

# Hungary: The Socioeconomic Impact of Urban Running Events on Local Tourism and Regional Development in Debrecen



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**Abstract** The number of running races in Hungary has significantly increased during the last few years, while competitions are becoming more and more diverse. To better understand the impact of these for the host town, a survey study has been carried out in Debrecen, Hungary, following a half marathon in April 2017. One quarter of the 1028 participants ( $n = 257$ ) responded to our questionnaire. The proximity of the race seems to be important for the runners, whereas a unique offer of the event (including registration options for different distances and programs for accompanying friends and family members) acts as a trigger for sport tourism. The social and economic impacts of the race turned out to be significant for the host town, whereas environmental impacts were barely detectable. A relatively high purchasing power of the participant runners coming mostly from the surrounding region and neighboring countries and their involvement in the running event and in some tourism-related activities generate important economic benefits for the town.

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However, the importance of small scale sporting events is not yet totally understood and leveraged by the organisers and the local authorities. A better use of these might be an important element of the local sustainable development.

**Keywords** Hungary · Small scale events · Sport tourism running

## Introduction

“Within the domain of tourism, “running tourism” might be one of the fastest growing area in the next few years as running races not only contribute to a healthier lifestyle and to awareness raising, but have a positive economic impact and provide [to Hungary] a positive image on an international scale”<sup>1</sup> – said Mihály Varga<sup>2</sup> in 2016 at the presentation of a report on the domestic economic impact of running races in the capital. Since the introduction of the 2004–2006 National Development Plan, the number of sporting events is increasing in Hungary. These may now receive state funds, as supporting physical activity participation has become a national strategic goal aiming at the well-being of the population (Ács et al., 2016; Ács, Hécz, Paár, & Stocker, 2011).

Therefore, the number of running races is increasing all around the country, and the growing demand for these result in an increasingly important impact in the fields of (sports) economy and tourism. In most of Hungary’s bigger cities, professional and leisure sports are supported by the local government.

Hungary’s geographical features provide excellent opportunities for sport tourism. Walking and hiking have long traditions, waters are central for leisure and sports, bicycle paths are merging everywhere in the country. Mild weather, hilly areas and open access nature sites attract local population and (international) tourists.

Since the 2000s, mass sporting events, mostly hiking, running and cycling, are becoming more and more popular. Many of these events, mostly organised in the capital, have grown to attract tens of thousands of people annually, including visitors from abroad. Besides mass sporting events, Hungary, and Budapest in particular, hosts a growing number of international (mega) sporting events, such as a FINA Swimming World Cup in 2019 or the UEFA Euro 2020. In line with the national development strategy, the Hungarian government have established a national agency to attract and organise international sporting events (Sportesemények Szervezéséért, Lebonyolításáért és Sportszolgáltatásért Felelős Nonprofit Korlátolt Felelősségű Társaság).

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<sup>1</sup> <http://www.origo.hu/gazdasag/20160301-turizmus-futoturizmus-varga-mihaly-budapest-egeszseg.html>

<sup>2</sup> Minister of Finance in Hungary.

Mass sporting events organised in Budapest contribute largely to the economy, but also to the image building of the country. That is why they are wittingly used for national and international communication purposes in Hungary, whereas their economic and social impacts are widely studied. Even though sporting events are organised all over the country (typically in/around bigger towns and/or at natural areas with particular geographical features for outdoor activities), only the capital has the infrastructure and the resources to organise mass events. While the attention of the media and academics often turn to mega events, small scale events are scarcely studied in Hungary. Our attempt is to provide information on this question through a case analysis of a road half marathon in the town of Debrecen. The town is known for its cultural and leisure attractions and it has become an important centre of sport tourism owing to diverse professional and amateur sport events attracting both domestic and international participants.

## **Sport Tourism and Sustainable Development in Hungary**

Sport tourism is an interdisciplinary field of science that has turned up owing to an emerging demand since the second half of the twentieth century. In this context, sport appears as the prime motivation for traveling and as a professional activity aiming at the organisation of these travels (Marton, 2015). By the turn of the millennium, stakeholders of the demand side have become important element of sports financing, whereas sports organisations are trying to include more and more discretionary incomes. At the same time, technological development makes traveling more and more easy and available for an increasing part of the world's population. These processes are in favor of sport tourism, what is also reflected in the growing number of scientific researches that acknowledge the different stakeholders of the sports market. According to Hinch and Higham (2011) participants of sports tourism can be categorised in three different groups: (1) active sport tourists, whose main travel motivation is sports participation; (2) event-based sport tourists, where attending a sports game is a major element of traveling; and (3) tourists who travel to visit sports venues, museums or to meet sport celebrities. Although sport tourism research's primary focus may still be large-scale events, an increasing attention is given to smaller competitions.

Hinch and Higham's (2011) first category includes sporting events with a large number of amateur sports participants, such as street running races. Their social importance goes beyond the sports participation of masses, as it also includes volunteers, local communities, organisers and the local media. Researches highlighted that the analysis of sport tourism incomes of small scale sporting events organised in smaller towns is still a relatively untapped area (Gibson, Kaplanidou, & Kang, 2012), whereas existing (national) literature focus primarily on international sport event participation of spectators. For example, Laczko and Stocker (2018) analysed the average spendings at sporting events in Hungarian towns and revealed that spectators coming from abroad spend on average 26,250 HUF daily (~80 EUR), whereas

domestic visitors staying overnight spend on average 8000 HUF (~25 EUR) or about 3000 HUF (~10 EUR) if they don't have other programs besides attending the event.

