HOW DO THE CITIZENS OF GYŐR USE THE OPEN SPACES?
RESULTS OF THE PRE-HEALTH QUESTIONNAIRE SURVEY

Széchenyi István University

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1. Introduction

In the frame of the PREHealth project, the Széchenyi István University has conducted a questionnaire survey among the citizens of Győr, focusing on the use of public spaces, the services and opportunities offered by the open spaces, as well as the habits and lifestyles of public space users. The survey was divided in two stages. First, a face-to-face, on-site survey took place at several, previously selected open spaces. The survey was conducted during morning and during afternoon, as well as on weekdays and on weekends, in order to examine whether there is any difference between the open space users. The field of survey took place between 27th June and 11th July 2017, collecting altogether 123 answers. A database was set up, and the examinations were performed by using the SPSS 22 software.

As the second stage of the research, the face-to-face questionnaire was adapted to an online interface. In this case, the survey was focusing on the most frequently used open spaces; this way deviating from the on-site survey. The online questionnaire was available from September to December 2017, and it was completed by 324 respondents. (The first answer was recorded on 11th September, while the last on 9th December.) The data-analysis was also conducted by using the SPSS 22 software.
1.1 Selected open spaces for the face-to-face survey

The on-site survey took place at three open spaces, asking the present open space users randomly. In Győr, the following open spaces were selected:

- Batthyány square (inner city park)
- Lakes of Adyváros (neighbouring blocks of flats)
- Riverside (inner city coastline of the Mosoni Danube and Rába River: Aranypart and Dunakapu square).

1.1.1 Batthyány square

The selected open space can be found in the downtown of Győr, it is a green space serving mainly the inhabitants of the inner city, with a territory of 20 thousand m². The square is surrounded from all sides by streets and 3-4 story residential area. It is a typical inner city park, which is mostly used by the neighbouring residents for resting, dog-walking or using the playground and sports field. Two different user pattern is characteristic: the free time activities and the pedestrian traffic across the area of the park, since several bus stops are located next to the open space. The square was renewed in 2014, and during the renovation a runway and several outdoor gym equipment were also placed. The running track is becoming more and more popular. For the dog-walkers, a “dog toilet” was also placed. Furthermore, on the Eastern side of the park, you can find a fenced playground and a road traffic track for children, as well as a sport field suitable for different ball games. Besides, several benches serve those who want to relax. The open space has traditional green vegetation, with ornamental shrub and assorted trees. The density of the trees offers adequate shade during the summer. In several places annual flowers are planted every year, and the spaces between the pedestrian paths are filled with lawn.

Photo 1: The Batthyány square in summer

Source: own photo
1.1.2 Lakes of Adyváros and the surrounding area

The three lakes in the district of Adyváros are the “products” of the 60ies and 70ies, since the building of the surrounding huge blocks of flats needed gravel extraction. After the completion of the flats, the newly evolved lakes were recultivated. The area today serves the residents of the surrounding 4-10 story blocks of flats. Because of the high buildings this district has the biggest population density within the city. Surrounding the three lakes of Adyváros the green area is presented in several, mosaic pieces, since the flats and some shops were built quite close to the lakes. The area is divided in two by an inner by-pass road, accompanied by a thermal pipe and a railway track, further enhancing the fragmentation of the open space. Each of the three lakes has cca. 0.8-1.2 hectare of water surface, while the total area of the surrounding green spaces accounts up to 9 hectare (incl. the water surfaces as well). The three areas are separated from each other, and therefore it can not really be understood as one broad open space. From the three lakes the Western one is the neatest, with stone pathways, flower beds, information boards, benches and a playground. The environment and vegetation of this lake was renewed lately, we can find here linden, willow and ornamental trees. During the renovation rose bushes, young oat plants were planted, which indeed increases the landscape value of the open space. However, it is a problem, that during summer the shade is rare, and the lawn between the trees dries out.

Photo 2: One of the lakes in Adyváros

The lake in the middle is surrounded by a gravel pathway, while the third (and Eastern) lake is surrounded by a runway track and several benches. The vegetation in the case of these lakes is less organised. We can found here several aspen trees (both planted and wild ones), and 20-30 years old ornamental trees. These trees altogether have rare density, and only give little shadow. Other horticultural intervention (herbs or flowers) is not visible here. The coastal side of the lakes are overgrown by water plants, especially reeds.

Source: own photo
1.1.3 Riversides (inner city coastline of the Mosoni Danube and the Rába River, connecting green spaces in Aranypart and Dunakapu square)

Well-known slogans as “Győr, the city of rivers” or “Győr, the city of meetings” indeed have a basis, since four rivers are running together within the borders of the settlement. The four river coastlines are altogether 47 km long. The riverbanks of the inner city have been completely renovated between 2012 and 2014 in the frame of a major water management European Union project. The primary aim of the project was the improvement of water quality and quantity, as well as the enlargement of the ecological potential, the reconstruction of water habitats, and the preservation of flood-security. However, the project also targeted social purposes, like the improvement of urban landscape, boosting water and ecotourism, as well as building walking paths along the river.

