

## THE CHARACTERISTICS OF SPORT RECREATIONAL PARK USE IN SZEGED'S ERZSÉBET LIGET

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### Abstract

*Objective:* Our research was aimed to explore the opportunities Szeged's largest park, the Erzsébet Liget's offers in the area of sport recreation, in addition, the composition, the sports habits, and the contentment of the park's adult visitors who came from nearby and also from more distant places. We hypothesized that the characteristics of access to the park and the characteristics of park use depend on the proximity of the user's residence. At the same time, their socio-demographic features and contentment are unrelated.

*Method:* Our primary data were gained using random paper-based questionnaires (N=108). Those people were asked who was doing some physical exercise at various sports scenes in the park. Pearson's Chi-square test was used to explore the relationship between different categorical variables.

*Results:* The proximity of the park and the users' place of residence was strongly related to the travel time and the chosen mode of transport. At the same time, it did not show any significant relation to the features of park use for sports. These features, primarily due to the elderly visitors, only impacted the frequency of park visits with an aim other than sport. Also, no significant difference was found concerning the park's proximity, contentment with the services, and socio-demographic variables, although some tendencies were identified.

*Conclusion:* The park's proximity did not have an impact of significance concerning the composition and the contentment of park visitors and their use of the sports facilities.

**Keywords:** sport, recreation, physical activity, park use, Szeged

### THEORETICAL BACKGROUND

The green areas and parks in cities greatly influence the comfort of city dwellers and visitors by granting them an opportunity for recreation in densely populated urban areas (KARANCSI et al., 2008). Green areas support the ecological integrity of cities: they clean the air, reduce the noise level, decrease the heat, help to preserve biodiversity, and influence the city dwellers' health positively (MAAS et al., 2006; WANG et al., 2022). By offering an opportunity for daily physical activities, these areas can reduce the risk of metabolic diseases and their complications and health problems, which are due to city dwellers' sedentary lifestyle (WOLCH et al., 2011; HALLAL et al., 2012; RUNDLE et al., 2013; KACZYNSKI et al., 2014; RADAK et al., 2019; KINCZEL – MÜLLER, 2020). These diseases are today the leading causes of death worldwide, even more so in Hungary. In addition, the health impact of outdoor physical activities is much more favorable than the influence of those which are done indoors: in the open air, the disrupted balance of human



organisms is restored faster, and thus the psychic state of people improves, too (ULRICH et al., 1991; GRAHN – STIGSDOTTER, 2003; KORPELA et al., 2014). According to KOTHENCZ et al. (2017), the opportunity to be surrounded by greenery and the recreational possibilities of a green area represent the most decisive markers of positively judging one's quality of life.

The role of parks and green areas in socialization is significant too. These green areas can be characterized by pleasant microclimate and quiet surroundings, which make them an ideal location for regular meetings and collective free time activities. In addition, they contribute to the creation of informal social interactions and intercultural dialogues (SULLIVAN et al., 2004; SEELAND et al., 2009). Parks also benefit the well-being of disadvantaged communities (THOMPSON et al., 2014; WOLCH et al., 2014). Recreation in natural surroundings may raise environmental awareness (HØYEM, 2020).

Since parks, recreational, health promotion, and sports activities are all integrated (GYÓRI, 2020), the accessibility of green areas and the general health state of the urban population are all interrelated (MAAS et al., 2006). Studies in the area of recreation and park use demonstrate a continuous growth in the frequency of park use for recreational purposes (BEDIMO-RUNG et al., 2005). Physical activities in 'green' areas gained special significance during the COVID-19 pandemic because indoor sports activities were significantly restricted then (ÁCS et al., 2021).

