Differences and similarities in sports participation: analysis considering regions and settlements in case of Hungary and European Union

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Abstract:

Health and life style gain increasing emphasis in contemporary societies. As physical inactivity became one of the urging threats in modernity, governments attempt to adopt policies to tackle this issue, and give special attention to sport participation and the level of physical activity of citizens. This issue is widely studied by scientific research; however, fewer studies focus on sport participation from the regional aspect in general. This study aims to analyse sport participation trends of the Hungarian total population with special attention given to regional trends and size of settlements; and comparing that with results gained in the European Union. It also attempts to make those comparisons and point out differences in relation to reasons for, obstacles and venues of participation; furthermore, evaluation of local sporting opportunities and actions of local authorities for sport. Based on data received from the Eurobarometer surveys sport and physical activity participation of the Hungarian population increased from 2009 to 2013 (10%), however, Hungary is still below the EU average. Hungarians less often exercise at locations such as fitness clubs, sport clubs or open spaces such as parks or natural environment; and more often use choose their private home for such purposes. Both never and regularly exercising expressed strong dissatisfaction with local sporting opportunities and with the contribution of local governments in support of sport than in the EU. Answers to the measured variables showed high diversity in regards to settlement size both in EU and Hungary and in regional distribution in case of Hungary. Sporting infrastructure was less used by people living on the lowest urbanisation level. This finding was reflected in the negative consideration of local opportunities and actions of local governments, which was actually suggest that relevant sport infrastructure and opportunities for sport such as organisations, programs, communities do not exist with such frequency as they do at larger settlements.

Key words: sport participation, types of settlement, regional differences, Hungary, Eurobarometer

Introduction

Health and life style gain increasing emphasis in contemporary societies. As physical inactivity became one of the urging threats in modernity, governments attempt to adopt policies to tackle this issue, and give special attention to sport participation and the level of physical activity of citizens. Accordingly various documents are being developed by national governments and also on the European level (e.g. White paper on sport, 2007; European dimension of sports). These documents supported by research data stress the importance to create opportunities of physical active life style by a supportive legislative, financing and physical environment. The first group of scientific studies completed in recent years contributed to these outcomes by analysing overall participation rates for sport and physical activity in different EU member states. The results of these studies showed significant differences among member states of the European Union. The overall trend was outlined by Tuyckom & Scheerder (2010) as a decreasing direction was recorded for sport participation rates in Europe starting from the north leading to the south and the same from the west to the east. As stated by Perényi (2013), Hungary, based on its central European location, would be expected to take an average position, which logic is not reflected in statistical data. Based on the Eurobarometer (2009) sport participation rates in Hungary showed that close to two-third of the population were completely inactive (never exercise), which result projects similarities to those of the Mediterranean countries living very different life style in general. Low sport participation trends were outlined by previous research also in national survey data in relation to the total population (Falussy, 2002; Gáldi, 2002; Gál, 2008), but also to youth population (Fábri, 2002; Perényi, 2011, 2013) and in the population of young children (Aszmann, 2003; Pikó, 2005). Based the recent Eurobarometer

survey, however, a raise was recorded in Hungary regarding sport and physical activity participation (Ács & Kovács, 2015).

Second large group of research consists of studies that focused on the reasons for and against sport and physical activity participation. In this respect the reason to 'improve health and fitness' and to 'relax' was given outstanding attention in a number of studies (Imanzadeh & Göndogdu, 2013; Martins et al, 2014). 'Lack of time' and lack of economic buying power (money) were outlined in most research as the most frequent reasons for disengagement (Gál, 2008; Perényi, 2011; 2013).