From the long riversides, for the face-to-face survey, we have chosen two territories: the inner city coastline of the Mosoni Danube and Rába River, and the traditionally recreational site along the Mosoni Danube neighbouring the university campus (Aranypart). Both of the selected locations are important open spaces, and they are also serving tourism purposes. The Aranypart is mainly used daily by the university students, however, during weekends many visitors are arriving from other districts of the city, primarily in order to do some physical activity. During summer it is a popular location because of the beach, and in winter because of the sleigh ride possibilities. This location also serves as a race track for rowing sports, international and world championships were also organised here. The Aranypart has a territory of around 4 hectares, partly including a sandy beach.

Photo 3: The riverside of Aranypart

As for the other selected riverside, it is located next to the historical inner city centre (Dunakapu square), just under the former city walls. Besides the city residents, many tourists come here to visit, and it is
also a popular place for the anglers. The territory of this selected riverside is around 2.5 hectare. While the Aranypart is mainly serving the water sportsmen (with swimming, rowing facilities, and also other sports field), the children (with playgrounds) and the campers (with fireplaces, and public toilets), the inner city coastline is rather used for resting and walking. You can also find here a playground, several benches and resting places, however, the infrastructure serving the anglers have decreased during the past years.

Photo 4: The inner city riverside under the former city walls before and after the renovation

Between 2012 and 2014, during the renovation, the riversides within the inner city have been covered with concrete, and walking paths have been developed next to the rivers. This is a novelty, since before
that the riversides were hardly walkable because of the half-natural state and the overgrown vegetation, therefore there was no real connection with the water surface. Today, the riversides are walkable for several km long. As for the vegetation, on both of the selected locations, you can find the remaining river forests, however, during the flood control works of the past years, the tree vegetation have been significantly decreased. In connection with the inner city coastline, several flower beds were formulated. All in all, today, the landscape of the riverside is more artificial, however, it is more transparent, and the water can be closely observed.
2. The open space users

This chapter will give an overview about the open space users, presenting the main characteristics of the users, the activities conducted on site, and the benefits deriving from these activities. The chapter will separately analyse the results of the face-to-face and the online survey, although where it was possible, we have done a comparison, therefore the differences and similarities will also be mentioned.

2.1. Characteristics of the open space users

As for the face-to-face survey, analysing 123 respondents, the gender rate is relatively balanced: 45% of the respondents is male, while 55% is female. Looking at the age distribution, there are two age groups that exceed the others: the 18-25 years old (25%) and the seniors above 65 years (24%), people in these two age groups give almost half of the total respondents. (Figure 1, marked with blue). It is important to notice, that during the offline survey, we have asked those, who were already present at the open spaces, therefore the age distribution might also represent those age categories, who prefer to visit these open spaces.

![Figure 1: Age distribution of the respondents in the online and offline surveys (N1=123, N2=324)](source: offline and online survey)

It must be added, that the face-to-face survey took place during summer, therefore probably the school holiday also contributed to the fact, that the young generation (especially the university-students) represented themselves in a higher rate in the sample. On one hand it is desirable that the senior age group is present at the open spaces (referring to the fact, that in Hungarian terms the health improvement of the seniors is a critical issue), however, it is also visible from the latter analysis, that primarily they are not visiting the open spaces for physical activities. However this fact confirms the initial assumption, that open spaces could be suitable locations to encourage the health preservation of the senior generation.

While the offline survey shows the profile of the open space users who were actually present at the open spaces, in the online survey the potential open space users were interviewed. The profile of the
324 online survey respondents significantly differs in several aspects from the face-to-face survey. First of all, by looking at the gender rate, the share of women is much higher (72,5%). Furthermore, in the age distribution the middle aged respondents (36-45 years old) are dominating, while the share of the younger and older generation is considerably less in the sample. (Figure 1, marked with orange) This difference can be explained by the nature of the online survey, namely that the dominant age group is the one, who mostly get access and knows those portals, where the online questionnaire was available.

The household situation of the respondents in the face-to-face survey shows a mixed picture (Figure 2, marked with blue). Most of them (28,7%) live with a partner, without children. It is important to mention, that those older couples also belong here, where the children have already left home. They are followed by those, who are living with own parents or guardians (24,6%), which is consistent with the distribution of age groups, assuming that the younger generation is still living with parents. Furthermore, the share of those, who live with a partner and children (22,1%) and those, who live alone (15,6%) is also remarkable.

