Source: authors.



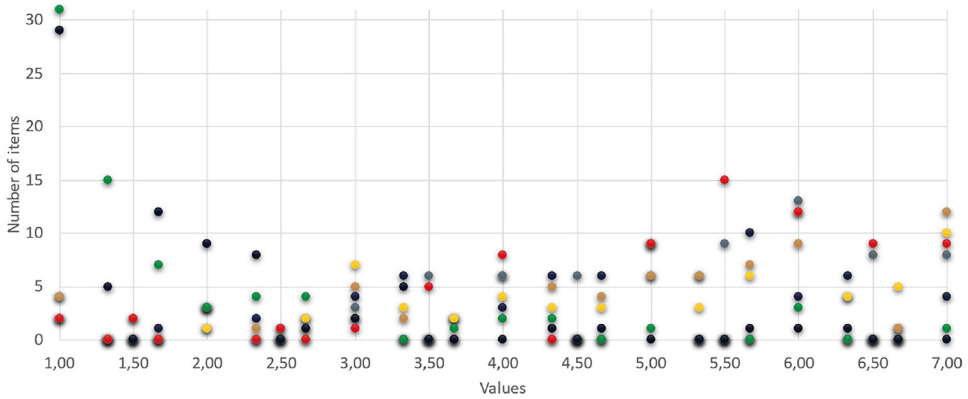


Fig. 1. Distribution of the motivation scale factors according to the values
 Source: authors.

Table 6. Relationship between motives and employment status

	Student (n = 13)	Employee (n = 29)	Entrepreneur (n = 3)	Pensione (n = 25)	Jobseeker (n = 3)	Other (n = 3)	χ^2	p (df = 5)
Effective	4.54	4.95	4.00	4.09	3.33	5.11	6.01	0.306
Cognitive	5.26	5.29	3.89	4.63	3.22	5.78	7.65	0.177
Integrated	5.27	5.10	5.67	4.56	3.33	5.83	6.94	0.225
Identified	5.46	5.31	3.67	4.88	3.56	5.89	8.35	0.138
Introjected	5.62	5.14	5.00	4.98	2.83	5.67	5.37	0.372
Extrinsic	2.36	1.77	1.00	1.84	1.00	3.67	13.03	0.023
Amotivation	1.79	1.92	1.00	2.07	1.33	2.33	7.77	0.170

Values highlighted in bold in the indicated tables indicate that they are significant at the 0.05 significance level, i.e. $P < 0.05$.

Source: authors.

According to our hypothesis, extrinsic motivation is less dominant for active employees than for those with a passive employment status. Based on the Kruskal-Wallis test, in the relationship between motives and employment status, only in the case of extrinsic regulation is there a significant difference between groups. It is students and pensioners that are most affected by extrinsic motivation. Thus, the analysis has confirmed the hypothesis.

H2b: People with a congenital disability have a stronger extrinsic motivation than people with an acquired disability.



In our hypothesis, people with congenital disability have stronger extrinsic motivation than those with acquired disability. For the analysis of the relationship between motivational factors and the causes of disability, we have used the Mann-Whitney U test. It has been found that there is a significant difference in the external regulation of those with congenital disability and those who acquired disability through accident or illness. Thus, the analysis has confirmed the hypothesis.

H2c: With higher levels of participation in sport, intrinsic motivation is becoming dominant.

Based on our hypothesis, with higher levels of participation in sport, intrinsic motivation is becoming dominant. For the analysis of levels of sport and motives, we used a Kruskal-Wallis test. Among the significant factors, without an exception all factors are highest for parasports people. Integrated motivation appears to be increasing with levels. Identified motivation is a decisive factor for youth athletes, with free time athletes it is lower, and with professional and parasports people it is higher again. Intrinsic motivational factors, especially cognitive motivation, are least dominant in the case of free time athletes, while on all other levels they may be regarded as vital.

Based on the results, external regulation has a greater role in the sports motivation of congenitally disabled than acquired disabilities (Table 7). In addition, regarding internal motivation, it can be stated that the cognitive factor is the highest among para-athletes (Table 8).