Third, research also pointed out the relationship between different social groups of the population and the frequency of sport participation. In this context it was found that age, gender and the level of income were influencing factors for participation (Tiggemann & Slater, 2011; Soares et al, 2013; Patricia & Rui, 2014; Phing et al., 2014). Other social and socio-demographic factors were found to be significant in their contribution to sport participation as well, such as level of education and size of residence, but also market activity describing the actual main activity of the individual. These studies found that higher level of education and living in larger settlements increased the odds to become a participant in sport (Gál, 2008; Perényi, 2010, 2013, 2014; Breedveld, 2014). Perényi (2012) emphasized over 60% of the youth population could be considered as a potential target group to reach in the future; and Bács (2011) stated that higher education institutions could be effective vehicles to increase the involvement of the 18-23 years olds if university sports organizations would utilize their capacities.

In recent years the level of urbanization gained more and more attention in sport participation research as in Dutch samples for example connections were found between the number of available sporting facilities and sport participation, and the tendencies were stronger as the size of the settlement increased (Hoekman, 2013, 2014). Similar results were recorded by Perényi (2010a, 2010b) on Hungarian youth sample stating that sport participation among youth increased on the ladder of settlement size, however, this tendency reversed in 2008 as a decrease was found in the case of the capital. In Hungarian youth samples also regional differences were found. In Hungary out of its seven regions the South Great Plain and Central Transdanubia showed the highest, while Central Hungary the lowest sport participation (Perényi, 2013). It was also stated, however, that within the regions specific municipalities outstand even in the low-rate regions. Perényi (2013) also stated that influencing factors showing regional or municipality based diversity of the macro environment of sport may also play a role such as economic power (GDP), settlement size composition, unemployment rate, but also geographical attributes and the number of sporting facilities. Kozma (2010a) found that sport also may play an effective tool in city marketing, furthermore the portfolio of sporting facilities at a region (Kozma, 2010b)) and the financing structure of those facilities (Becsky et al., 2015) may influence sport participation of the local population. As mentioned more research data is available on the mentioned three approaches on both the European and national levels, but less that considering the regional characteristics of sport participation.

Specifically, research focusing on sport participation from the regional aspect neither in case of the Hungarian total population nor in comparison to European trends was made in case of Hungary before. Therefore this study aims to analyse sport participation trends of the Hungarian total population with special attention given to regional trends and comparing that with results gained in the European Union. This study also attempts to make those comparisons and point out differences in relation to reasons for, obstacles and venues of participation; furthermore, evaluation of local sporting opportunities and actions of local authorities for sport.

Material & methods

Data available from the 2009 and 2013 Eurobarometer surveys were the basis of this analysis. Retrieved database (on 2015.04.12 from <http://zacat.gesis.org>) included types of settlement and regions by country. The number of respondents in the European Union in 2009 were N=26 788, in Hungary N=1044; while in 2013 N=27,919 in the EU, and N=1,012 in Hungary. To ensure comparability for data from 2009 the settlement typology used in original survey was applied in this analysis (rural area/village, small/medium town, large town), while in 2013 NUTS-2 level regions were used.

Seven NUTS-2 regions are located in Hungary, which show great diversity in case of economic development, unemployment rates and income levels of citizens (Table 1).

Table 1 Socio-economic data for the seven NUTS-2 regions examined in Hungary (%).

	GDP ^A	Income ^B	Unemployment rate ^C
Central Hungary	159.9	119.8	6.2
North Hungary	61.5	86.0	10.4
North Great Plain	63.5	83.5	11.8
South Great Plain	69.2	85.4	9.0
South Transdanubia	67.6	86.2	7.8
Central Transdanubia	89.9	109.7	5.6
West Transdanubia	102.9	106.1	4.6

^A – GDP/capita of Hungarian average (2013); ^B – total income/capita of Hungarian average (2013); ^C – unemployment rate (2014).

Source: Central Statistical Office of Hungary

Statistical analysis using SPSS 18 software included cross tabulation tables, calculation of correlation coefficients; and in order to ensure comparability of data in cases of specific questions values were calculated by using weight method on the answers¹. It shall be noted that the sport related variables of Eurobarometer surveys referred not only to sporting activities, but also to a variety of physical activities (e.g. dancing, gardening, walking, and transportation type of bicycling). In majority of the questions both forms were included in the meanings, which shall be taken into account in data analysis and evaluation of findings, also in drawing conclusions.