As for the household situation of the online survey respondents, there are two categories, which is showing substantial difference (Figure 2, marked with orange). In the online survey, the share of those, who are living with a partner and children is the highest (37,7%), while in the offline survey, this category was only in the third place. The other remarkably different category consists of those, who are living with own parents. While in the face-to-face survey, almost quarter of the respondents belong to this category, in the online survey, they are only representing 6%. Both of these differences can be explained by the age distribution of the samples, since in the online survey there are significantly less respondents under the age of 25.

By looking at the highest education level, there are also differences within the two samples. In the case of the online survey, the respondents holding a higher education degree are predominant (taking into account both the BSc and MSc degree their share is more than 57%). The rate of those, who have
finished upper secondary education is 19.4%, followed by those with post-secondary non-tertiary education (17.3%). The rate of those, who have finished lower secondary education or primary education is marginal. (Figure 3, marked with orange)

In the case of the face-to-face survey, contrary to the age distribution, there are no outlier categories. Most of the respondents have finished upper secondary education (31%), followed by those who have finished lower secondary and post-secondary non-tertiary education with equal shares (19.8%). The rate of the respondents holding a higher education degree (both BSc and MSc) is also around 20%, while 9% of the respondents have finished primary education, however, obviously this category also includes those, who are still in the primary education. (Figure 3, marked with blue)

As for the employment status, two categories are dominant in the face-to-face survey: the full-time employed (37.4%) and the pensioners (34.1%). Besides the students (14.6%) the rate of the other categories are marginal. As for the nature of the work is can be mentioned, that those who are working in a manual occupation are predominant (66%), opposite to the office workers.

In the case of the online survey, the share of the highest finished education also indicates the employment structure. Overwhelming majority (79%) of the online survey respondents are employed full-time, the share of the pensioners is only 10.5%, while the share of students is only 4.6%. Contrary to the face-to-face survey, this sample is dominated by the office workers (87.4%). However, also in this case the share of other categories is marginal, which is understandable, since the number of part-time employed people in Hungary is considerably low (one of the lowest within the European Union), while the unemployment rate in Győr is also negligible.
Despite the visible and perceptible differences, we can also look at the two samples that they are complementing each other. In any case, the differences between the profiles of the open space users definitely need to be taken into account while analysing the further questions, and the results should be interpreted in accordance with the characteristics of the user profile.

2.2. Visiting and using the open spaces

According to the face-to-face survey it is visible, that the respondents prefer to visit the local (neighbouring) open spaces. However, many respondents (21%) also like to visit other parts of Győr as well. The rate of those was the lowest, who prefer to visit open spaces outside the city. This also implies that the city is able to satisfy the emerging needs with an adequate number of open spaces.

In connection with this, it is slightly surprising, that more than half of the open space users (50,9%) arrived from more than 1 km distance in order to enjoy the possibilities offered by the parks/riversides. In spite of the often longer distance, most of the visitors (51,7%) arrived on foot, while the share of the bicycle (16,7%), the public transport (20%) or the car (11,7%) remained at a low level.

The biggest share of the respondents (33,6%) visited the given open space 2 or more times per week (Figure 4). It is also often to make the visit once a fortnight (21,3%), once a week (16,4%) or once a month (12,3%). However, 15% of the respondents only visit the open space incidentally, that is more rarely than every two months.

As for the length of the visit it can be stated, that more than half of the respondents (55,3%) spends more than 1 hour at the given open space. 30% spends a duration between half an hour to one hour, while 14,6% spends up to half an hour here. The average duration of the visit implies, that the time spent at the open spaces could be enough for activities related to health preservation, however as the
analysis of the further results also indicates, most of the time spent at the open spaces is not filled with physical activities.

39% of the respondents arrive to the open space alone, while in the majority of the cases the visitor is accompanied by someone. Most of those arriving accompanied are coming together with other adult or adults (32,5%), however the rate of those who arrive with children is also high (24,4%). In the case of the accompanied children it can be seen, that most of them are below 6 years old, while there were also some (although considerably less) cases, when the child was between 7 and 11 years old. However, older children were not accompanied to the examined open spaces (at least not in the frame of the face-to-face survey). This share is most likely implies, that the urban open spaces and public parks are offering adequate possibilities for younger children, for example in all of the three selected open spaces for the face-to-face survey, a playground could be found.

As for the activities during the visit, it can be seen, that most of the open space users are visiting the examined parks/riversides for resting and relaxing (Figure 5). The share of those, who are visiting in order to do some physical activities is considerably less. In the frame of the PreHealth, social interaction was also defined as an element of mental health. Therefore, the activities aiming at social interaction
can also be understood as part of a healthy lifestyle, and it can be seen, that in the case of the examined open spaces in Győr, meeting other people is the second most frequent reason of the visit. However, it is also true, that actual physical activities are only done by considerably less people. Although it is a fact, that the face-to-face survey was conducted during the summer heat, when the outdoor physical activities are naturally less appealing.