Based on interviews conducted during our qualitative research, respondents appeared to agree on what motivates them, saying “*sport is what connects us*”. This implies that one of the main motives is belonging to a community. On the other hand, sport is a rehabilitation activity that, thanks to physical and mental development, helps “*get us beyond the bathroom (I3)*”. Thereby, it enables a person to lead a better and more independent life. According to I4, the main motivating factors are “*the possibility to return, community building, independence, increased standard of living, improved stamina, and an experience of having a community*”. ‘Return’ means, for example, that a sportsperson resumes training after an accident and succeeds again. Although active engagement in sport has several benefits both for the individual and society, in fact, it is a challenge to attract new people to active sport (Table 9).

Table 7. Relationship between motives and causes of disability

Cause of disability							
	Effective	Cognitive	Integrated	Identified	Introjected	Extrinsic	Amotivation
Congenital (n = 28)	4.60	5.20	4.82	5.04	5.09	2.30	1.89
Acquired (n = 48)	4.45	4.80	5.00	5.11	5.09	1.68	1.91
Z (p)	-0.605 (0.545)	-1.309 (0.191)	-0.466 (0.641)	-0.054 (0.957)	-0.071 (0.944)	-2.023 (0.043)	-0.439 (0.660)

Values highlighted in bold in the indicated tables indicate that they are significant at the 0.05 significance level, i.e. $P < 0.05$.

Source: authors.



Table 8. Relationship between motives and levels of sport

	Youth athlete (n = 3)	Free time athlete (n = 26)	Professional athlete (n = 12)	Parasports person (n = 35)	χ^2	p (df = 3)
Effective	4.11	3.82	4.61	5.01	8.35	0.039
Cognitive	4.00	4.04	4.83	5.74	19.48	0.000
Integrated	4.00	4.42	4.54	5.53	8.94	0.030
Identified	5.22	4.29	4.72	5.78	14.50	0.002
Introjected	4.00	4.63	4.58	5.70	8.61	0.035
Extrinsic	2.22	1.59	2.03	2.08	1.54	0.673
Amotivation	1.89	1.85	2.03	1.90	0.92	0.821

Values highlighted in bold in the indicated tables indicate that they are significant at the 0.05 significance level, i.e. $P < 0.05$.

Source: authors.

Table 9. Amotivation of those not engaged in sport

Causes of non-participation	Number (n = 46)	Percentage
"For me, there is no attractive option nearby."	15	32.61 per cent
"Because of my state of health."	12	28.26 per cent
"I have no company."	12	28.26 per cent
"What will others say?" Psychological reasons	11	26.09 per cent

Source: authors.

The impact of sport on the individual and society was analysed through integration. Integration within sport is continuously improving. The social impact of international sporting events can also be understood in the case of para-sport (Máté 2022). Pertinent examples are the European kayak-canoe championships in Szeged, Hungary in 2019 and in Munich in 2022, and the world championship in Halifax in 2022, all of which were held in an integrated form. As reported by I1 and I5, in Hungary, joint training camps and integrated free-time events were also frequent. I8 was excited about sport, saying that *"development is always a wonderful thing, and that's what sport is about for everyone, that you have unlimited potential as long as you are able to learn and develop."*

Q3: Why do not people with reduced mobility do sports?

H3: For non-athletes with reduced mobility, the main reason for amotivation is lack of information and opportunities.



Respondents could mark more than one answer in the questionnaire; as a result, there is some overlap between the categories and the total is over 100 per cent. Consequently, the hypothesis is only partly confirmed, because the shortage of opportunities is indeed the main amotivational cause for inactive people. However, poor health and the lack of the right company affect amotivation much more than the lack of information.

Based on the interviews, it can be said that young people are even harder to activate. I6's explanation for this phenomenon is that only in young adulthood do body conscience and personal responsibility emerge. In turn, I5 thinks that *"the reason why few disabled young people participate in sport is the weakness of integrated education and that for this reason sport is not accessible to them."* It needs to be added that in some sports, e.g., in wheelchair fencing, there are no contests for children; thus, these sports can only be started at a later age. Furthermore, young people cannot do sport without their parents, which may be an impediment to involvement, often due to a lack of mental accessibility. Involvement is best supported by communication and marketing.