Organising international sporting events being a national priority, apart from the analysis of the economic, environmental and social impacts, Hungarian literature takes into consideration the questions of sport, sport policies and technological development for the analysis of national and international sporting events (Stocker & Szabo, 2017).

Regarding sport and sustainable development, Wilson (2006) analysed the economic impacts of local sporting events, where he defined these as small scale events, where the number of participants may be superior to that of the supporters, being most often recurrent events, organised annually, without considerable media attention or economic activity. However, Csobán and Serra (2014) showed in their analyses of fencing events that small scale events may as well contribute considerably to local sustainable sport tourism.

Sustainability in Hungary, just like on an international scale, is increasingly important; however, it has been adopted only recently in practice. After the Earth Summit of 1992 in Rio de Janeiro, in Hungary the Committee for Sustainable Development has been established with the aim to define the intervention areas and coordinate the implementation of new measures in Hungary in accordance with international agreements.

On the political level, the basic principles of sustainable development have not been generally accepted in Hungary; economic development often prevails on environmental protection (greenfield projects, highway constructions, decreasing green spaces in urban areas, etc.). Today, a large majority of ventures have no interest in the sustainable use of natural resources or to diminish their pollution emissions. Therefore, very few measures are implemented to protect natural resources and to preserve the natural environment. Besides the respect of legal and economic regulations, awareness raising among the population would also be necessary.<sup>3</sup>

Regarding the contribution of sport entities in this question, the Hungarian Olympic Committee issued its booklet on Sport and Environment in 2016. It analyses the sustainability aspects of the 16 sports that constitute a priority for Hungarian sport finances through the analyses of the possibilities of diminishing the environmental impacts of these sports. The aim of this booklet is to involve all stakeholders, especially decision makers of these sports, to better understand sustainability issues and opportunities to be able to best contribute to the implementation of sustainability measures. Similarly to former measures, these considerations aim primarily the protection of the environment, while the social benefits of sports are still not fully taken advantage of (Földesiné, 2005).

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<sup>3</sup><http://www.ff3.hu/helyzet.html> (retrieved on 17 Nov 2018).

## The Popularity of Long-Distance Running and Its Growing Variety

In Hungary, running has started to gain popularity since the 1970–80s. The first marathon distance street running event was organised in Budapest in 1984, which was the first one to open for non-licensed runners. The same year, Budapest has joined the Italian “Vivicitta” street running series, while in 1986 the first “Earth Run”<sup>4</sup> was held there. In all cases, the organiser was the Futapest Sports Association. Besides these, ultra-marathon races started to emerge, and since the 1990s, cross-country competitions have also occurred. Since 1983 both the number of organisers of road or trail races and the number of participants have been noticeably increasing (Perényi, 2015). While at the end of the 1990s, approximately 50 running races were organised in Hungary; in 2017 this number has exceeded 350. The biggest ones – usually organised in the capital – are of several thousands of participants, whilst bigger country towns reach easily at least 1000 of runners per race. As for the number of organising agencies, a heavy increase is observable. In bigger towns, certain (sports) associations or local companies managed to stand out from the other organisers, and gained a quasi-monopoly position in the market of the community’s running races. In Budapest the Budapest Sportiroda Ltd. (BSI) (formerly Futapest Sports Association) is undoubtedly the biggest organising agency, whereas in Debrecen, the Debreceni Kilometerek Association is the main organiser of mass running events. The organisers are often supported by the local government; however, the level of engagement of these may differ from one town to another. In some places, they heavily support the events and, in some cases, even take part from the organising activity (for example in Székesfehérvár), or they support the event by lending their infrastructure and/or equipment to the organisers (like in Debrecen).

Lately, Hungary seems to be catching up with the international tendencies, providing an increasing diversity of races, including a growing number of out-of-stadium disciplines – such as trail running, ultra-trail running, folklore running or obstacle races. Also, more and more women are getting involved in these events.

## The Impact of Running Tourism in Hungary

The tourism impacts of diverse sporting events may vary largely. In Hungary, running races tend to become more and more spectacular and increasingly important for the region where they take place. The impacts of the events depend, among many factors, on their size, recognition and accessibility. Obviously, internationally renowned running races, usually organised in the capital, generate more important economic benefits, than smaller competitions, which are mostly frequented by local populations (Gibson et al., 2012). However, the importance of these latter ones is

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<sup>4</sup>To celebrate Earth Day (April 22).

not negligible, especially as these might have a significant potential for growth. Organisers of these smaller events may, thus, get inspired from the tendencies observed at the bigger ones.

After the surveys of 2012 and 2014 run by themselves, in 2015 the BSI engaged KPMG Consulting to carry out a study on running tourism in Budapest and its economic impacts on a national scale. The report focuses on the three biggest marathons and half marathons organised by BSI in Budapest: Wizz Air Budapest Half Marathon in September and SPAR Budapest Marathon in October.<sup>5</sup> These races are, today, Hungary's biggest leisure sport events, according to the KPMG in terms of number of participants. In 2015 the total number of runners registered for the three races exceeded 70,000, corresponding to a 21.5% increase compared to 2014. During the three races almost 17,500 "running tourists"<sup>6</sup> visited Hungary from 80 different countries. Relating to the events, approximately 65,500 guests' nights were spent in Budapest (according to KPMG's estimation), mainly in three and four starred hotels, hostels or in rented apartments. Almost half of the "running tourists" were first time visitors in Hungary 2015, and 70% of them declared a willingness to return to the Hungarian capital within the next 5 years (KPMG Consulting Ltd, 2015).