During the **online survey**, the respondents were asked to name the open space in Győr, which they are visiting the most frequently (Figure 6), and the following questions were concerning these locations.

![Figure 6: Public spaces mentioned by the respondents of the online survey (N=324)](source)

However, from the results we can also conclude which are those locations in Győr, that due to their frequent attendance are suitable to promote the health preservation. It is visible, that the riversides (and the Radó island) are the most popular among the residents of Győr, followed closely by the public spaces of the inner city and the parks and playgrounds of the Nádorváros district.

The highest share of the online respondents (43.2%) are visiting both the local (neighbouring) and other open spaces within the city as well. Similarly to the face-to-face survey, the rate of those who are visiting open spaces outside the city was also marginal (1.2%). (Figure 7)
Concerning the distance from the open spaces, the rate is again similar to the face-to-face survey. 41% of the respondents are willing to visit a particular open space from more than 1 km distance. Most of them are arriving on foot (57%), considerably less people are using bicycle (12.7%) or public transport (7.7%). However, the car was the second most popular mode of transport, with a rate twice as high as in the face-to-face survey (22.6%).

Regarding the length of the visit, it can be stated, that in almost half of the cases (46.9%) the respondents spend between 30 minutes to 1 hour at the given open space, which is again (similar to the face-to-face survey) suitable for performing physical activities. Most of the online respondents (41%) like to spend time at the open space in the company of other adults, while 28% of them are arriving with children. However, the rate of those, who are visiting the open spaces alone, is also remarkable (29%).

As for the activities during the visit, the online survey shows different results compared to the face-to-face survey (Figure 8). On one hand it is visible, that the online respondents marked all of the possible answering options more frequent, which means that they are taking a higher advantage of the possibilities offered by the parks and public spaces. Furthermore, while in the face-to-face survey, the resting and relaxing function dominated, among the online survey respondents, walking and jogging was the most frequently chosen option (43.8%). Again, it is worthy to mention, that the face-to-face survey was conducted during the summer heat, while the online survey was rather focusing on the general open space use.
Every single activity was more often mentioned in the case of the online respondents, however, the cycling itself was chosen 10 times more than in the face-to-face survey. These differences can be explained by the deviations of the two samples, namely that the mostly middle aged group is using the open spaces more frequently and more intensively, in addition the health preservation (walking, cycling, playing a sport, social interaction) is more dominant in their case as well. Common thing is, that both samples contain middle aged and seniors who are spending more time than the average at the open space, however, the performed activities differ. While the middle aged are visiting because of the time spent together with their children and the sport activities, the older generation is mainly using the parks or riversides for resting and for the opportunity of community life.

2.3 Advantages and necessary improvements

Within the questionnaire survey, it was also an important aspect to examine how well the public space users are satisfied with the parks and open spaces of Győr, what kind of improvements they would like to see, and if they had the opportunity, what activities would they perform.

The respondents taking part in the face-to-face survey were more or less satisfied with those open spaces, where the interviewing took place. Most of them (51,2%) are partially or totally satisfied with the facilities of the location. However, 21% stated that the given open space is only satisfying few of their needs. The rate of those, who think that the examined open spaces are not able to satisfy any of
their needs is marginal (3,3%). We analysed, although did not find any significant connection between the examined public spaces and the rate of the satisfaction, however, among the users of the Lakes in Adyváros were more unsatisfied respondents.

The primary motivation and benefit deriving from visiting the open space is the resting and relaxing, this option was marked as the most important one (Figure 9), which is not surprising bearing in mind that the highest share of the visitors are choosing the open spaces for resting. The second most important benefit is the enjoyment of nature, since the open spaces selected for the survey (riversides, inner city park and water surfaces among blocks of houses) are indeed understood as natural sites.

*Figure 9: Strength of benefits of activities done at public spaces by the respondents of the offline survey (%) (N=123)*

It is also visible, that the health preservation function of the open spaces is not a fully identified and utilised factor. While the health improvement and socializing were determined as important benefits, the actual physical activities (keeping fit and playing a sport) were not really connected to the use of the open space. This result shows that although the examined open spaces could be suitable for encouraging these activities, most of the open space users do not visit the parks and riversides of Győr because of physical activities.

The lack of activities connected to health preservation can be explained by the shortage of the infrastructure, at least according to the respondents of the face-to-face survey, which means that in case the appropriate infrastructure would be given, much more of them would perform physical activities (Figure 10). Almost half of the respondents (48,3%) would take up a sport at the given open space, many of them would chose outdoor gym, walking or jogging. Only 9% answered, that they would not do anything differently, even if the infrastructure would be there. The answers indicate, that by creating the appropriate opportunities the rate of the health preservation activities could be indeed increased among the public space users in Győr. Among the possible answering options, the high rate of swimming (14,9%) can be highlighted. One of the selected location for the survey was the riverside of the Mosoni Danube (Aranypart), which also serves as a free beach close to the inner city. However, this water is currently not really suitable for swimming because of the high amount of mud, although...
with a small development the rate of physical activities could be significantly increased – especially during summer.