Concerning constraints, the main finding is that there is a lack of synergies. While in the international world, athletes enter parasport through rehabilitation, the Hungarian health service and doctors are generally reluctant to accept such initiatives. All respondents agreed that sport offers numerous opportunities for them. By way of example, I7 mentioned that some of their teammates had joined the team without having a job and a driving licence, but then thanks to their teammates and the sport activity, they soon obtained both. Participation in sport also boosts the presence of disabled people and those with reduced capacity in the labour market. Therefore, the Hungarian Paralympic Committee helps paralympic athletes after their sports careers by providing them with higher regular benefits and scholarship programmes. Transport difficulties and inadequate facilities also constrain disabled people's sportive life. An individual's status clearly defines the sports they can do, which may be hindered by a lack of information. The process of categorisation is part of choosing the right sport, as depending on athletes' status, there are various categories of competitions within each branch of sport. The interdisciplinary character of sport by disabled people is best demonstrated by human resources. For success, trainers and professionals should be working closely together with remedial teachers and other experts. I5 states that at present there is no educational programme in Hungarian higher education that would provide the complex sports professional and methodological training to prepare for working with disabled athletes. I1 believes that *"finding the specialists is the key to recruiting more new athletes."*

To put motivation in context, it is important to highlight two further issues: sport consumption habits and economic opportunities and constraints.

Sports consumption habits were also examined in the survey. In this regard, it is important that 60.53% of athletes with limited mobility always or often train in sport clubs. Furthermore, 56.58% of athletes with reduced mobility go by car to the place of the sports activity. Finally, 71.06% of disabled athletes participating in the research train with teammates. In an open-ended question, we asked our participants what sports they do. For this question, most of the athletes gave more than one sport, we then coded them separately, so we created a total of 23 different sports and the other category. The other category includes, among other things, leisure sports activities such as running or fitness. For easier handling, we created three categories: individual (only individual sports), team (only team sports), and both. We considered football/table football, wheelchair rugby, wheelchair basketball, sitting volleyball and wheelchair handball to be team sports. The most common individual sport was swimming (15 people; 19.74%).



Finally, we should the emphasise the economic opportunities and limitations of disabled sport. On the one hand, sport ensures a better financial standing and more possibilities. On the other hand, high costs may be prohibitive, because most activities require special wheelchairs, which are very expensive. If they have no sponsors, those who wish to participate in sport frequently obtain them through non-governmental initiatives. According to I2, *“everything depends on money. Money is one of the movers of this, and the other is adjustment. In other words, if you only must adjust a little to make them work, if you have them, then in my opinion there is, in fact, practically nothing that cannot be done.”* Enterprises supporting sports organisations is advantageous for both parties: team building events strengthen the organisation and contribute to acceptance and social inclusion (Tables 10).

Table 10. Results of the primary research

	Quantitative results	Qualitative results
Q1	Gender has no effect on sports motivation, but its effects involvement in para-sports.	The qualitative research did not examine gender differences separately.
Q2	Extrinsic motivation plays a more significant role in the motivation of athletes with congenital disabilities than in the case of athletes with acquired disabilities. In addition, intrinsic motivation is the most decisive in the case of para-athletes, and the cognitive factor is more important there as well.	The results of qualitative research emphasis important of belonging to a community. Moreover, identification and introjected regulation have significant role in this. The active sports consumption habits verify the qualitative results because athletes largely take part in sports together with their teammates. This provides inspiration and motivation for development to the athletes.
Q3	Among disabled people who do not do sports, suitable sports opportunities near their homes are the main reason for motivation. Athletes usually travel by car to the venue of the sports activity (which is usually a state sports facility). It follows that you need your own car to participate in sports. Without it, getting there requires much more planning, which reduces motivation. Among the respondents, the lack of suitable partners was also a common reason for motivation.	Experts see the causes of amotivation in incomplete educational integration, lack of intellectual barrier-free access and appropriate professionals, and financial reasons. Being an athlete with a disability is expensive, as sports require special personalised equipment. In most cases, athletes get access to these tools through the civil sector and public sector. The presence of the corporate sector particularly in sports for people with disability is still low. A stronger presence of sponsorship in the sport of people with disabilities, especially in parasport, would promote the professionalisation of parasport and participation in this area of sport, as well as the social popularity and recognition of sport for people with disabilities.