The two races attracted almost 8000 domestic running tourists,<sup>7</sup> who confirmed to have considerably more expenses relating to the event, than what they would have spent normally. In this way, a new kind of demand is being created in the domestic market. The spending of Hungarian tourists identified in the study exceeded 150 million HUF (approx. 500,000 EUR). Most part of it was spent on accommodation, transportation and fuel. Besides them, approximately 14,000 runner visited Budapest from abroad. According to the report, relating to the half marathon, the average spending per capita exceeded 120,000 HUF (~400 EUR), whereas in case of the marathon, this amount was around 180,000 HUF (~600 EUR). International participants to the two races have spent more than 3 days on average in Hungary, while their cumulated overall spending relating to their visits is estimated around 2.3 billion HUF.

The cost of organising was about 280 million HUF (~850,000 EUR) for the two events. Sponsors cover most of it: approximately 240 million HUF (~750,000 EUR). Among the costs of organising (wage costs, race-day installations and services, ensuring technical background for the event, prizes, etc.), the most important elements for both events were the race-day expenses, about 30% of the total expenses. For the domestic economy, these events generated an estimated amount

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<sup>5</sup> More info about these events on the official website of the organisers: <https://runinbudapest.com/>

<sup>6</sup> The study refers to all the registered runners and the people accompanying them who declared to have arrived in Budapest especially for the race from abroad with the major motivation for visiting Hungary being participation at the running event, or to accompany a participating runner.

<sup>7</sup> The study refers to all the registered runners and the people accompanying them who declared to have arrived in Budapest especially for the race from their Hungarian residence with the major motivation for traveling being participation at the running event, or to accompany a participating runner.

of 880 million HUF (2,750,000 EUR) of income in taxes and other contributions. (KPMG Consulting Ltd, 2015).

Besides the economic impacts, the report outlines the image-building capacity of running events, their presence in the media, their social and cultural benefits and their potential importance for the development of small and medium businesses. However, the report did not include any analysis of the environmental impacts of the events.

## Debrecen, the Hosting City

With its population of a bit above 200,000,<sup>8</sup> Debrecen is the second largest city in Hungary, and the third biggest of its surface area (approx. 462 km<sup>2</sup>). According to the IMF's World Economic Outlook Database of October 2016, Hungary's GDP per capita is 11,903 USD. We do not have any reliable information on Debrecen's GDP per capita. According to the Hungarian Central Statistics Office (KSH), in 2016, the average gross salary of those who are employed full time was around 250,000 HUF<sup>9</sup> (approx. 800 EUR).<sup>10</sup> According to unofficial data,<sup>11</sup> average gross salary in Debrecen is estimated around 350,000 HUF (approx. 1100 EUR)<sup>12</sup> for the same year.

Debrecen is one of the most developed cities in Hungary. In the past, it used to rely on handicraft, food industry and agriculture. Today, the most important sectors are agriculture, health and education. The University of Debrecen (approx. 30,000 students)<sup>13</sup> provides workforce for the pharmaceutical and biotechnological industry (Teva Pharmaceutical Industries Ltd. and Gedeon Richter Plc.), to IT companies, etc.

Debrecen might be considered as the sport epicenter of Hungary regarding the number of sporting events compared to the number of inhabitants or via the analysis of the importance of youth development (Gösi, 2012). International sporting events are regularly organised in the town. In 2000, the city's local government set the objective to support international sporting events as prescribed in its sports strategy.<sup>14</sup> In this context, the Debrecen Sportcentrum Kht.<sup>15</sup> was created with the aim to manage sports infrastructure. One of its priorities is to contribute to the organisation of sporting events on a local and also on a regional, national and international scale.

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<sup>8</sup> Source: <https://www.ksh.hu/>

<sup>9</sup> Source: [http://www.ksh.hu/docs/hun/xstadat/xstadat\\_evkozi/e\\_qli032a.html?back=/stadat\\_ker](http://www.ksh.hu/docs/hun/xstadat/xstadat_evkozi/e_qli032a.html?back=/stadat_ker) (retrieved on 25/11/2019).

<sup>10</sup> Approximative number calculated on 2016 EUR-HUF exchange rates.

<sup>11</sup> Source: <https://www.fizetesek.hu/partner/region/debrecen>

<sup>12</sup> According to unofficial data, average gross salary in Debrecen is estimated around 350,000 HUF (approx. 1300 EUR) for the same year.

<sup>13</sup> Source: <https://unideb.hu/>

<sup>14</sup> Source: [https://www.debrecenisportcentrum.hu/index\\_en.php](https://www.debrecenisportcentrum.hu/index_en.php) (retrieved on 09/08/2018).

<sup>15</sup> In English: Debrecen Sports Center Providing Public Benefit Company.

Accordingly, Debrecen already hosted international and world events,<sup>16</sup> as well as national championships and other regular events.