Figure 10: Possible activities mentioned by the offline survey’s responders (N=123)

Concerning the necessary improvements (Figure 11), most of the open space users (34.3%) missed the access to free drinking water. Again, this can be partially explained by the date of the face-to-face survey, since during the summer this aspect obviously becomes more important. The respondents often mentioned the improvement of the cleanliness, as well as the need for more benches and street furniture. However, it is also visible, that the improvements closely connected to sporting facilities and physical activities were not dominating among the demands. Although almost half of the respondents would take up a sport at the open spaces, however it seems that it can not be pursued by the simple renewal of the sports infrastructure. Instead, such basic development issues count, like the public toilet, free drinking water, more garbage bins, which are making the use of the public spaces generally more comfortable.
As for the **online survey**, the respondents were considerably more satisfied with the open spaces. The vast majority of them (74%) were partially or totally satisfied with the chosen open space. However, this can be explained by the differences of the two survey methodologies. While in the case of the face-to-face survey we were asking open space users, who were already present at the location, in the online survey the respondents needed to select that open space, which they are visiting the most frequently. It is understandable, that in the latter case, such parks or open spaces were named, where people like to spend time, because it satisfies many of their needs.

According to the online respondents, the primary benefit of the open space visit is the enjoyment of nature, closely followed by the improvement of health (Figure 12). Although this result is a bit different from the face-to-face survey, since the benefit of the resting and relaxing is lagging behind, there are also similarities: namely, that the concrete physical activities (taking up a sport, keeping fit) was not rated as a very important benefit. Further difference is that socialising with others is not as important benefit for the online respondents, as for the face-to-face survey respondents.
While almost half of the face-to-face survey respondents would take up a sport at the given open space (in spite that they did not rate this benefit as important), most of the online respondents would not do anything differently than now (Figure 13). That is, by renewing the occasionally missing sports infrastructure would not really encourage the online respondents for higher physical activity – unlike the respondents of the face-to-face survey. However, it also needs to be emphasized, that the online respondents already doing physical activities at the open spaces in a considerably higher rate than the respondents of the face-to-face survey, therefore in their case the encouragement is less important than in the case of the offline respondents.
Figure 13: Possible activities mentioned by the online respondents (as percentages of referrals) (N=324)

What else would you like to do in this open space, if you had the opportunity? (%)

- Wouldn’t do anything differently: 56.8%
- Walk or jog around: 17%
- Open-air gym: 13%
- Cycle: 12%
- Skating: 6.2%
- Other activity: 5.2%
- Other sport: 4.6%
- Swimming: 3.7%
- Basketball: 3.7%
- Tennis: 3.4%
- Football: 1.9%
- Volleyball: 1.9%

Source: online survey

Figure 14: Improvements needed in public spaces mentioned by the responders of the online survey (N=324)

Improvements needed in public space (%)

- Benches or other open air furniture: 51.2%
- Improve the vegetation: 42.9%
- Free drinking water: 40.4%
- Improve cleanliness: 37.7%
- Free Wi-Fi access: 36.7%
- Better upkeep of footpaths and other areas used by the...: 27.2%
- Improve safety: 26.5%
- Facilities and infrastructure for physical activity and...: 21.6%
- Bicycle parking: 19.4%
- Noise control: 13.3%
- Accessibility for disabled people: 10.2%
- Other improvements: 8.3%
- Better information about sport and recreation options...: 7.4%
- Keeping different activities separate: 4.6%
- No improvements are necessary: 4%

Source: online survey
Concerning the necessary improvements, the order of the results is very similar to the face-to-face survey (Figure 14). Again, those factors are dominating, which are not primarily connected to the physical activity infrastructure, but are able to make the open space more appealing in general. The most important needs in the case of the online respondents are the more benches and street furniture, the improvement of the vegetation and the free drinking water. Furthermore, the public toilets, the facilities for physical activity and the improvement of cleanliness were also mentioned among the needed developments.

2.4 Lifestyle of the open space users

Last, but not least, we were curious about the lifestyle of the open space users, and whether this lifestyle is influencing the visiting and using of the open spaces. In the questionnaire, the lifestyle was determined by the time spent with sitting, the amount of free time, the amount of stress and the physical activities performed.