Results and discussion

Frequency

Examining the frequency of sport participation between 2009 and 2013 a considerable stable tendency can be noticed in the European Union (Table 2). Only a slight rise was recorded among those participating once a week (0.6%), and the proportion of the European population never exercising grown (3.0%), while the calculated value slightly decreased. In contrast, significant improvement was recorded in Hungary among the population exercising once a week or more. This rise of 16.7% can be considered outstanding regardless of the fact that Hungary still remained below the EU average. Based on this data the overall participation of Hungarians has grown; those never exercising decreased by 11.3%, and also those exercising less than once a week. Results suggest that the populations' participation becoming more frequent in comparison to 2009. It must be noted, however, that Eurobarometer results from 2013 were in conflict with national survey data collected among youth population as Hungarian Youth/2012 survey showed an increase of the otherwise high proportion of youth (15 to 29 years) never exercising from 63% to 65% (Perenyi, 2013). Because of the possible methodology differences in definitions used between Eurobarometer and national samples and also the difference in targeted age group this discrepancy is documented, but will not be considered in this study.

Table 2 The frequency of sport participation (%) in Hungary and European Union, (higher calculated value stand for higher participation in sports)

	2009		2013	
	EU average	Hungary	EU average	Hungary
1 time a week or more	38.5	19.0	39.1	35.7
1 to 3 time a month	6.4	5.8	5.4	4.1
less often	15.4	16.9	12.9	13.2
never	39.7	58.3	42.6	47.0
total	100.0	100.0	100.0	100.0
calculated value	2.65	1.95	2.62	2.53

Source: European Commission, 2010, 2014

Using EU results as a reference it can be noticed that in Europe higher urbanization level assumed higher participation rates, as the population of large cities and small/medium cities recorded more engagement in sport and physical activities. It also should be noticed, however, that the distribution of the population among the frequency levels of participation by settlement types showed less than 5% difference (Table 3), for example proportions of those never exercising were considerable in close range on each settlement type. In contradiction, Hungarian data shows different proportions and larger differences among the three urbanization levels; furthermore, suggest important changes in trends during the examined period.

In 2009 besides the population living in rural areas also residents of small/medium towns showed similarly high inactivity rates (64.4% and 66.3% respectively), while less proportion of people living in large towns reported complete inactivity (46.6%); the difference between the two groups exceeded 15%. Also, less proportion of people of the two lower urbanization levels were participating 'once a week or more' (17.2%) and 'one to three times a month' (16.7%) than in case of residents in large towns (22.5%). By 2013 additional changes were recorded in Hungary mostly on the two lower urbanization levels. First of all, the participation rate profile of the population living on the rural areas became similar to those living in large cities, and small/medium cities were lagging behind. The proportion of the population 'never exercising' decreased in rural areas by 21.1%, and in small/medium towns by 12.2%, while in large towns 2.1%. Parallel, those participating once a week increased substantially and in rural areas exceeded not only figures recorded in Hungarian large towns, but that of the EU average. Changes of trends were also reflected in calculated values.

¹ Sample average calculated on each sample using coding procedure to the occasions of participation -(4) 1 time a week or more; (3) 1 to 3 time a month; (2) less often; (1) never-; missing values were excluded from the analysis.