Source: authors.



8. DISCUSSION

All studies agreed on this and our research also proved that sports have significant physical and mental effects on individuals. However, the impact of sports for people with disabilities is also significant in terms of society.

Environmental factors limiting the effective emergence of these positive impacts can be divided into two groups. The following *physical factors* have been identified in the literature and in our research: lack of access to appropriate equipment and facilities, limited availability of accessible programmes and services, and accessible facilities. *Social factors* include negative attitudes towards disability and social stigma, as well as a lack of inclusive policies. Taking into account the physical and mental abilities of the individual, the following obstacles arose eminently during the research: lack of information about sports, fear of injury and lack of self-confidence, and lack of support from family and friends.

Self-determined motivational forms positively contribute to coping both in sports and beyond, while amotivation has a negative impact on coping. For people with disabilities, sports serve as the primary means of social integration, thus social inclusion becomes the main motivational factor, involving issues of fairness and equality. Additionally, sports for people with disabilities represent health preservation, friendship, outdoor activities, entertainment, and relaxation.

Regarding the relationship between gender and individual motivational factors we found that based on the sociodemographic data, it can be established that men were in a significant majority both in the entire sample and among the athletes, while women were in a slight majority among the non-athletes, so gender influences participation in sports. Given that among athletes, introjected and identified motivational factors were the most dominant, and our interviewees' experiences also showed that sport plays a significant role in the autonomy and self-efficacy of athletes with disabilities. It helps and supports access to resources and overcoming perceived barriers if the individual has a driving license. Sport increases the labour market presence of disabled athletes, which is supported by our own research and the literature. Social support and past experiences play a much more significant role for athletes with acquired disabilities than for those with congenital disabilities, as their return and social integration are much more significant. This also explains why external motivation is less emphasised in the case of athletes with acquired disabilities. Inclusive sports significantly contribute to the social acceptance of people with disabilities, as confirmed by our qualitative research. The involvement of athletes in decision-making, which we saw among interviewees as an example, also has a positive effect on sports motivation, as they can be role models for young people and contribute to the development of environmental factors.

However, the appearance of athletes as role models is not only achieved through involvement in decision-making, but also through various media appearances, be it through social media, since the value-creating activity of para-athletes is also realised through sponsorship cooperation.

Based on the literature described above and our own research, we have identified six individual and social effects of sports for people with disabilities: self-efficacy, social support, access to resources and perceived barriers, past experiences, autonomy, attitudes and beliefs (Table 11).



Table 11. Summary of the research

Keywords	Literature	Authors research	Discussion
Self-efficacy and autonomy	Sport contributes to the welfare and well-being of people living with physical disability	Participation in sports increases participation in the labour market, thereby increasing independence and self-acceptance, and provides a better quality of life	Overall, the research supports the self-efficacy and autonomy literature
Social support	The literature has different views on social support, but the social integration role of sport is recognised	Identified and introjected regulation was the most dominant motivational factor. Together, these factors point to the importance of social integration. Sport is also the most suitable tool for returning to society, especially integrated sports events.	Sports activity significantly increases social support. This can be verified both at the level of the individual and at the level of society.
Access to resources and perceived barriers	The literature highlights five external obstacles, the most important of which is the lack of mental barriers, the support of family and friends, and the lack of synergy between those stakeholders	The research emphasises transportation and infrastructural obstacles as the main reasons for amotivation. At the same time, the qualitative research emphasises the high cost and difficult accessibility of the equipment needed to participate in sports.	The research confirmed the presence of the five main external factors. Furthermore, the main conclusion of the research is that having your own car is an advantage when participating in sports
Past experiences	Stigma, discrimination, exclusion or fear of injury and lack of confidence play a negative role in the sports motivation of people who live with reduced mobility	Among athletes with acquired disabilities, sport is the main means of reintegration into society. Among non-athletes and young people, the later development of body awareness or the lack thereof makes it difficult to participate in sports.	Past experiences and the external environment have a significant impact on sports motivation, but participation in sports helps to overcome past experiences, and this also has a role in the development of the individual.
Attitudes and beliefs	Attitudes and beliefs are based to a significant extent on past experiences or lack thereof.	Sports connect us, however a lack of mental accessibility can make this difficult.	The solution is mental accessibility, and integrated leisure and professional sports events

Source: authors.