Historically, in the first public parks, which were established with the aims of urban hygienic and aesthetics in mind, there were no designated places for exercising. People could find walking paths or trails suitable for horseback riding and carriage riding, and also, some open spaces could be used for ball games. Parks, which were opened with the aim of sports activities in mind, were first opened in England in the middle of the 19th century; then, from the turn of the century onward, meeting these new requirements became increasingly important when designing, opening, or renewing public parks (CSEPELY-KNORR, 2011). Nowadays, it is a general requirement that in the process of urban renovation, public parks and even the larger green areas have sports courts and sports equipment. All of these are established for use by city dwellers, free of charge (running tracks, fields, and courts for ball games or rolling sports and fitness stations).

According to GODBEY and MOWEN (2010), even though the parks support a great variety of physical activities, they primarily promote physical exercises of low intensity (e.g., walking and jogging). Other researchers think that the renewed green areas in cities increase the number of athletes and the intensity of physical activities they do (COHEN et al., 2019; VERT et al., 2019; ARIFWIDODO –CHANDRASIRI, 2020, DUNCAN et al., 2022). On the other hand, POPPE et al. (2022) did not think there was any significant change concerning this latter statement. Methods aimed at measuring the intensity of physical activities vary, making it extremely difficult to compare results. In addition, the frequency of park visits is also related to using some active modes of transport, which may increase total exercise time (VEITCH et al., 2013).



The proximity of parks near the residence positively impacts people's willingness to do sports (WICKER et al., 2012). On the other hand, easy accessibility is insufficient for regular physical activities. Well-prepared locations (tracks and courts) are also needed, and, from an aesthetic point of view, the general environment has to be attractive, too (DUNCAN – MUMMERY, 2005; HILLSDON et al., 2006; VAN HERZELE – DE VRIES, 2012). In places where the opportunities for sports activities are seen as more favorable by residents, a higher proportion of them regularly engages in physical activities (LACZKÓ et al., 2020). Within a distance of 1 km from one's place of residence, each hectare of green areas increases the residents' rate of physical activity by 2% (KACZYNSKI et al., 2009). On the other hand, it is also a well-known fact that those who like outdoor physical activities are more willing to move to areas with parks and green spaces nearby (CAO et al., 2009). So, the use of parks depends on these areas' spatial and temporal availability, but it takes work to determine the optimal rates. The ideal material availability was first identified as a 5-minute walking distance (COHEN et al., 2007; GUAN et al., 2020). Today the optimum is related to a distance and determined as 1 kilometer or 1 mile (KACZYNSKI et al., 2009; KOOHSARI et al., 2013). On the other hand, larger parks tend to be more appealing with a larger zone of attraction; it means more people visit them, and there are even visitors from areas outside the park's immediate proximity (GUAN et al., 2020). Not only the larger size but better equipment, multifunctionality, an increased number of sports facilities, and several supplementary services are all features that may contribute to a place's popularity (KACZYNSKI et al., 2008). The zone of attraction of a 5-6-hectare public park with playgrounds, sports fields, picnic areas, gardens, and paths are estimated as approximately 400-800 m (about 5-10 minutes on foot); a park of this size and quality may serve CCA. 1000-5000 persons per hectare (LANCASTER, 1983; VAN HERZELE – DE VRIES, 2012).

So, the use of parks depends on the distance between the users' residence and the park itself and the length of time one can reach it. Still, it is also dependent on one's place of work, people's needs and preferences, the actual sports activities, the sense of security as well as the socio-demographic composition of park users (MARCUS – FRANCIS, 1998; KACZYNSKI et al., 2014; BAKAR et al., 2016). Each park or green area may be attractive for a different reason. Still, each has to suit the geographical characteristics of its immediate environment. When designing the services these parks offer, the needs and preferences of potential park users must also be considered.

Generally, the studies exploring the relationship between parks and physical activities primarily focus on children, the elderly, and the disadvantaged. At the same time, there needs to be more information about the park use by adults who visit the area for recreation and sport (BANCROFT et al., 2015). Based on these general tendencies, it is clear that the group of men exercise more likely, and use parks more extensively than women; in addition, the positive attitude to sport is also intensified by younger age, higher educational level, more income, and the urban environment (PAÁR – ÁCS, 2015; BERKI – PIKÓ, 2017; MAKAI, 2019; COHEN et al., 2021; GYŐRI et al., 2021). At the same time, the



composition of athletes in parks may occasionally differ from the average: the proximity of a park may be more attractive for women, the young, and the elderly (KACZYNSKI et al., 2009).