The success of these events indicates that Debrecen's image, sports infrastructure, tourism, catering and leisure services are making the town suitable for future sports tourism investments (Borbély & Müller, 2015). They argue that promoting sporting events and sport tourism improvements may contribute to the development of the city image and increase its tax incomes. The success of organising sporting events relies on different factors, among these, to meet the objectives of the event and to achieve the stakeholders' and target groups' satisfaction. However, from the organisers' point of view, it seems that the most important is still the financial profitability of the event, and to a lesser extent, the satisfaction of the corresponding national and international sport federation. In order to promote recreational and leisure sports, in 2015 the "Sportolj Debrecen!"<sup>17</sup> campaign was launched in Debrecen to encourage the local populations to participate in physical activities, get to know different sporting activities and engage in them on a regular basis either on an amateur or professional level.

## The Rotary Running Festival

As for local running races, the first bigger spring event is the Rotary Running Festival. In March 2018 it was organised for the eighth time by the Debreceni Kilometerek Sports Association (DKSA)<sup>18</sup> with the Rotary Club Debrecen. DKSA was established in 2011 with the main objective to gather those who are interested in leisure sports in Debrecen and its surroundings by providing them with high-quality sporting events. The mission of the association is to enhance the general health and well-being of the local populations through the promotion of an active and sporty life, healthy lifestyle, the development of available sporting possibilities and broadening the range of healthy recreational activities in the town by organising competitions, sporting and leisure events. The association pays particular attention to involve participants with disabilities to their events. Since 2011 both the number and the range of events organised by the association are expanding: while during the first year, only two events were organised (Rotary Half marathon and St. Nicholas Day Aquaticum Run), in 2012 this number grew to nine and the following year some 15 competitions were held.

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<sup>16</sup> Since 2001, Debrecen Sports Center has organised more than two dozens of world competitions in nearly 20 sports, among others, the World Youth Championship in Athletics, the World Gymnastic Championship, the first European Men's and Women's Individual Gymnastics Championship, the sixth European Women's Handball Championship, the European Short Course Swimming Championship, the European Pentathlon Championship, the World Short Track Speed Skating Championship.

<sup>17</sup> Source: [https://www.debrecenisportcentrum.hu/index\\_en.php](https://www.debrecenisportcentrum.hu/index_en.php) (retrieved on 09/08/2018).

<sup>18</sup> Source: <http://www.debrecenikilometerek.hu/> (retrieved on 31/07/2018).



To understand the context of this rapid development, the other sporting events in the region are important to be mentioned. Regarding its surroundings within a distance of 50 km, in 2018, three half marathons can be found: in Derecske (22 km from Debrecen) in April, in Nyíregyháza (49 km away) in March, and in Püspökladány (50 km away) in October. Regarding further distances, semi-marathons in Szolnok, Miskolc, Eger and Békéscsaba might also be available for the population of Debrecen. Therefore, the Rotary Running Festival faces numerous competing races; however, their distribution in both time and space provides a complementarity among them.

Regarding the Rotary Running Festival, besides the three race distances, its most popular event is the Rotary Charity Run with a distance of 1993 metres, referring to the year of reestablishment of the Debrecen Rotary Club. Pre-schools and schools, foundations, sports associations and work communities are often present at the team competitions, the entrance to which is free of charge. More dedicated runners can participate in longer distances in nine categories.<sup>19</sup> Besides the half marathon, 10 (1/4 marathon), 30 K (3/4 marathon) and 42 K (marathon) distances are also available. In 2016, 1028 runners participated in these distances (above the charity run), and 920 of them finished the competition (1/4 marathon: 378; 1/2 marathon: 353; 3/4 marathon: 37; 1/1 marathon: 152 runner).

According to the main organiser of the event, the charity part of the race aims fund-raising purposes as well as the physical and social well-being of the participants. It does this through the capacity of community building (team formed by coworkers, classmates, etc.) and the promotion of a physically active lifestyle. The main objective of the longer distances is the same, but also to serve the needs of the more experienced joggers/runners.

## Data and Methods

Following the guidelines of the shared methodology, in Hungary, the VII Rotary Running Festival (April 2, 2017), a multi-distance urban running race has been chosen. Although the focus of the project was on half marathons, taking national differences into consideration, multi-distance races could also take part of the project, provided that the majority of the participants engage in the half marathon distance. Debrecen has been chosen for being a city that meets the methodology design criteria, but also because we were curious about the impacts of a mass running event in a city known for its larger scale international events.

As specified in our shared methodology, questionnaires were distributed among the participants on the race day and on-line during the evening following the event. Answers were accepted not later than 7 days after the race. In both cases, organisers

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<sup>19</sup> Individual marathon, ekiden marathon, 3/4 marathon, half marathon, minimarathon (shorter distances for young age-groups), wheelchair marathon and half marathon and hand-bike marathon and half marathon

were ready to help us distributing the questionnaires and ask the participants to fill them out, in order to collect a maximum number of responses.

The paper-based questionnaires were returned by 76 participants, whereas the on-line version was filled in by 181 of them. The total number of 257 questionnaires corresponds to one quart of the total number of participants (1028). It is important to emphasize, that most of the respondents were registered on the half marathon distance – as the speakers specifically asked them while announcing the organisers' request to encourage runners to participate in the survey.