9. CONCLUSION

This article is about the sports motivation and sports opportunities of the disabled in Hungary. We would like to highlight the new motto of International Olympics Committee in connection to this topic: Faster Higher Stronger Together. This supplement (Together) also emphasises the significant impact of community sport and social impacts of sports and sports events. Moreover, the mottos of Paralympics. “Spirit in motion” and “Make for an inclusive world through Para sport” also are verified by our findings. The main conclusions of the research include the reliable application of the Hungarian Sports Motivation Scale (H-SMS) to assess sports motivation among people with reduced mobility. Based on this, participation in sports increases an individual’s independence, physical activity, presence in the labour market, well-being and social usefulness. Therefore, major stakeholders need to create inclusive policies and must support the system. The research findings highlight and confirm the importance of mobility in the everyday life of people with disabilities and in participating in sports activities.

Based on our results, we make two main recommendations. The first is to improve mobility opportunities, including improving accessibility in transport. The second is the development of sporting opportunities for people with disabilities and the promotion of integrated sports, in which increasing the number of media appearances at all levels of sports and sponsorship also offer opportunities.

Overall, this article, an extended version of Tóth (2022), provides valuable insight into the motivation and opportunities of athletes with disabilities in case of Hungary and provides recommendations for promoting inclusive sports programmes and policies in any other countries.

REFERENCES

- Abdullah, N. M. – Shapie, M. N. M. – Lan, N. C. – Pilus, A. M. – Abdullah, M. N. (2017): Persons with Disabilities and Their Motives for Participating in Sports. *Pertanika Journal of Social Science and Humanities* 25: 51–58.
- András, K. – Havran, Z. – Kajos, A. – Kozma, M. – Máté, T. – Szabó, Á. (2019): The Historical Development of Sport Business Research in Hungary and beyond. *Budapest Management Review* 50(12): 136–148.
- Balatoni, I. – Varga, Á. (2020): A fogyatékosággal élők sportolási lehetőségei és motivációs tényezői [Sport Opportunities and Motivational Factors of the Disabled]. *Acta Medicinae et Sociologica* 11: 99–109.
- Blauwet, C. A. (2019): More Than Just a Game: the Public Health Impact of Sport and Physical Activity for People with Disabilities (The 2017 DeLisa Lecture). *American Journal of Physical Medicine & Rehabilitation* 98(1): 1–6.
- Blauwet, C. – Willick, S. E. (2012): The Paralympic Movement: Using Sports to Promote Health, Disability Rights, and Social Integration for Athletes with Disabilities. *Pm&r* 4(11): 851–856.
- Bryman, A. (2012): *Social Research Methods*. Oxford: Oxford University Press.
- Çelenk, Ç. (2021): Motivation Affects Sports and Life Skills in Physical Disabled People. *Journal of Educational Psychology-Propositos y Representaciones* 9: e1161.
- Csóka, L. – Töröcsik, M. (2019): A sportfogyasztás és a sportmotivációt mérő skálák [Scales for Measuring Sports Consumption and Motivation]. *Marketing & Menedzsment* 53(special edition): 77–86.