Regarding the location of our research, we focused on the inhabitants of Szeged (160 thousand), a city situated on the banks of the Tisza River, an administrative, economic, and cultural center in the region of the Southern Great Plain of Hungary. This location has many green areas because, on the one hand, there used to be wooded areas that served as marketplaces at the cross-section of streets in Szeged. On the other hand, the flood zones of the river were and still are green bands stretching along the river across the town (BLAZOVICH, 2007). Another study has already described the outdoor sport and recreational facilities in and near the city (GYŐRI, 2013). Also, KARANCSI et al. (2016) summarized the most typical characteristics of Szeged's parks and their role in local tourism. Based on a detailed analysis of Szeged's five largest parks KOTHENCZ (2015), it was concluded that the Erzsébet Liget in 'New Szeged' (Újszeged) district represents the highest quality green area for recreation.

The park, named after Queen Erzsébet (Elizabeth) of Hungary, is called Erzsébet Liget, or the 'Liget' (liget=grove). It is located in the vicinity of the inner-city bridge, and it occupies an area of 15 hectares. The park was established in 1858, and due to its central location, it soon became popular with Szeged's citizens. In addition to its traditional role as a park, it was and still is the venue for many events, including festivals, open-air theatrical performances, and sports events. This park has always been significant for the inhabitants of Szeged, both periods of neglect and renewal in its history (BÁLINT, 1969; BÁTYAI, 1998). When research was carried out by KOTHENCZ (2015) to map the opinion of local people on what state the park was in, the conclusion was that it was depressing due to maintenance problems, the ruinous state of its buildings, and the lack of safety. It was in 2019 that the park was renewed according to modern standards. As a result, the park became an open-air fitness center, including a 1.5 km long running track, conditioning stations, and the extreme sports venues (skate park) were also made safer; new benches, fountains, bicycle storage places, and mulch-covered walking paths were established. Bicycle routes were opened through traffic.

We may conclude that the accessibility of parks and their recreational services are firmly related to the inhabitants' physical activities and, indirectly, their health and quality of life. Although some data is available concerning the frequency of running tracks in the park (KOTHENCZ et al., 2017), more comprehensive research into the characteristics of park users and their sports habits has not been done yet. Our study aimed first to explore the recreational sports possibilities in Erzsébet Liget, Szeged's most extensive public park. We investigated the sports habits and characteristics of adult park users who may come from nearby but also more distant locations. We were eager to find out how much time people spend in this park with recreational activities, how often they come, what services they use, and to what extent they are satisfied with them. There were also questions about how long it takes them to get there and what means of transport they use. After analyzing



relevant literature findings and considering the results of our on-the-spot survey, it was hypothesized that there was no direct relationship between the socio-demographic composition of people and the distance between the park and their residence (H1). The means and time of local travel are dependent on the distance between the park and the users' residence (H2); park use is dependent on the distance between the park and the users' residence (H3); and, finally, the user's satisfaction with the services is independent of the distance between the park and their residence (H4).

## METHOD

Our primary data collection was paper-based; our data were gained anonymously and randomly. Respondents were asked questions personally in the Erzsébet Liget on ten occasions in September and October 2020, a period between two waves of COVID; first early in the morning, then later in the morning, followed by questions asked in the afternoon, in the evening and at night. Respondents were addressed at various locations, including running tracks, extreme sports venues, tennis courts, and 'street workout' stations (N=108, men n=51, women n=57). Respondents did not participate in any organized sport activity (training session or PE lesson). Our sample did not include those who just walked across the park or rode a bicycle or a scooter.