We had to give up on the questionnaire for the inhabitants and the interview with the municipality due to organisational issues. As for the interviews with the organisers, as the main organiser helped us, some pieces of information were gathered in an informal way, but owing to a close collaboration, the interview would have been biased (as the organiser was also part of the Hungarian scientific team).

## Results

### *Respondents' Profile*

The most popular event of the 2017 edition of the running festival, besides the Charity Run, was the half marathon event. The number of participants in this latter course includes 353 runners and one person in wheelchair. 33% of the half marathon (117) were women. In the quarter-marathon distance, more women than men participated (58%), while the whole marathon was chosen by only 20 women (19%). However, among the respondents of the questionnaire, women are overrepresented by 56% of the answers. The half marathon provided 7 male and 5 female age categories. Regarding the participants, the oldest runner was 82 and the youngest 16 years old.

Majority (71.3%) of the respondents declared to be either married or in a relationship. 71.2% of the sample have a higher education degree. More than 60% of them work as an employee, 10.6% are students, and 21.5% in a management position. As for their revenues: 46% have a monthly net income above 200,000 HUF (650 EUR).<sup>20</sup> Only 18% earn less than 110,000 HUF a month; however, among them there are also students, jobseekers and those who don't have a regular income.

Regarding the expenditures, the registration fees vary according to the distances and the date of registration (according to five registration intervals with registration fees growing as we're approaching the date of the race). For the half marathon, the early bird registration fee was 4000 HUF (~12 EUR), while same-day registration would cost 6500 HUF (~20 EUR).

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<sup>20</sup>In 2019 the average gross earnings in Hungary were 297,017 HUF (~ 900 EUR) (source: [http://www.ksh.hu/docs/hun/xstadat/xstadat\\_hosszu/h\\_qli001.html](http://www.ksh.hu/docs/hun/xstadat/xstadat_hosszu/h_qli001.html), retrieved on 31/07/2018).

Many of the runners are regular participants of running events: 15.5% participated during the previous year in more than ten races, while another 61.1% participated in more than one running race during 2016. Only 9.9% declared not to have participated in any competition during the previous year, while 13.5% participated in only one race during the preceding year.

### *The Scope of the Event*

Responses to diverse questions (such as the place of residency, motivation for the visit, spendings, transportation use, etc.) suggest that the Rotary half marathon is primarily a local event. 55.6% of the respondents live in Debrecen, while another 17.3% not further than 40 km from the town. Respondents also confirmed that the proximity of the race was an important motivator for participation. As for the remaining 27.1% runners arrived mostly from Budapest, Miskolc, Nagykanizsa, Sopron (Hungary), and Nagyvárad (Romania). They typically came for bigger Hungarian towns from the neighbouring Romania, and have travelled on average 300 kilometres to Debrecen. Nevertheless, only 7.2% of the respondents stayed in Debrecen to participate in the race: 10 of them spent one night, while another six of them have spent two or three guest nights in the town. Commercial accommodation facilities (hotels, hostels, etc.) were used by 18 participants, corresponding to 7.2% of the respondents.

To travel to the race venue, most of the participants (71.4%) used their personal vehicle. However, some of the local runners came by bike (7%), by walking (14.1%) or by using the local public transportation system (3.9%). Only 2% traveled by train, and four respondents came from abroad on plane (1.6%).

Regarding the tourism interest of the event, among the reasons for participation, tourism possibilities were only mentioned by four of the respondents. On the other hand, the quality of the organisation and the accessibility (closeness) of the race turned out to be important factors. The former one motivated 48.2% of the respondents for participation while the latter one was chosen by 63.4% (see Table 1).

Regarding the other response options, some runners were attracted by the different distances; a relatively large number of respondents had decided to participate after having been encouraged by colleagues, relatives or friends. For more dedicated runners, the date was an important factor, as it turned out to be an event that fits well in their race calendar. However, the most often cited primary motivation was simply the pleasure of running. 83% of the respondents scored 6 or 7 on a 7-points Likert scale for the quality of the organisation, while only 4 of them gave 4

**Table 1** Motivation for choice of participation

	Quality of organisation	Proximity	Tourism	Other
Number of occurrences	124	163	4	28
% of total responses	48.2	63.4	1.6	10.9

or below. In line with these findings, the survey revealed that 67.7% of the respondents are not first-time participant to the event. Regarding the “freshmen”, 55.6% of them live in Debrecen and 30% of them hadn’t participated to any running race during the previous year.

### ***Running as a Community Experience***

The general tendency among respondents revealed that the running festival is a community event. 66.7% of the respondents came accompanied, and for 75.3% of them their travel parties included between 1 and 5 people. The accompanying people were most often family members (43.3%) and/or friends (18.9%). Bigger groups of friends were also present at the event, 8.2% of the respondents declared to have arrived with a group of 10 or more. Besides, the diversity of distances allowed accompanying people to participate in an event that corresponds their physical fitness. Therefore, the willingness of the organisers to engage more people in physical activities can also be considered as successful.

Even though participating turned out to be a social event, organised running communities were underrepresented in our sample. The number of those who are member of a sport club or association was very low, whereas only 2% respondents declared to be accompanied by club members and/or a coach.