- Darcy, S. – Lock, D. – Taylor, T. (2016): Enabling Inclusive Sport Participation: Effects of Disability and Support Needs on Constraints to Sport Participation. *Leisure Sciences* 39(1): 20–41.
- Delaney, T. (2015): The Functionalist Perspective on Sport. In: Giulianotti, R. (ed): *Routledge Handbook of the Sociology of Sport*. Abingdon: Routledge.
- Devine, A. – Carrol, A. – Naivalu, S. – Seru, S. – Baker, S. – Bayak-Bush, B. – Marella, M. (2017): They Don't See My Disability Anymore'–The Outcomes of Sport for Development Programmes in the Lives of People in the Pacific. *Journal of Sport for Development* 5(8): 4–18.
- Di Palma, D. – Raiola, G. – Tafuri, D. (2016): Disability and Sport Management: a Systematic Review of the Literature. *Journal of Physical Education and Sport* 16(3): 785.
- Dimitrova, A. (2017): Social Integration of People with Disabilities in the Field of Sport. In: National Sport Academy “Vassil Levski” (ed): *International Scientific Congress “Applied Sports Sciences”*. Sofia, pp. 445–448.
- International Paralympic Committee (2011): Strategic Plan 2011–2014. https://www.paralympic.org/sites/default/files/document/120118143826469_RZ_IPC_11_Strategic_brochure_long.pdf, accessed: 09/04/2022.
- International Paralympic Committee (2015): Strategic Plan 2015–2018. https://www.paralympic.org/sites/default/files/document/150619133600866_2015_06+IPC+Strategic+Plan+2015-2018_Digital.pdf, accessed: 09/04/2022.
- International Paralympic Committee (2019): Strategic Plan 2019–2022. <https://library.olympics.com/network/doc/SYRACUSE/355011/strategic-plan-2019-to-2022-international-paralympic-committee>, accessed: 09/04/2022.
- Jaarsma, E. A. – Dijkstra, P. U. – Geertzen, J. H. B. – Dekker, R. (2014): Barriers to and Facilitators of Sports Participation for People with Physical Disabilities: A Systematic Review. *Scandinavian Journal of Medicine & Science in Sports* 24(6): 871–881.
- Joshi, A. – Kale, S. – Chandel, S. – Pal, D. K. (2015): Likert Scale: Explored and Explained. *British Journal of Applied Science & Technology* 7(4): 396.
- Kruskal, W. H. – Wallis, W. A. (1952): Use of Ranks in One-Criterion Variance Analysis. *Journal of the American Statistical Association* 47(260): 583–621.
- Laoues-Czibalmos, N. – Bácsné Bába, É. – Szerdahelyi, Z. – Müller, A. (2019): Sportmotivációs tényezők vizsgálata a 8-18 éves fogyatékossgal élő korosztály körében [Sports Motivation Factors Investigated in the 8-to-18 Age Group]. *Acta Carolus Robertus* 9: 121–132.
- Lindell, M. K. – Whitney, D. J. (2001): Accounting for Common Method Variance in Cross Sectional Research Designs. *Journal of Applied Psychology* 86(1): 114.
- Lins, S. – Melo, C. F. – Alves, S. G. – Silva, R. L. (2019): “Our Voices, Our Meaning”: The Social Representations of Sports for Brazilian Athletes with Disabilities. *Adapted Physical Activity Quarterly* 36(1): 42–60.
- Mallett, C. – Kawabata, M. – Newcombe, P. – Otero-Forero, A. – Jackson, S. (2007): Sport Motivation Scale-6 (SMS-6): A Revised Six-Factor Sport Motivation Scale. *Psychology of Sport and Exercise* 8(5): 600–614.
- Mann, H. B. – Whitney, D. R. (1947): On a Test of whether One of Two Random Variables Is Stochastically Larger Than the Other. *The Annals of Mathematical Statistics* 50–60.
- Máté, T. (2022): Social Perception and Support–An International Sports Event from the Perspective of the Residents of the Host City. *Society and Economy* 44(4): 460–476.
- McKenzie, G. – Willis, C. – Shields, N. (2021): Barriers and Facilitators of Physical Activity Participation for Young People and Adults with Childhood-Onset Physical Disability: A Mixed Methods Systematic Review. *Developmental Medicine & Child Neurology* 63(8): 914–924.
- Mitić, P. – Jorgić, B. – Popović, I. – Hadžović, M. (2020): The Relationship between Playing Sports and Self-Efficacy in People with Disabilities. *Facta Universitatis Series: Physical Education and Sport*, 409–416.
- Paic, R. – Kajos, A. – Meszler, B. – Prisztóka, G. (2017): Validation of the Hungarian Sport Motivation Scale (H-SMS). *Cognition Brain Behavior* 21(4): 275–291.