Table 3 The frequency of sport participation (%) in Hungary and in European Union by type of settlement (higher calculated value stand for higher participation in sports)

	Hungary 2009			2013			European Union 2013		
	A	B	C	A	B	C	A	B	C
1 time a week or more	17.2	16.7	22.5	42.0	30.6	34.3	35.9	40.4	41.3
1 to 3 time a month	4.2	3.7	8.9	4.1	3.5	4.5	4.9	5.5	6.0
less often	14.4	13.3	22.0	10.8	11.8	16.7	13.1	13.0	12.5
never	64.2	66.3	46.6	43.1	54.1	44.5	46.1	41.1	40.2
total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
calculated value	1.84	1.80	2.18	2.76	2.35	2.47	2.49	2.67	2.70

A – rural area or village, B – small/medium town, C – large town

Source: European Commission, 2010, 2014

Regional distribution in Hungary

Regional analysis recorded the highest ‘once a week’ participation at the West Transdanubia (42.1%) followed by the North Great Plain and Central Hungary region. Lowest proportions were found in this regard in Northern Hungary, South and Central Transdanubia regions (Table 4). Clear link between sport participation profile of regions and their socio-economic situation (Table 1) cannot be established as some discrepancies may also be discovered. 1) while high frequency of ‘once a week’ participants were characterizing the West Transdanubia region; 2) and low frequency participation of the Northern Hungary regions could be explained by their socio-economic indicators, the North Great Plain region with its multiple disadvantaged socio-economic indicators demonstrate one of the highest participation in sports and physical activities. In the Central Transdanubia region the reverse can be noticed, a high composition of socio-economic indicators was paired with low sport participation.

Table 4 The frequency of sport activity in Hungary in 2013 by NUTS-2 regions (higher calculated value stand for higher participation in sports)

	A	B	C	D	E	F	G
1 time a week or more	37.5	32.2	35.5	36.1	31.3	31.4	42.9
1 to 3 time a month	5.0	3.3	2.0	4.2	5.2	4.8	3.6
less often	11.8	8.3	21.1	16.0	13.5	7.6	12.5
never	45.7	56.2	41.4	43.8	50.0	56.2	41.1
total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
calculated value	2.58	2.31	2.59	2.56	2.42	2.38	2.77

A – Central Hungary, B – North Hungary, C – North Great Plain, D – South Great Plain, E – South Transdanubia, F – Central Transdanubia, G – West Transdanubia

Source: European Commission, 2014

Reasons to participate

Looking at the reasons why people engage in sport and physical activities a considerable stable profile was recorded on the European level, while in Hungary some differences were recorded in Hungary from the European trends (Table 5). Both in Hungary and the EU the most frequent reasons mentioned for participation were ‘to improve health, to relax, to improve fitness’, in addition to these in Hungary ‘to improve physical performance’ was added. Among EU citizens however, other reasons, marginal among Hungarians, also received high mentions such as ‘to have fun, to be with friends, to improve self-esteem, to develop new skills, for the spirit of competition, to better integrate into society’. ‘To control weight’ received high scores in the EU, and played a marginal role in Hungary. Over the examined time period in Hungary both increases and decreases were recorded in answers. Reasons for reaching both tangible (e.g. ‘to improve physical appearance and to control weight’) and intangible (to improve self-esteem, to develop new skills) goals increased importance. However, classical answers were less mentioned in 2013, such as ‘to improve health, to relax, to improve physical performance, to improve fitness’. Striking decrease were recorded as mentioned in reasons such as ‘to have fun, to be with friends, and to make new acquaintances (results may need deeper analysis in the future).

Table 5 The reason for sport activity in European Union and Hungary (% , multiple answer-options)

	2009		2013	
	EU	Hungary	EU	Hungary
to improve health	62.8	48.1	61.8	39.7
to improve physical appearance	23.0	21.8	21.1	23.5
to counteract the effects of ageing	17.6	16.8	17.2	13.1
to have fun	28.6	10.2	27.5	7.4
to relax	38.6	30.2	36.3	24.9
to be with friends	21.1	12.2	19.4	9.5
to make new acquaintances	5.9	1.8	5.1	1.9
to meet people from other culture	2.2	0.3	1.9	1.2
to improve physical performance	23.4	33.6	22.8	26.9
to improve fitness	40.8	35.0	39.8	30.2
to control weight	25.5	7.1	24.9	8.0
to improve self-esteem	11.6	4.6	10.8	7.8
to develop new skills	6.2	2.0	5.9	2.4
for the spirit of competition	5.5	3.0	4.9	2.4
to better integrate into society	3.1	1.0	2.9	1.1
other	8.3	13.1	8.9	14.7