All these might suggest that participating in mass running events is above all a leisure activity. Accordingly, even though the challenge seemed to be an important motivator among respondents, the leisure character of the event may be further confirmed by the pace of the runners: Only 12 of them (3%) managed to accomplish the half marathon distance (~21 km) in less than 90 min, even though the 31–50 age group is overrepresented in the sample.

### ***Motivation***

Participation motivation was studied along nine response options, including potential motivators, such as the pleasure of participation, health, challenge, etc. Each option had to be evaluated on a 7-points Likert scale according to the level of importance the respondents attach to these. The results are interesting and diverse, suggesting that the participants are driven by different motivations (see Table 2).

The most common motivators were the “pleasure to participate” and the “physical activity” itself. More than 75% of these respondents considered these as “very important” to them, whereas lower (6 and below) scores were scarce on these options.

On options like “to support (a friend or a family member)”, the “novelty” (of the event) and “to travel” (to Debrecen as tourism destination), scores varied considerably, suggesting that our sample is not heterogenous on these dimensions.

**Table 2** Motivation for participation (average)

Motivation	Pleasure to participate	Socialising	For my health	To support runner	For the challenge	To relax	For the physical activity	For a novelty	To travel
Importance/7	6.7	5.3	6.2	4.6	6.4	5.5	6.6	4.6	3.8

Almost 88% of the respondents reported to have been highly motivated by a challenging race. This may most likely be explained by the diversity of distances, providing customised challenges for most participants.

Respondents also considered that sports and running's positive effect on health is an important motivator. These questions scored between 5 and 7 in 92% of the cases.

Social relations, meeting with friends, creating new relationships were important factors for some, however, almost 15% of respondents attached only a low importance to these questions.

Typically, those who didn't attach a high importance to form social relations as motivators for participation, tended to mark higher scores on the "challenge" dimension.

The study also revealed that the runners yearned to break the everyday routines through participation in sports / sporting events. Therefore, the leisure character of the event is further confirmed.

### *Expenses of Participants*

Regarding the economic impacts of the half marathon we focused primarily on the expenses of the participants relating to the event. Even though only about 60% of the respondents answered this part of the questionnaire, the obtained data still allow us to presume some tendencies.

A small minority (8.4%) of the respondents claimed to have not spent any money relating to the event. Also, regarding the cumulated expenses for all the travel parties, 24.5% of the respondents reported not having spent anything relating to the event. We assume that in this case, respondents disregarded the registration fees, which in most cases were paid in advance. One quarter (27.7%) of respondents claimed to have spent between 0 and 5000 HUF (~between 0 and 15 EUR), that would cover the registration fee and a shorter trip to the venue. 31.6% spent between 5001 and 10,000 HUF (~ between 15 and 30 EUR), which might have included a cheaper accommodation too. Expenses over 25,000 HUF (~80 EUR) were mentioned by 8.4% of the respondents. While itemising this amount, registration fee, accommodation and eating out were mentioned the most often. The biggest cost, for 42.5% of the respondents was the registration fee, and for 29.6% of them was the cost of traveling. Those who mentioned accommodation and eating out as well, typically claimed overall expenses over 15,000 HUF (~45 EUR). Interestingly, 33.5% of the respondents mentioned equipment as one of the most important cost for the event.

## *Environment*

According to Gibson et al. (2012) the analysis of the environmental impact of sporting event tourism is the least researched axis regarding the existing literature on impact studies. Unfortunately, measuring the ecological footprint of sporting events is a relatively poorly developed area, although larger scale events may have a considerable impact on the environment; enough to think of the carbon dioxide emission relating transportation to and from the event. With respect to this, Collins, Jones, and Munday (2009) draw attention to the considerably less significant environmental footprint of smaller scale events – just like the one in our study – owing to the proximity of the residency of participants to the event venue.

For the analysis of the environmental impacts, it is important to highlight that the scenery and the landscape may act as important motivators for the choice of destination (Franch, Martini, Buffa, & Parisi, 2008), therefore they may have a central role for sport tourism participation (Moore, Richardson, & Corkill, 2014). A principal element of outdoor recreation is the natural environment (Mullins, 2009), as it is likely to influence the experiences of participants (Higham & Hinch, 2009). In Debrecen, 88% of respondents found the quality of environment very good (by scoring at least 6 on a 7-points Likert scale). In addition, in 2017 weather conditions were also favourable for the successful organisation of the event.

Besides the quality of the natural environment, it is important to pay attention to the organisers' aspirations to reduce the negative environmental impacts of the race. Although 74.6% of the respondents found that the organisers haven't proposed any environmentally friendly solution, this result may not necessarily indicate a lack of measures but may as well imply that in terms of environmental consciousness, the event was considered as "average" without any particular initiatives. It is important to highlight, that none of the respondents expressed criticism against the environmental perspective of the event. However, those who found that the organisers made noticeable efforts to comply with environmental conservation issues (25.4%), most often mentioned segregated trash disposal possibilities and the continuous waste collection at the refreshment zones. Furthermore, the runners appreciated, that the race was easily accessible by means of public transportation and by bike, whereas storage facilities were also offered for personal non-motorised vehicles. Some highlighted the possibility of online registration, and other online opportunities (online payment, photo sharing, etc.) as environmentally conscious initiatives.