Most of the respondents in the face-to-face survey (74%) are spending less than 6 hours a day with sitting. One fifth of them are sitting 7-12 hours, and the rate of those who sit more than 12 hours per day is quite low (5,7%). In the case of the free time, the picture is more diverse, most of the respondents (37,4%) possess 2-4 hours of free time, however there is a high rate, who have more than 6 hours of free time per day. The stress level was measured on a 5-scale range. The vast majority of the face-to-face survey respondents (73%) are dealing with some or less stress. 17% of them are living with much, while 9,8% of them are living with too much stress.

Figure 15: Physical activities mentioned by the offline responders (N=124)
Most of the respondents are doing some kind of physical activity (Figure 15). In most of the cases this is either cycling or running, which is predominantly done outdoors due to the nature of these activities. Furthermore, football and swimming are also popular outdoor sports. In fact, the only physical activity, which is rather performed indoors than outdoors is the gym or exercising. In this term, the open spaces and parks could offer a good opportunity, however, it is possible that the face-to-face respondents do not know and therefore do not use these facilities.

Finally, the respondents were also asked, whether they are using mobile internet. The majority of them (64.8%) are using it, however, most of them are using it only for the social media sites, and the rate of those, who are using location-based games or fitness applications is very low (6%).

The examination of the lifestyle of online respondents are showing several significant differences. First of all, concerning the time spent with sitting, almost half of the respondents (48.1%) are sitting 7-12 hours, while many of them (38.3%) are spending 2-6 hours sitting per day. As for the free time, the vast majority of the respondents (74%) have less than 4 hours of free time per day, and the rate of those, who have more than 6 hours of free time per day is considerably less (only 9%). Although the biggest share of the online respondents (similarly to the face-to-face survey) are facing with a middle range of stress, there are many, who are dealing with much (31.2%) or too much (13.6%) stress.

Because of the higher stress-factor, it would be highly necessary to perform some kind of physical activity. However, it is visible that in the case of the online respondents (although they are performing
physical activities in a higher rate) still only a few sports are performed outdoors (Figure 16). The results are similar to the face-to-face survey, again the cycling and running/jogging are dominating, followed by the most popular outdoor sport, the football. It needs to be emphasized, that the other sports were mentioned quite rarely, especially regarding the outdoor performance. Furthermore, the outdoor exercising is even less popular, than in the case of the face-to-face survey, although several of the chosen open spaces are equipped with such infrastructure.
3. Factors influencing the use of the open spaces

As previously mentioned, the data collection of the face-to-face and the online survey approached different groups with divergent socio-demographic backgrounds. The group of respondents, who were interviewed on previously selected locations is quite different from those, who have answered the questionnaire independently, on an online interface. Therefore, in the followings we will analyse by using cross-tabulations what other factors and variables can play a role in the different open space use patterns.

3.1 Frequency of the open space visits

We are using the open spaces day by day, when we are walking in the city on foot, or when we are using other means of transport, however, the conscious open space visit – when the aim is expressly the activities performed at the open space – is a different thing. Everybody is planning and spending its free time differently, therefore the frequency of the visit, and the time spent there differs among the respondents.

First, we were looking for correlations regarding the frequency of open space visits of the face-to-face survey respondents, and found connections with the different age groups. The most frequent visitors are the representatives of the inactive age group, in particular the pensioners (Figure 17). This is not a surprising result, bearing in mind that the active group has considerably less free time, and they are using it for other activities. Within the category of the most frequent visitors, the seniors (aged above 65) are two times overrepresented. 60% of the respondents within this age group stated, that they are visiting the given open space several times per week. Therefore, it can be established, that as the age of the visitors is growing, so increases the frequency of the open space visits (at least until a certain age). The apparently simple correlation is overwritten by the 26-35 and 18-25 age groups. In the case of the latter one, the different activities and free time patterns play a significant role, while in the case of the previous age group childbearing and the therefore changing free time activities count. 28.6% of the 26-35 age group stated, that they are visiting the given open space 2 or more times per week, while 40% of them only visiting once a fortnight. The least active age group regarding the frequency of open space visits are definitely the middle aged. Half of them claimed to visit the open space only very rarely, only 16.7% of this age group belonged to the category of the most frequent visitors.
There was no significant correlation between the frequency of the visit and the gender, the household situation or the employment status.

However, there is a correlation between the activities performed at the open spaces and the frequency of the visits. Figure 18 presents the frequencies of the open space visits among those, who perform different activities. Every row is showing the answers of only those, who perform the given activity at the open space. Cycling is hardly mentioned, although, it is understandable, since within the questionnaire we were only asking about cycling across the open space, which is hard to connect to activities performed on site. It needs to be emphasized again, that in the case of the online survey, activities connected to any frequently visited open spaces could be mentioned, while the face-to-face survey is only focusing on the activities performed on the three previously selected open spaces. This is the reason why the distribution of the answers is such diverse among the two samples.