Source: European Commission, 2010, 2014

Reasons for participation of people living at different type of settlements was also analyzed (Table 6). Higher frequency of response rate can be noticed to most of the questions by people living on higher urbanization levels (large towns). Reasons mentioned with over 30% difference to both directions from national average were examined. It was found in the case of large cities 'to relax, to control weight and to develop new skills' received most importance, while in villages and rural areas 'to make new acquaintances, to meet people from other culture, and to better integrate into society'. In small and medium-sized cities 'for the spirit of competition' stood out, and 'to control weight' especially in comparison to rural areas. It seems that the frequency of reasons mentioned build up on the opposite end of the spectrum by urbanization levels. Those important in large cities receive less attention in villages and rural areas, and characteristics recorded in small and medium-sized cities alternate in similarities by questions in comparison to the other two settlement types.

Table 6 The reason for sport activity (%) in Hungary in 2013 by type of community (multiple answer-options, values over the 30% range of difference from national average)

	rural area/village	small/medium town	large town	National average
to improve health	39.4	36.4	43.2	39.7
to improve physical appearance	20.9	19.3	30.3	23.5
to counteract the effects of ageing	13.4	8.8	17.0	13.1
to have fun	7.2	7.5	7.5	7.4
to relax	19.1	21.1	35.3	24.9
to be with friends	8.3	8.3	12.0	9.5
to make new acquaintances	2.5	0.9	2.1	1.9
to meet people from other culture	2.2	0.4	0.8	1.2
to improve physical performance	27.1	24.6	29.0	26.9
to improve fitness	27.4	27.2	36.1	30.2
to control weight	4.7	9.2	10.8	8.0
to improve self-esteem	6.1	7.9	9.5	7.8
to develop new skills	1.4	2.2	3.7	2.4
for the spirit of competition	1.4	4.4	1.7	2.4
to better integrate into society	1.8	0.9	0.4	1.1
other	15.9	17.5	10.8	14.7

Source: European Commission, 2014

Obstacles

The analysis of the main obstacles that blocking people from participation showed hardly any difference between the European Union and Hungary (Table 7): 'lack of time and motivation were mentioned the most beside the high frequency of 'having a disability or illnesses. More refusals (over 30%) were recorded in

Hungary in relation dislike of competitive activities, higher rate of having a disability or illness, and ‘not having friends to do sport with’. The roots behind these reasons found in the lower willingness of risk taking, lower performance in health indicators and less frequency of personal relationships in Hungarian society. Among the reasons also lack of relevant sporting infrastructure was mentioned, which is expected to show a change in the future due to developments in this area on the national level (Perenyi, 2013).

Table 7 Obstacles of sport and physical activity participation (%) in Hungary and in the European Union in 2013 (multiple answer-options)

	European Union	Hungary
I do not have the time	40.1	41.0
it is too expensive	10.5	12.4
I do not like competitive activities	6.2	10.4
there is no suitable or accessible sport infrastructure close to where I live	4.6	5.8
I have a disability or illness	15.5	19.5
I do not have friends to do sport with	3.7	4.7
I feel discriminated against by other participants	0.6	1.4
I lack motivation or I am not interested	21.1	19.7
I am afraid of the risk of injuries	5.8	7.0
others	6.8	7.1

Source: European Commission, 2014

Mentions of obstacles by settlement size similarities and differences may also be found between the European Union and Hungary (Table 8). From the European average over 30% difference was recorded in case of consideration for infrastructure available. In Hungarian villages or rural areas lack of sporting facilities were mentioned as a blocking factor, along with high costs, having disabilities or illnesses, lack of friends and fear of injuries in comparison to higher urbanization levels both in Europe and in Hungary. Interestingly in the EU lack of facilities was mentioned less in large cities, while in Hungary small or medium size of settlements seemed to offer better supply of sporting facilities than large cities. It is suggested by the results that in small settlements people tend to have more time and higher level of willingness for sport participation, but a fear of discrimination by other participants in sports as a hindering factor was mentioned with higher frequency than in larger settlements.