The organisers made a special attempt to promote the possibilities to access to the event via public transportation. Even so, 71.4% of the respondents came by car. The majority of those coming from closer or further locations used their personal vehicle; however, as the organisers defined in advance the parking options, the increased traffic didn't affect the more sensitive natural areas, such as the Nagyerdo (Grand Forest of Debrecen).

The organisers didn't make special attempts for measuring the carbon footprint of the event; however, they spoke about a possible awareness raising campaign to draw participants' attention to the environmental pollution linked the race (such as

using personal vehicles, waste production, etc.) and the possibilities to diminish these. For example, at the start and finish zones and the relay zone, 12 mobile toilets were installed, and the cleaning up has started immediately after the race ended, with the help of the cleaning services of the city hall.

### *Tourism Attractiveness of the Host City*

The large majority (95.3%) of respondents indicated that they would return to Debrecen during the following year for the Running Festival, while 91.4% of them intend to participate in other sporting events in the city. However, 22.2% of the respondents wouldn't return to Debrecen solely for tourism. While interpreting this result, it shouldn't be forgotten, that the vast majority of the participants are residents of Debrecen or a close by town, therefore they may not consider Debrecen as a tourist destination (Table 3).

Regarding the participation in other programs relating to the event, it has been revealed that 51.4% of the respondents don't participate in any other activities. Nevertheless, 15.9% of the respondents mentioned eating out in restaurants, whereas 25.3% of them participated in some kind of leisure activities (such as going to an adventure park or to a water park), 7.8% visited family members, while 8.6% mentioned shopping. Those who declared to participate in other activities, typically mention more than one activity, whereas others either indicated to do nothing else or didn't respond to this question.

The study also revealed that for runners arriving from outside Debrecen, the city's tourism offers and attractivity are an important element. These respondents were majorly interested in after-race recreational activities, restaurants and leisure opportunities and services for accompanying travel parties. Tourists to Debrecen are offered a broad range of cultural and leisure activities, therefore promoting these, along with the available guest nights options may become important questions for race organisers in the future.

**Table 3** Participation in other activities in Debrecen relating to the running festival

Participation in other activities in the city (%)	Nothing	Visiting family	Cultural activities	Leisure activities	Shopping	Eating out	Cinema
%	51.4	7.8	3.9	25.3	8.6	15.9	2.3



## National Comparisons

The Rotary Half marathon and Running Festival is definitely an important and popular event on the regional level, in particular because in Nyíregyháza, the closest larger town, there are no regular yearly running events. Even though in 2015 the BSI organised a Vivicitta event in Nyíregyháza, and in 2017 the third Electrolux Halfmarathon and the Spring Running Festival (Tavaszcímű Futóverseny) were held in the city (in Nyíregyháza Sóstó), we couldn't find any half marathon event for the season 2018/19.<sup>21</sup> Since, in Debrecen there are at least two other regular annual events including a half marathon, although these are offroad races. However, it is interesting to compare these in a nutshell. Our comparison is completed by results from the Wizz Air Budapest Half Marathon, the biggest half marathon event in Hungary, to highlight differences between courses organised in the capital and in the second largest town in Hungary (Table 4).

**Table 4** Comparison of half marathons in Debrecen and Budapest

Name of the event	Rotary Half Marathon Debrecen	G4 Offroad Half Marathon, Debrecen	Decathlon Half Marathon, Debrecen	Wizz Air Budapest Half Marathon Budapest
Organiser	DKSA, Rotary Club Debrecen	DKSA, Decathlon Debrecen	DKSA, Decathlon Debrecen, Hajdú Sports Association	BSI
Date	March / April	May	September	September
Available distances besides half marathon	Individual Marathon, Ekiden Marathon, ¼ Marathon, Minimathon (5.2 km), Children Run (2.5 km), Charity Run (1993 m)	¼ Marathon, Minimathon (5.2 km), children run (2.5 km)	¼ Marathon, Minimathon (5.2 km), children run (2.5 km)	Half Marathon duo Half Marathon trio
Total number of participants	4562 (1028 + 3534 charity run)	358	576	16,278 (10,324 individual +1048 in duo +643 trio)
Number of half marathon participants	353	123	124	10,324
Entrance fee (basic fees)	4000–6500 HUF 12–20 EUR	3500–5500 HUF 11–17 EUR	3500–5500 HUF 11–17 EUR	8000–23,000 HUF 25–70 EUR

<sup>21</sup> Source: [www.futonaptar.info](http://www.futonaptar.info), a popular website among runners to get informed by running events.

It seems that the DKSA holds a monopoly position on the local market of running races and backed by distinguished partners and sponsors for the organising. Their three half marathon races cover the running season in Debrecen's hereabouts. Regarding the distances, the broadest range is offered by the Rotary Festival, including marathon, relay events, charity run, that are not part of neither the G4 nor the Decathlon off-road events. At the same time, the auxiliary events of the Budapest Half Marathon may have a similar public than the charity race in Debrecen, and these extra events contribute largely to the overall number of participants. The difference in the number of participants between Budapest (approximately 1.7 million residents and the second largest Hungarian town, Debrecen (approximately 200,000 habitants, 550,000 in the region) is flagrant. However, if we add the 3534 charity runners, the Rotary can also be considered as a mass event. The other two half marathons in Debrecen attracted 258 and 567 participants, which are approximately one quarter and half of the Rotary's numbers respectively. If we only consider the number of half marathon participants, the Rotary Half Marathon's participants are almost three times the number of the G4 and the Decathlon races, whereas it is only 3.4% of those who are registered in Budapest.