From the data of the face-to-face survey it is visible, that those who perform physical activity are the most frequent visitors. 85% of those who play a sport on site are visiting the given open space very often (2 or more times per week). In their case, “playing a sport” means using the sport facilities, equipment and infrastructure of the open space, those who are walking or jogging are only visiting the open spaces more rarely (only 20% of them are frequent visitors). This means, that the well-established sport infrastructure can attract the group of frequent or permanent users. Quite frequent visitors are those as well, who are coming to rest or to meet with other people. In both cases a little more than one-third of them are coming very often, and also their other values confirm the regular open space use. Two other activity-types need to be mentioned, which also draw the frequent visiting: taking children to the playground and walking the dog. In these cases, a permanency can also be observed in the use of the open space, however, the rate of the most frequent visitors is not that high as in the case of the sportspeople.
By looking at the data of the online survey, it can be seen, that the rate of those, who are visiting the open space only very rarely, is very low – and it is true for every single activity. The age group distribution of the online respondents is younger, therefore we can observe higher visiting frequency in the case of those, who perform physical activities. Except the dog-walkers and sportsmen, who have outstanding values in the case of visiting frequency, the other activities show similar values, than in the case of the face-to-face survey.

*Figure 18: The connection between the frequency of open space visiting and the performance of certain activities*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Offline</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>rest</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>meet other people</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>walk or jog around</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>cycle across the open space</td>
<td>33</td>
<td>8</td>
</tr>
<tr>
<td>observe nature</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>play a sport</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>dog walking</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>taking the children to the playground</td>
<td>13</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: offline and online survey
Finally, it is worthy to analyse, how the **visiting frequency and the visit length** correlates with each other. These two variables only correlates in the case of the face-to-face survey, there was no significant correlation in the case of the online responds. Furthermore, only one respondent is visiting the given open space once every two months, therefore this value distribution stands out from the other answers. According to the examination, it can be stated, that the more frequent visit most likely also means longer visiting time. Among the frequent visitors (2 or more times per week or once a week) the share of those is the highest, who spend at the given open space more than an hour. As previously mentioned, this group (i.e. the frequent visitors) predominantly performs sports or other physical activities, therefore it can be stated, that the frequent visitors are deriving from that group, who pursuit the most physical activities on site (Figure 19).

![Figure 19: Connection between the frequency of visits and the length of visits](source: offline survey)

Regarding the face-to-face survey, examining the single open spaces (the survey locations) there was no significant correlation with the visiting frequency, however, there was correlation with the length of the visit. In the followings, we will present, what factors influence the **length** of the open space visits.

### 3.2 Length of open space visits

It was already mentioned before, that the frequency of the visit and the length of the visit correlate with each other. However, the length of the visit is significantly influenced also by the **facilities of a given open space**. The three open spaces, where the face-to-face survey was conducted are located in different districts of the city. All of them have different characteristics and various services and infrastructure are available. As a consequence, the respondents in different open spaces reported different visit-length. The Batthyány square in the inner city, as well as the Lakes in Adyváros are similar to each other concerning the available and offered services, although they are very different in size, and
can be found in a different district. The respondents of these two open spaces had quite similar answers regarding the length of their visit. Among the open space visits of the Batthyány square can be found the highest share of short visits (up to half an hour). Compared to the 9% of the short visits here, only 5% and 4% of the respondents spend such little time at the other two selected open spaces. The rates of the middle-length and long visits are very similar in the case of the Lakes of Adyváros and the Batthyány square. However, a significant deviation can be observed in the case of the riversides of the inner city, where quite complex infrastructure and services are offered. As previously mentioned, one of the locations of the riversides also included a free beach. Since the survey was conducted during the summer, the answers of those, who spent time at the beach, also increased the rate of the longer visits in the case of the riversides. Therefore, it is no surprise, that the visitors of the riversides stay the longest at the open space, 70% of them spends more than an hour here (Figure 20).

![Figure 20: Connection between the lengths of the visit and the different survey locations (%)](source: offline survey)

It is clearly visible from the above, that the different types of open spaces have different impact on the amount of time spent outdoor. On one hand, it is in connection with the fact, that the open spaces have different equipment and infrastructure, on the other hand, the different activities also require different time amount. Therefore the performed activities also effect the amount of time spent at the open space. In the followings, we will analyse the connection between the length of the visit and the activities performed on site, by examining both the online and the face-to-face survey results (Figure 21). Cycling shows the biggest difference among the online and the offline survey respondents. By cycling across the open space, cyclists only spend a very little time at the given area. However, in the case of the online survey, respondents also marked bigger open space territories, where there is a possibility to spend longer time with cycling.
The difference can be well identified in the case of the respondents of the online survey (where the middle aged, employed group dominated), that their average time spent on every activity is shorter, than in the case of the face-to-face survey (where the rate of inactive people, i.e. seniors, pensioners, parents with young children was much higher). Definitely the dog-walkers are, who have very similar patterns both in the offline and the online survey, but this is explained by the similar needs of the dogs, rather than the similarities of the keepers.