The questionnaire consisted of 23 (11 closed, five semi-open, and seven open) questions. We examined the respondents' main socio-demographic characteristics (e.g., gender, birth year, educational background, and occupation). We intend to clarify their place of residence followed in the questionnaire (e.g., *'In case you live in Szeged, which part of the town is your residence in?'*). Those respondents were considered 'locals' with a permanent or a temporary address in Szeged. Since we did not aim to identify the full address of respondents, two categories were identified as far as the distance between the 'Liget' and the respondents' place of residence was concerned. Those parts of Szeged which can be found within a 1 km circle (Újszeged, Odessza, Inner city, and Upper town) were considered as 'nearby places,' while all the other parts of Szeged were classified as 'distant' areas. There were also questions about the mode of transport respondents used to reach the park. We were also interested in how long it took them to get there, and the frequency of their visits was also included in our questions (e.g., *'How many times did you visit the Erzsébet Liget last month to do sport?'*). We gathered information about the sport and recreational activities, the infrastructure, and the use of services. The respondents could mark their contentment using a five-Likert scale. If they wanted to add some details concerning their own opinion, they could do it, too (e.g., *'What possibilities/services do you miss when doing sport in the Erzsébet Liget?'*). Since our survey was carried out between two waves of the COVID-19 pandemic, we also asked our respondents how this situation influenced their sports habits and visits to the park. The time they spent in the park on one occasion was called 'training time' in the questionnaire.

The data we gained was then analyzed using the methods of descriptive statistics. Pearson's Chi-square tests were used ( $\chi^2$ ) to explore the relationship between the



categorical variables. We used Yates's continuity correction when analyzing the relationship between two binary variables.

## RESULTS

47.2 % of the respondents (N=108) were men, and 52.8% were women. Their average age was 34.7 years (SD=12.1, Min=18; Max=65). Out of 10 respondents, five were middle-aged (30-49 years old), there four were young people (18-29 years old), and one was more mature (50-65 years old) (Table 1). Almost one-half of our respondents had some degree from a higher education; one-third of them finished secondary education, one-fifth attended vocational school, and one out of 10 finished primary school only. Considering their occupation, three-fourths were actively employed (entrepreneurs or employees), while about one-fourth were students or learners in primary or secondary education (dependents). The percentage of inactive people (pensioners or women on maternity leave or people on unemployment benefits) was low (4.6%). In the group of wage earners, there were significantly more men than women ( $p<0.05$ ). The educational background and occupation depended on their age ( $p<0.05$ ).

Table 1. Socio-demographic composition of people who do sport in Szeged's Erzsébet Liget with the aim of recreation; their residence as compared with the location of the park

	Total (N=108)		Nearby district (n=47)		More distant district, settlement (n=61)		X <sup>2</sup>
	persons	%	persons	%	Persons	%	
<b>Gender</b>							0,73
men	51	47.2	20	42.6	31	50.8	
women	57	52.8	27	57.4	30	49.2	
<b>Age</b>							1.89
young adult (18-29 yrs)	45	41.7	23	48.9	22	36.1	
middle-aged (30-49 yrs)	51	47.2	19	40.4	32	52.5	
mature middle-aged (50-65 yrs)	12	11.1	5	10.6	7	11.5	
<b>Highest education</b>							2.32
primary school	4	3.7	3	6.4	1	1.6	
vocational school	19	17.6	5	10.6	14	23.0	
secondary school	34	31.5	14	29.8	20	32.8	
university, college	51	47.2	25	53.2	26	42.6	
<b>Occupation</b>							6,29
employee	60	55.6	27	57.4	33	54.1	
entrepreneur	18	16.7	4	8.5	14	23.0	
pensioners, or people living on some benefit	5	4.6	4	8.5	1	1.6	
student, learner	25	23.1	12	25.5	13	21.3	