- Pelletier, L. G. – Rocchi, M. A. – Vallerand, R. J. – Deci, E. L. – Ryan, R. M. (2013): Validation of the Revised Sport Motivation Scale (SMS-II). *Psychology of Sport and Exercise* 14(3): 329–341.
- Pelletier, L. G. – Tuson, K. M. – Fortier, M. S. – Vallerand, R. J. – Briere, N. M. – Blais, M. R. (1995): Toward a New Measure of Intrinsic Motivation, Extrinsic Motivation, and Amotivation in Sports: The Sport Motivation Scale (SMS). *Journal of Sport and Exercise Psychology* 17(1): 35–53.
- Perreault, S. – Vallerand, R. J. (2007): A Test of Self-Determination Theory with Wheelchair Basketball Players With and Without Disability. *Adapted Physical Activity Quarterly* 24(4): 305–316.
- Purdue, D. E. – Howe, P. D. (2012): See the Sport, Not the Disability: Exploring the Paralympic Paradox. *Qualitative Research in Sport, Exercise and Health* 4(2): 189–205.
- Purdue, D. E. – Howe, P. D. (2013): Who's in and Who Is Out? Legitimate Bodies within the Paralympic Games. *Sociology of Sport Journal* 30(1): 24–40.
- Riley, B. B. – Rimmer, J. H. – Wang, E. – Schiller, W. J. (2008): A Conceptual Framework for Improving the Accessibility of Fitness and Recreation Facilities for People with Disabilities. *Journal of Physical Activity and Health* 5(1): 158–168.
- Ryan, R. M. – Deci, E. L. (2000): Self-determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist* 55(1): 68–78.
- Sabalaiuskas, S. (2019): Motivation of Disabled Athletes for Sport Activities: Validity and Reliability of the Lithuanian Version of the Sport Motivation Scale. *Specialusis ugdymas/Special education* 2(40): 125–162.
- Syggall, D. (2022): Paralympic Champions Help Launch '10-Year Green And Gold Celebration'. <https://www.paralympic.org.au/2022/07/paralympic-champions-help-launch-10-year-green-and-gold-celebration/>, accessed: 09/04/2022.
- Szabó, Á. (2013): What Values Do Leisure Sports Create and What Is Their Relationship to Competitiveness? *Physical Culture and Sport Studies and Research* 60(1): 40–51.
- Szabó, Á. – Kajos, A. (2023): A munkahelyi mozgásprogramok szervezeti és egyéni oldala: Előnyök, értékteremtő tényezők, motivációk [Organisational and Individual Aspects of Workplace Physical Activity Programmes – Benefits, Value Drivers, Motivations]. *Budapest Management Review* 54(4): 54–68.
- Szabó, Á. – Máté, T. – Havran, Z. (2021): A szabadidősport gazdasági szerepe Közép-Kelet-Európában [Economic Role of Leisure Sport in the Central and Eastern European Region]. *Tér és Társadalom* 35(2): 125–149.
- Tóth, B. (2022): Sport, ahol nincsenek korlátok? A mozgáskorlátozott személyek motivációi és lehetőségei a sportban és a sport által [Sport without Barriers? Motivations and Opportunities of People with Physical Disability within Sport]. *TDK research paper*, Corvinus University of Budapest.
- United Nations (2006): Convention on the Rights of Persons with Disabilities. *General Assembly Resolution* 61: 106.
- Urr, A. (2022): Paralimpiai Játékok Tokyo 2020 [Paralympic Games Tokyo 2020]. In Hungarian Society of Sports Science (ed): *Mihály Nyerges Memorial Conference*. Budapest.
- Zhou, J. – Yuan, F. – Yu, T. – Liu, F. (2016): Why Are the Disabled People Willing to Participate in Sports: Taking Chinese Disabled Table Tennis Players as the Object of Investigation? *Advances in Physical Education* 6(2): 88–98.

Open Access statement. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited, a link to the CC License is provided, and changes – if any – are indicated. (SID_1)