Those activities that require the longest visits are the followings (deriving from the data of the face-to-face survey, taking into account the rate of those, who spend more than one hour for the given activity): playing a sport (79%), taking the children to the playground (79%), meeting others (71%). In the case of the online survey for the same activities the length of the visit is respectively 30% lower: play a sport (46%), taking the children to the playground (50%), meeting others (42%). On the whole, it is visible,
that besides the above listed, time-consuming activities the other activities are usually performed within half an hour and one hour: this is the amount of time that the respondents spend at the given open space. In the case of the face-to-face survey, walking and jogging requires either the shortest or the longest visiting time: 27% of the respondents are walking maximum half an hour, while 43% spend more than an hour with this activity. On the contrary, in the case of the online survey, more than half of the respondents (55%) require half an hour to one hour to perform this activity.

3.3: Connection between the single types of performed activities, user groups

In the followings, we will present, how the single open space activities are related to each other, and whether the selected open spaces can be characterised by a higher rate of a given activity type. The number of mentioned activities performed on site is very similar both in the case of the online and the offline respondents (Figure 22). In both cases 1-2% of the respondents indicated, that they do not perform any of the previously determined and in the questionnaire survey listed activities. The vast majority performs 1 or 2 activities while visiting the open space. 16% of the respondents do 3 activities, while the remaining 6-12% performs more than that. Therefore, it is reasonable to question, which are those activities, that go together, which are those that were mentioned together? Resting and meeting with others were the two activities that were mentioned together in the highest rate. Quite often case was, when resting and taking the children to the playground was mentioned together. And finally, the three activities of resting, meeting with others and walking was also very common to mention together as performed activities. Consequently, resting is the activity, which is in connection with other activities as well, and not necessarily separable from the other activities.

Figure 22: Number of activities mentioned in each survey (Noffline=123, Nonline=324)

![Figure 22: Number of activities mentioned in each survey](source: offline and online survey)
It was already mentioned before, that the different open spaces have different features and facilities, which can also influence the activities performed on site. By only examining the data of the face-to-face survey, it can be established, that the performed activities can be well distinguished by locations.

For examining the connection between the locations and the performed activities, only the data of the face-to-face survey could be used. Resting was the activity that had the highest share in all of the three selected locations, almost 60% of the respondents have performed this activity. Furthermore, the Batthyány square (the inner city park) serves as a meeting place and a place to walk and jog, both of these activities were mentioned by more than one-third of the respondents. In addition, the use of playgrounds can also be highlighted here. On the contrary, sport activities are connected rather to the Lakes in Adyváros, and to the riversides (and not at all to the Batthyány square). As for cycling, none of the above open spaces can be highlighted. And finally, it is interesting and rather surprising, that observing nature was not mentioned by any of the respondents, who were present at the riversides; this was a typical activity rather at the Batthyány square.
4. Conclusions

From the data of the questionnaire survey we intended to analyse the open space use, the satisfaction and the necessary improvements and required developments in Győr. Since a face-to-face and an online survey were also conducted, we could use the information of 447 filled in questionnaires. However, it is advisable, to deal with the data of the 123 offline and 324 online questionnaire separately, partly because of the diversity of the samples, and partly because the face-to-face survey was concentrating on a given and previously selected open space, while the online was focusing on the most frequently used open space. However, despite the diverse samples, we can also find similarities. It was true in both surveys, that the riversides of Győr are very popular; the respondents like to spend time here. As for the on-site performed activities, walking, jogging and resting dominated in both groups, and also for the outdoor sport activities the results are very similar: the most popular outdoor activity is running, cycling and football.

The responds of different age groups show bigger differences in the user patterns of open spaces. For the senior generation, the open space visit mainly serves as resting and relaxing, while the middle aged and younger group also visits the open spaces for physical activities. It also implies, that in the case of the seniors the length of the visit is often longer. It is also important to emphasize, that different open spaces have different features, which can also strongly influence the public space use and the time spent there.

It was also important to analyse, how satisfied the visitors are with the given open spaces, and what improvements they think are necessary. In the case of the face-to-face survey, more than half of the respondents were satisfied with the previously selected three open spaces; in the case of the online survey the satisfaction rate was even higher. Almost half of the face-to-face respondents would like to pursue a sport at the open space, while in the case of the online respondents the rate of physical activities is already higher. The knowledge of the satisfaction rate and the needed developments can be very useful for the city of Győr. From the survey, it also turned out, that open space users would require more benches and street furniture, the improvement of the vegetation, the maintenance of the parks, and the access to free drinking water and public toilets, in order to make the open spaces more attractive in the future.