Note: \* $p<0.05$ ; \*\* $p<0.01$ ; \*\*\* $p<0.001$

Author's source

72% of our respondents had their permanent residence in Szeged, and the percentage of those who permanently or temporarily lived in Szeged was 86%. In comparison, another 14% were commuters from nearby settlements (e.g., Deszk, Sándorfalva, Röske). 44 % of respondents live in or in the vicinity of New Szeged, the place where the park itself is located. There is no relation between the respondents' residence and the socio-



demographic indicators; it is only the occupational status that shows such tendency ( $p < 0,10$ ): in the group of those who live nearby, there were more employees, dependents, inactive people, while in the group of those who came from more distant places, there were more entrepreneurs. In addition, there were more women in the group of those who live nearby (although the difference was not significant: 57% as opposed to 49%, young adults from nearby places also represented a larger group (49% as opposed to 36%). In addition, the majority of visitors (4 people out of 5) to the 'Liget' does not go to other recreational parks to do sport. This place in New Szeged is favorably located and can be reached easily from more distant locations by different means of transport; simultaneously, the length of time it takes to get there depends on the mode of transportation, too. In the group of respondents, the average time to get to the 'Liget' was 16.5 minutes (SD=9,7; Min=1; Max=60). On average, it took about 11.5 minutes to get to the park for those who lived nearby, while those, who lived in more distant places, spent an average of 20.3 minutes to get to the park. Six out of 10 used an active mode of transport (4 people walked and two rode bicycles), two persons used some public transportation, and 2 drove their cars (Table 2). It took an average of 14 minutes to get there for those who walked, ran, or cycled; those who drove their cars spent an average of 16 minutes on traveling, while those who used public transport spent an average of 20 minutes on traveling. Proportionately twice as many respondents used an active mode of transportation in the group of those who lived nearby than in the group of those who lived in more distant districts. A significant relation was found ( $p < 0.001$ ) between the length of time, the mode of transport, and the distance between the park and the respondent's residence.

Table 2. Characteristics of the group of sportsmen reaching the Erzsébet Liget

	Total (N=108)		Nearby district (n=47)		More distant districts or suburbs (n=61)		X <sup>2</sup>
	Pers.	%	Pers.	%	Pers.	%	
<b>Length of time</b>							31.72***
1-10 min.	34	31.5	28	59.6	6	9.8	
11-20 min.	54	50.0	16	34.0	38	62.3	
More than 20 min.	20	18.5	3	6.4	17	27.9	
<b>Mode of transport</b>							25.58***
walking, running	41	38.0	30	63.8	11	18.0	
Bicycle	24	22.2	8	17.0	16	26.2	
public transport	21	19.4	6	12.8	15	24.6	
Car	22	20.4	3	6.4	19	31.1	
<b>Time of the day</b>							3.37
at dawn, early morning	15	13.9	9	19.1	6	9.8	
later in the morning	17	15.7	9	19.1	8	13.1	
in the afternoon	34	31.5	12	25.5	22	36.1	
in the evening, at night	42	38.9	17	36.2	25	41.0	

Note: \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

Author's source



Most respondents visit the park during the evening and night hours (39%) or in the afternoon (32%). On the other hand, the more significant proportion of visitors who live nearby come in the early or late morning hours (38% altogether), but the difference between the two groups is not significant ( $p>0.05$ ). During the month preceding our data collection, our respondents did sports activities in the park on 6-7 occasions on average ( $A=6,6$ ;  $SD=6,0$ ;  $Min=1$ ;  $Max=30$ ). No relationship was found between the frequency of park visits and the socio-demographic variables. Those who live nearby do not do sport more frequently than those who live in more distant districts ( $p>0,05$ ). However, the proportion of those who come to do some sport activity on more than two occasions per week was somewhat higher in the group of those who live in the vicinity (34%). In the group of those who live in a more outlying district, this value was a bit higher (25%) (Table 3).