The popularity and size of the events affects the registration fees as well. While in Debrecen it is possible to register on the race-day; the BSI won't offer this option anymore in Budapest (due to the already large number of participants, which requires special attention from the organisers). Students and the elderly (over 65 years), and also regular runners (BSI regular runner cardholders), may benefit from a reduced entry fee to the events of the BSI, whereas in Debrecen differences in the registration fees are only defined by time periods. At both events, finishers' bag, a shirt and a medal for those who complete the registered distance are offered, but welcome bags are only provided in Debrecen. In 2018, after the eighth edition of the event, we may state, that on the regional level, the Debrecen Rotary Running Festival is a prime example of successful sporting events with a broad range of offers and with some sport tourism opportunities of which the organisers haven't yet taken full advantage.

## Discussion and Conclusion

The Anglo-Saxon literature of sport tourism research (Dwyer & Fredline, 2008; Kaplanidou & Vogt, 2007; Misener & Mason, 2006) focuses most often on the contribution of sporting events to the host city's economic development and image building. On the other hand, according to Gibson et al. (2012), small scale events are likely to adapt to the host town's infrastructures and human and cultural resources, and are also suitable to develop sustainable tourism at their venue. This view had already been pointed out by Higham (1999), highlighting the fact that these events may have a positive effect on the venue, because these typically use existing infrastructure, while attract all local, domestic and international participants.

This is also true to the Rotary Running Festival in Debrecen, though most of the foreign participants came from close by neighboring countries.

According to the organisers, regarding the economic point of view, the event was not focusing on profitability; its main objective was to integrate new partners from local service providers and businesses, whereas the perspective of tourism development did not make an essential part of the organising process. Even though many question relating sports can be used as an economic tool (whether linked to tourism or not) for reaching financial objectives. Gibson showed in 1998 already, that on the strategic level, sport and tourism organisations need to be better synchronized to achieve mutual goals (financial or others). In the United States, typically “sport for all” and amateur sport operates as a contributor to the tourism industry, therefore sport may be considered as a generator of the economy, a separate industry, that is based on private financing and that creates economic activity, well-being and employment.

However, in Hungary, amateur sport still falls within the category of leisure activities, using some sponsoring and state financing, but relying primarily on the principles of crowdfunding, without any particular economic objectives, mainly remaining on the local level. Some of the local governments, including that of Debrecen, have already started to take into consideration the potential economic impacts of mass sporting events. That is, partially, why leisure and mass sport events are most often organised during the tourism season, as these are viewed as tourism attractivities and are used to contribute to the viability of local businesses.

Our study revealed, that the Rotary Half marathon in Debrecen is one of the most popular running events in the region, that serves primarily the local populations, who are willing to participate in running events and have the purchasing power to enter these competitions, whereas runners from other parts of the country and from abroad are scarce.

Those, who answered the questionnaire, praised the quality of organisation of the event. However, we couldn't find a positive correlation between this result and their motivations for participation, suggesting that the organisation of the event may be of high quality, but it does not represent an attractivity itself for its public. At the same time, reaching to masses via the charity run is definitely a unique element providing a personal image to the event and extra workload for the organisers.

Regarding the direct and indirect economic impacts to the local government are so far minimal; however, with the reinforcement of the tourism aspect of sporting events, an important economic potential may be emerging for the communities, which may be worthwhile to take advantage of.

Our study also revealed, that the organisers take into consideration the environmental aspects of sustainability, and these are reflected in the organisation of the event, an approach that the organisers are willing to keep, or even reinforce, for the future editions of the run.

Finally, regarding the social impacts, the participants declared that they do not consider the run as a social event. Nevertheless, they arrived typically in groups of 2–6 people, which may suggest its importance for communities. Also, as respondents

tend to complement their activities with other leisure programs, the social character of the event is further confirmed.

A deeper understanding of the socio-demographic profile, the motivations and the attitude of the participants creates also an opportunity to improve the event and/or (better) benefit from it for different purposes. The study revealed that most of the participants are more or less regular runners and that most of them live close to the event venue. As a local event, it has a great potential for (local) community building and other social and marketing purposes. Based on our findings, we would make the following recommendations for sporting event organisers and other stakeholders of these events.

1. As the event inherently contributes to the creation of social links, these aspects could be reinforced and further utilised through challenges proposed for existing or newly formed groups and with specific communication strategies designed for them.
2. Environmental awareness seems to be important for the organisers, therefore a) more protection measures could be provided and elucidated and b) communication could be reinforced on these for awareness raising among the participants, the accompanying people and the spectators.
3. In most cases, participants' spendings covered mostly the registration fees and in some cases accommodation and/or restoration. As other tourism related expenses were scarcely reported, we might consider that the events potential for enhancing tourism activities is not fully exploited. Therefore, we would recommend to consider linking the event to other local (cultural) events and/or to communicate more about the venue as a touristic destination.

Our study offered an insight to a Hungarian case study through the analysis of road running in Debrecen. However, to draw general conclusions on the current trends in road running in Hungary, the study should be extended to different parts of the country and should include a broader variety of events in terms of the type, size and date of the running race and also the distances and disciplines offered.

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