Table 8 Obstacles of sport and physical activity participation (%) by type of settlement in Hungary and in the European Union in 2013 (multiple answer-options)

	European Union			Hungary		
	A	B	C	A	B	C
I do not have the time	40.3	38.5	42.0	39.2	43.0	41.0
it is too expensive	8.5	10.6	13.0	14.5	9.6	12.7
I do not like competitive activities	5.8	6.9	5.7	11.0	10.8	9.3
there is no suitable or accessible sport infrastructure close to where I live	7.1	3.6	3.0	10.2	2.9	4.2
I have a disability or illness	15.5	16.3	14.4	21.5	19.4	17.5
I do not have friends to do sport with	3.4	3.7	4.0	5.2	3.5	5.4
I feel discriminated against by other participants	0.5	0.7	0.6	2.0	1.3	0.8
I lack motivation or I am not interested	20.5	22.0	20.5	15.1	23.9	20.3
I am afraid of the risk of injuries	5.8	6.1	5.3	8.1	4.8	7.9
others	7.2	6.6	6.6	4.7	8.9	7.9

A – rural area or village, B – small/medium town, C – large town

Source: European Commission, 2014

Locations

The analysis of locations chosen for sporting and physical activities showed that both in Europe and in Hungary the most frequently used locations were private or public spaces not specifically developed for sporting practices such as parks, natural environment, homes, on the road between home and place of work/school (Table 9). Venues specially designed for sporting purposes such as fitness and health centers, sports clubs, sports centers were less used by sport participants. Hungarian population on all urbanization levels used, with high above EU average frequency, their private homes as their exercise location, but less used fitness and health centers and outdoor parks. Also, less participation in sport clubs and sports centers were characterizing

Hungarians. These findings suggest that sporting habits has relations to available sporting spaces. On the one hand, parks and natural movement with sporting infrastructure developed with less frequency Hungary; in urban spaces the frequency of and distance from natural environment was also a question. On the other hand, the construction and reconstruction of sport infrastructure started only recently, which influencing power need more time to be in effect (Perényi, 2013). Over 30% difference from the EU average was characterizing the use in frequency of fitness clubs, which is explained by the low number of such clubs in Hungary in comparison to the EU (Szabó, 2012). The role of fitness and health centers as sporting location in Hungarian big cities was stronger than in villages and in rural areas, which trend also apply in respect to the use of parks and natural environment. Availability of these spaces on different urbanization levels may be considered the main explanatory force; it defines socialization procedures, specifically how sporting habits and practices built in daily activities; thus what kind and how often sporting spaces are learnt to be used.

Table 9 The venues of sport activity (%) in European Union and Hungary in 2013 by type of community (multiple answer-options)

	Magyarország				Európai Unió
	A	B	C	D	
at a health or fitness centre	2.2	7.0	8.7	5,8	14.2
at a sports club	5.1	5.7	3.7	4,8	10.6
at a sports center	3.6	3.1	2.9	3,2	6.8
at school/university	5.1	1.3	3.3	3,4	3.7
at work	15.5	8.8	13.3	12,7	12.8
at home	61.0	52.6	41.5	52,1	42.0
on the way between home abd school or work	26.7	31.6	27.8	28,6	27.5
in a park, outdoors	10.8	12.7	26.6	16,5	41.4
elsewhere (spontaneous)	1.8	1.3	5.8	2,9	4.3

A – rural area or village, B – small/medium town, C – large town, D – national value