Table 3: Characteristics of park visits with recreational aims in the group of recreational sportsmen of Szeged's Erzsébet Liget

	Total (N=108)		Nearby district (n=47)		More distant districts or suburbs (n=61)		X <sup>2</sup>
	Pers.	%	Pers.	%	Pers.	%	
<b>Frequency of visits</b>							1.18
monthly 1-3 occasions	43	39.8	17	36.2	26	42.6	
weekly 1-2 occasions	34	31.5	14	29.8	20	32.8	
more than two occasions	31	28.7	16	34.0	15	24.6	
<b>Training time per occasion</b>							4.03
less than 30 min.	14	13.0	7	14.9	7	11.5	
30-59 min.	32	29.6	15	31.9	17	27.9	
1-1,5 hrs	50	46.3	23	48.9	27	44.3	
Longer than 1,5 hrs	12	11.1	2	4.3	10	16.4	
<b>Monthly training time</b>							0.98
less than 1 hr	17	15.7	8	17.0	9	14.8	
1-3 hrs	28	25.9	12	25.5	16	26.2	
10-15 hrs	13	12.0	7	14.9	6	9.8	
3-6 hrs	19	17.6	8	17.0	11	18.0	
6-10 hrs	16	14.8	6	12.8	10	16.4	
longer than 15 hrs	15	13.9	6	12.8	9	14.8	
<b>Variety of recreational areas</b>							0.26
one kind	73	67.6	33	70.2	40	65.6	
several kinds	35	32.4	14	29.8	21	34.4	
<b>Non-sport occasions in the preceding month</b>							16.62***
none	33	30.6	12	25.5	21	34.4	
1-4 occasions	47	43.5	14	29.8	33	54.1	
5-10 occasions	19	17.6	13	27.7	6	9.8	
more than ten occasions	9	8.3	8	17.0	1	1.6	
<b>Visits since the outbreak of Covid-19</b>							3.14
much rare	7	6.5	4	8.5	3	4.9	
rare	10	9.3	3	6.4	7	11.5	
the same frequency	58	53.7	27	57.4	31	50.8	
more frequent	17	15.7	5	10.6	12	19.7	
much more frequent	16	14.8	8	17.0	8	13.1	

Note: \* $p<0.05$ ; \*\* $p<0.01$ ; \*\*\* $p<0.001$

Author's source





On one occasion, respondents spend about 1 hour in the park (A=57.3 min, SD = 30,0; Min = 15; Max = 150). Those who live in more distant districts tend to exercise longer (61 min), while those who live nearby exercise only 51 minutes on average. The difference between the two groups is insignificant ( $p>0.5$ ). The monthly training time was gained as follows: average training time multiplied by the monthly frequency of visits (A=423.1 min., SD=529.4 min, Min=20 min, Max=3600 min.) This number was also independent of the distance of visitors' residences ( $p>0.05$ ). In case the time spent on some active mode of transport (getting to the park and then back home) is added to the previously described training time, the physical activity patterns of our respondents can be described in a more precise and detailed way. Thus, the average time respondents spent actively on one occasion was increased to 76 minutes (A=76.2, SD=34.4), while the exact figure appeared somewhat higher in the group of those who live in more outlying districts (A=81.2, SD=37.0). In the group of those who live nearby, the exact figures were (A=69.6, SD=30.3) somewhat lower, although the differences were not found significant ( $p>0.05$ ).

More than two-thirds of our respondents use only one venue during their visits. A maximum of 1/3 of them use at least two different venue types during one visit. Out of the four main areas of the park, the running tracks proved to be the most popular (91%), the next on the popularity list was the fitness stations (32%); they were followed by the tennis courts (12%) and the venues for extreme sports (6%). The frequency of these areas did not depend on the distance between the park and the respondents' residence ( $p>0,05$ ).

In the month preceding our survey, there were three athletes in the group of 10 whose exclusive aim when visiting the park was doing some sport. Seven people out of 10 – on average, on four occasions per month – had other purposes when visiting the park (A=4.13; SD=6.8; Min=0; Max=40). Some members of this latter group went for walks (58%), walked their dogs (20%), visited an event (32%), or came here to have a rest to rejuvenate (18%). In the group of those who live nearby, people visited the park on seven occasions on average with an aim other than sport. In the group of those who live in more distant places, this number was only 2. This significant difference ( $p<0.001$ ) is mainly due to the more substantial number of elderly (50-65 years) respondents.