Source: European Commission, 2014

Local sporting opportunities

Besides the various individual factors mentioned above and examined in previous research (Vanreusel et al, 1999; Gál, 2008; Perényi, 2011, 2013) sport participation also influenced by factors characterizing the external sporting environment. Among others number and condition of sporting infrastructure (Hoekman, 2014) or the policies, opportunities and funding of sport opportunities created by local authorities, such as city councils, or municipalities (Petry et al., 2004; Perenyi, 2013) also play a noticeable role. In this study correlation was found between sport participation and the level of satisfaction with local sporting opportunities. In Europe this was stronger, but in both examined sample a significant relationship (.266 $p > .01$ and .155 $p > .01$ respectively). Data shows that those participating in sports expressed higher level of satisfaction about sporting opportunities in comparison to those of the inactive. People not participating tend to have negative opinion, which may contribute to their absence; they may have the tendency of not finding a feasible sporting environment in which they would be willing to participate (Table 10).

Table 10 Consideration of local sporting opportunities (%) in the European Union and in Hungary in 2013

		consideration of local sporting opportunities (the area where I live offer me many opportunities)			
frequency of sport activity		A	B	C	D
European Union	1 time a week or more	52.3	37.0	29.1	20.8
	1 to 3 time a month	6.1	5.4	5.7	3.6
	less often	11.4	14.4	15.7	10.9
	never	30.1	43.2	49.5	64.6
	total	100.0	100.0	100.0	100.0
Hungary	1 time a week or more	41.9	41.1	32.0	32.1
	1 to 3 time a month	4.8	4.0	3.9	5.7
	less often	11.9	14.3	13.9	10.4
	never	41.4	40.6	50.2	51.9
	total	100.0	100.0	100.0	100.0

A – totally agree, B – tend to agree, C – tend to disagree, D – totally disagree

Source: European Commission, 2014

Actions of local authorities

The level of satisfaction with actions of local governments in connection to their support for sport and physical activities was also examined (Table 11). In this respect, the data indicated among those dissatisfied with the contribution of local authorities a higher rate of inactivity, while among those formulating a less critical opinion a higher rate and higher frequency of participation was recorded. This trend was to be found both in Europe and Hungary, however, the strength of the relationship was stronger in Hungary, Pearson's correlation coefficient was in this aspect 0.041 for Europe, while 0.057 for Hungary; both significant on 0.01 level.

Table 11 Consideration of local authorities' contribution to creating sporting opportunities (%) in the European Union and in Hungary in 2013

		contribution of local authorities (local authority does not do enough for its citizens in relation to sport and physical activities)			
	frequency of sport activity	A	B	C	D
European Union	1 time a week or more	39.6	37.0	41.9	46.0
	1 to 3 time a month	5.8	5.5	5.7	5.9
	less often	12.0	14.1	14.0	11.4
	never	42.6	43.5	38.4	36.7
	total	100.0	100.0	100.0	100.0
Hungary	1 time a week or more	36.0	38.5	39.3	35.8
	1 to 3 time a month	5.1	4.9	3.5	4.1
	less often	10.3	13.5	11.8	15.4
	never	48.5	43.1	45.4	44.7
	total	100.0	100.0	100.0	100.0

A – totally agree, B – tend to agree, C – tend to disagree, D – totally disagree

Source: European Commission, 2014

Both similarities and differences can be observed in cases of the EU and Hungary when people living on different urbanization levels evaluated the contribution of local governments to the sporting field (Table 12). First, it seemed to be a general European issue that people living in villages and rural regions expressed dissatisfaction about actions of their local authorities in connection to sporting opportunities. Second, satisfaction trends in small/medium and large settlements had the tendency to be similar. The differences between these two breaking points, however, were larger in case of Hungary. Over 60% of the population living in villages or in rural areas expressed dissatisfaction in comparison to 47% of those in the EU. It is also to mention that in Hungary there were higher difference in opinions also on the two higher urbanization levels as well. Results suggest that creation of opportunities by local authorities may be a strong influence on sport participation, however, it must be stated that satisfaction of the individual with actions of local governments might be influenced by factors outside of the sporting field such as life stages, economic situation or even political affiliation.