Due to the first wave of the COVID-19 pandemic, the number of those visitors who arrived to do some sport increased. Although, more than half of our respondents (54%) said they did not alter their sports habits. There were almost twice as many people who increased the number of their visits (31%) than those who reduced it (16%). In this respect, there was no significant difference between those who lived in the vicinity and those who lived in more distant districts ( $p>0,05$ ).

Contentment with the specific recreational venues was evaluated only by those who used them at least once. They gave points from 1 to 5. There was a total of 275 evaluations, and the average point was 4.0. The highest point was given to the tennis courts (4.4), 4.3 points evaluated the grassy areas, the fitness stations were also awarded 4.3 points, the running tracks were given 4.2, and the skate park received only 3.6 points. When evaluating the other features in the park, the dog parks were given 3.7 points, and the restrooms got the



lowest points, only 3.1. The visitors' contentment was independent of their residence ( $p>0.05$ ). Then an open question was asked from the visitors concerning the sports possibilities and services they missed the most in the park. Six respondents out of 10 answered they got everything, while 4 of them mentioned some new services they would be happy to have access to, including drinks vending machines, snack bars, childcare service, and lockers. Some others would like to see new sports opportunities, including baseball and foot tennis courts, soccer fields, open-air opportunities to play table tennis and chess, or venues suitable for doing exercises for group sports and orienteering. There were also suggestions to have the existing platforms or tools renewed, for example, more modern lighting, drinking fountains, and restrooms. Most of our respondents choose the 'Liget' because of its sports fields and equipment (68%) and its proximity to nature (67%). Five out of 10 considered the nearness of the park and good public transport important. In the answers of 3 respondents' favorable social relationships were also mentioned.

## DISCUSSION

Our survey has proven that New Szeged's park, called Erzsébet Liget, offers high-quality recreational opportunities for the inhabitants of Szeged (KOTHENCZ, 2015). Furthermore, it represents an outdoor venue where sport- recreational and health-improving activities are all integrated and represent one unit (GYÓRI, 2020). The attractiveness of landscaping and the new forms of exercising –similar to other park renewals of our times (KACZYNSKI et al., 2008, COHEN et al., 2019; VERT et al., 2019, ARIFWIDODO – CHANDRASIRI, 2020, DUNCAN et al., 2022) – motivate urban inhabitants to live more actively and healthily.

Based on our questionnaires (N=108), it can be stated that the people who do sport in the park belong to different age groups and represent a variety of educational backgrounds and professions. On the other hand, the socio-demographic background variables (e.g., PAÁR – ÁCS, 2015, MAKAI, 2019; GYÓRI et al., 2021) appeared to be less significant. There were no significant differences according to our respondents' gender; their age-based composition tended to be young, and the proportion of degree holders was relatively high in the group of respondents.

It is well known that the patterns of park use may differ depending on the social groups themselves as well as on the accessibility of the park (MARCUS – FRANCIS, 1998; KACZYNSKI et al., 2014, BAKAR et al., 2016). Since information of this kind was not available to us concerning our venue and target group, we supposed that the socio-demographic composition of recreational park users in New Szeged and the distance between their homes and the park did not depend on one another (H1). Our results have not proven such a relationship, but – although not to a statistically significant degree –, in the group of those visitors who lived nearby, there were more women and young adults (see KACZYNSKI et al., 2014), and the majority of them had low incomes; they were dependent on their families, or inactive.