Table 12 Consideration of local authorities contribution to creating sporting opportunities (%) in the European Union and in Hungary in 2013 by settlement types (local authority does not do enough for its citizens in relation to sport and physical activities)

	European Union			Hungary		
	A	B	C	A	B	C
totally agree	16.9	12.5	14.7	21.8	9.0	14.1
tend to agree	30.3	28.1	27.5	42.2	35.6	30.8
tend to disagree	32.7	35.8	35.4	26.9	39.6	38.8
totally disagree	20.1	23.6	22.4	9.1	15.8	16.3

A – rural area or village, B – small/medium town, C – large town, D – national value

Source: European Commission, 2014

Conclusions

This study focused on sport participation from the regional aspect and made attempt to compare participation trends of the Hungarian population to that of the European Union. Outside of participation rate analysis was also made in relation to reasons for, obstacles and venues of participation; furthermore, evaluation of local sporting opportunities and actions of local authorities for sport were evaluated. Based on data received from the Eurobarometer surveys and used in this study sport and physical activity participation of the Hungarian population increased from 2009 to 2013. This level of increased participation was the most characteristics in villages and for those living in rural areas. Also, regardless of this substantial growth, sport and physical activity

participation in Hungary is still below the EU average. The connection of sport participation with socio-economic status of regions did not provide a clear and direct explanation for the trends. Only a partial explanation were suggested by the findings as some of the regions with low socio-economic status showed high, while those with high socio-economic status showed low sport participation. Consequently, region-specific additional factors may also play a role such as traditions for sports, sport structure and policy, popularity of sports among locals, etc.

In reasons for sport participation, obstacles for absence, choice of location of sporting practices, and also consideration of available sport infrastructure, opportunities and actions of local government similar results were found both the European and national data with some specific differentiating characteristics to the Hungarian national case. For example in reasons for participation Hungarians mentioned more often 'to improve physical performance' as a reason and less often the indirect benefits of sports such as 'to have fun, to be with friends, to improve self-esteem, to develop new skills, for the spirit of competition, to better integrate into society'.

Among obstacles of participation striking result that 'having disability or illness' one of the most frequently mentioned reason of for absence; this obstacle was even more characteristic in Hungary than in the EU.

The locations used for sport showed that Hungarians less often exercise at locations such as fitness clubs, sport clubs or open spaces such as parks or natural environment; and more often use choose their private home for such purposes. This result is reinforced by the fact that higher rate of individuals (bot never and regularly exercising) expressed strong dissatisfaction with local sporting opportunities and with the contribution of local governments in support of sport than in the EU.

Answers to the measured variables showed high diversity in regards to settlement size both in EU and Hungary and in regional distribution in case of Hungary. In Hungary urbanisation level in general built up answers on the opposite end of the spectrum: important reasons for participation for example in large cities receive less attention in villages and rural areas, and the other way around. Additionally, answers from small and medium-sized cities in some cases match with those on low and in other cases with those on high urbanization level, additional analysis may be needed for this phenomena. Having a disability or illness especially appeared with high frequency on the lowest urbanisation level in Hungary; also villages and rural areas lack sport infrastructure and the population of this settlement type mentioned also economic buying power as an obstacle. Sporting infrastructure was less used by people living on the lowest urbanisation level. This finding was reflected in the negative consideration of local opportunities and actions of local governments, which was actually suggest that relevant sport infrastructure and opportunities for sport such as organisations, programs, communities do not exist with such frequency as they do at larger settlements. It seems that supporting sport policy and available infrastructure on the local level play a major role in creating sporting opportunities and contribute to the increase of sport participation of the population in general.

It must be noted that the results coming from the second wave of the Eurobarometer surveys very much differ from national survey data gained from age-segment data of youth population. This difference mostly can be due to the different conceptualisation and definition sport participation and physical activity variable, and the mixture of meaning of questions. In the Eurobarometer survey physical activity also contain for example gardening which could be accounting for most growth in participation rates especially in rural areas.

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