When choosing the ‘Liget’ as a recreational venue, its accessibility was an essential feature for every other respondent. Although the park is well-known and famous all over Szeged and relatively accessible from all town districts, it is logical that the length of time it takes to get there – depending on the actual means of transport - is related to the park users' residence (H2). The park users who live nearby tended to choose an active mode of transport (walking or riding a bike) twice more frequently than those who live in more distant districts; motorized transport was only a third choice for them. Considering all respondents, the average time for them to get to the park was a bit more than a quarter of an hour (16.5 minutes). Prominent, well-equipped public parks attract visitors even from areas beyond convenient accessibility (COHEN et al., 2007; KOOHSARI et al., 2013) regularly (KACZYNSKI et al., 2008; VAN HERZELE – DE VRIES, 2012; GUAN et al., 2020). Some people were willing to travel as long as 40 minutes to do sport in this park. The relationship between the frequency of park visits and the active mode of transport (VEITCH et al., 2013) did not show any direct relatedness concerning sport itself, but concerning other recreational activities – owing to those respondents who live nearby – some tendencies could be identified ( $p < 0,10$ ). Due to the COVID-19 pandemic, the outdoor recreational possibilities tended to be more appreciated: 5 out of 10 respondents said they did not change the frequency of their sports visits, but there were 3 out of 10 did. This latter aspect is crucial because the most recent nationwide survey (LACZKÓ et al., 2023) concluded that those who had been able to increase the timeframe of their sports activities during the pandemic, at the same time, were able to improve their mental and psychological health.

Before our survey, it was probable that the characteristics of park use (e.g., frequency of visits, length of training time, number of sports venues used) are related to the distance between the park and the users' residence (H3). When considering the use of the park for sport, no such relationship was found. On the other hand, the closeness of users' homes significantly increased the frequency of park visits in the group of recreational visitors with an aim other than sport. This latter fact was primarily due to the park use habits of the elderly. Independently of the distance between the park and their homes, park users were satisfied with the park in general (H4), and the newly opened sports venues (running tracks and fitness stations) also played a significant role in their contentment. Several respondents would be pleased to try new possibilities, too, or would have liked to improve their sense of comfort or would have wanted to have better safety and asset protection regulations introduced.

Most of our respondents, 7 out of 10, said they chose the ‘Liget’ because of its built infrastructure and closeness to nature. These answers underline those general statements, which speak, that to be engaged in regular physical activities suitable infrastructural background (DUNCAN – MUMMERY, 2005; HILLSDON et al., 2006) as well as closeness to nature are needed the most (VAN HERZELE – DE VRIES, 2012; KOTHENCZ et al., 2017). In addition, our results – based on the opinion of each third respondent – also



demonstrate that green areas play an extremely significant role in socialization and shaping social and cultural relations (SULLIVAN et al., 2004, SEELAND et al., 2009).

A positive feature of our research is that a personal query was used, and the data were gained on the spot; these features provided new information with the help of previously never investigated variables. Our results were limited by the relatively low number of respondents (N=109) and the necessity of categorizing spatial parameters since we needed access to precise data concerning people's addresses. Respondents' composition may have also been influenced by the fact that there are two university dormitories nearby. The impact of physical activities on health improvement may be a limit, too, since it was only the extensive indicators (frequency of park visits, length of training time) we emphasized in our research.

In summary, we may conclude that city parks and the urban green areas – in addition to their ecological significance – due to their capability to preserve physical and mental health – represent an undisputable benefit for city dwellers and, through them, for the entire social and economic environment. This is also of particular importance to us because Hungary has one of the lowest rates (17%) of people exercising outdoors in parks in a European comparison (EU28 AVG 40%) (European Commission, 2018). Our work highlighted that park renewals might have a special significance in motivating city dwellers to lead a more active and healthier life. Decision makers and landscape designers must be aware of potential park users' needs, customs, and preferences. In our future research, we intend to finetune our temporal and spatial parameters from the point of view of spatial sciences; from the aspect of sports science, we want to include further analysis of quality markers of physical activities. In addition, an in-depth analysis of the health status of sportspeople who do recreational sports is planned to be included. In the future, we would like to extend our research to different parks in Szeged and other parts of the country. The results of these analyses might serve as clues for planners to improve citizens' health behavior. We intend to clarify how to influence such behavior through good practice examples positively.

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