

Romania: Bucharest International Marathon. The Impact of Half Marathon Race from an Environmental, Economic, and Sociocultural Perspective



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Abstract The Bucharest International Marathon is the most important street running event in Romania. The main purpose of the study was to examine the profile of runners who participated at this event and to highlight the impact of this road race in the territory from economic, environmental, and sociocultural perspective. The research was based on a common methodology elaborated by the International Research Network in Sport Tourism (IRNIST). In order to have results that are comparable to those of other countries, only the half marathon race of this event was analyzed. The data analysis was based on 148 valid questionnaires. The research has highlighted several aspects of the runners' profile: average age 36.8 years old, high level of education, married or living with a partner, earn between 500 and 1000 euro per month, which is above the average salary. Taking into consideration the fact that more than 95% of the runners wanted to participate again in the future editions of this sport event, we therefore concluded that they appreciated the organization of the races, the ambiance and not only. This kind of benefits for the population seems to have been very important despite the small economic impact of this event.

Keywords Bucharest International Marathon · Road Race · Romania · Socioeconomic Impact · Sport event

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Introduction

Sports tourism by its diversity (participation in a sporting event, being a spectator at a sport event, leisure activities (golf, fishing, mountain biking, etc.), visiting places of memory and sports history) offers multiple development possibilities, in relation to natural resources, topology, climate, history, the region concerned, etc. The development of such activities requires investments in specific equipment but can also use those existing and thus enhance local wealth, architectural, or other, resulting in significant economic and social benefits.

A South Eastern European country, with a population of 22,273,309 inhabitants (National Institute of Statistics, January 1, 2016) and an area of 238,397 km², Romania has a very varied and diverse sport tourism potential and has natural and environmental assets that would enable it to enter this market.

Bucharest, the capital of the country and the largest economic center of Romania, with a population of 2,107,500 inhabitants in 2016 (INS, 2016), is the city with the most sports facilities in the country. However, according to data from a European Commission survey in 2015 concerning how the inhabitants are satisfied about sports facilities (such as sport fields and indoor sport halls) in the city, the people living in Bucharest declared that they were very satisfied (10%) and rather satisfied (34%) compared with Luxembourg and Helsinki, where the population's satisfaction rate was very high (84%).

Major sporting events are not very numerous in the city, the Bucharest Marathon and Bucharest Half Marathon being one of the most important. However, national championships in different disciplines, matches of the local football leagues, tennis tournaments, as well as other running events attract more and more participants every year.

Due to the sports infrastructure being in continuous development, a series of sporting events have been organized over the years in Romania. A ranking of the 61 Romanian sport federations shows us that football is by far the most popular sport in the country if we refer to the number of license-holders (48.05% of the total license-holders) (see Table 1). In Romania, there are five stadiums with a capacity

Table 1 Number of license-holders in the evidence of national federations, taking part in the competitive system (INS, 2016)

No.	Romanian sport federations	Number of license-holders by federation	%
1.	Romanian Football Federation	118,040	48.05
2.	Romanian Basketball Federation	22,957	9.35
3.	Romanian Chess Federation	15,965	6.5
4.	Romanian Karate Federation	7345	2.99
5.	Romanian Athletic Federation	7299	2.97
...
61.	Romanian Squash Federation	109	0.04
	Total	245,644	100

INS (2016)

of more than 30,000 seats, the largest of them being the National Arena in Bucharest (55,634 seats). This stadium accommodated the final Europa League (2012), being the first European Cup final hosted by Romania. Another important international event will be UEFA Euro 2020. Four games of this tournament (including the quarter finals) will be hosted by this arena.

Basketball is the second most popular sport in Romania with 22,957 license-holders. In recent years, several international competitions were organized of which the most important were: the European Women Basketball Championship (2015), event co-held in Hungary and Romania, hosts cities being Oradea and Timisoara, and the European Men Basketball Championship (2017), hosted by four countries—Turkey, Finland, Israel, and Romania.

Also, the 3 × 3 basketball tournaments have become very famous in the country, attracting thousands of participants every year. Besides the national basketball circuit 3 × 3 Sport Arena Streetball Tour organized every summer, there were organized some international competitions: Raiffeisen Bank Bucharest Challenger (since 2012) and FIBA 3 × 3 Europe Cup—men and women (2014, 2016 and 2018) in Bucharest.

Chess, so-called mind sport, the third in national ranking, is highlighted especially by the organization of national competitions over the board. The World Senior Chess Championship, an international event, with 366 participants, was organized in 2019, in Bucharest. Correspondence chess tournaments at national and international level are organized, too.

Running races in Romania attract more and more participants from year to year, whether we speak about road running, cross country, trails, triathlons, fun run, track running, obstacle racing, tower running or other; 127 important running events were organized in 2019 (Asociația Club Sportiv Elite Running, 2019).

Tennis is very popular in the country, especially among amateurs. Several events were organized: Davis Cup meeting (2013), in Brasov, between the representative of Netherlands and Romania, Czech Republic vs Romania Fed Cup meeting (2016) held in Cluj-Napoca, and from 1993 until 2016, the Romanian Open (BRD Nastase Tiriatic Trophy)—part of the ATP Tour, competition that was relocated to Budapest. With 11 tennis courts, the central one with 5000 seats, the BNR Arenas hosts starting with 2014 the BRD Bucharest Open (part of WTA Tour), an event organized by the Romanian Tennis Federation and considered the biggest tennis tournament in Romania.

BT Arena in Cluj-Napoca, the multipurpose sports hall with a capacity of 7227 seats, hosts various sport events: European Artistic Gymnastics Championships (2017) and FIBA Under-17 Women's Basketball World Cup (2020). Also, some demonstration matches at a worldwide level are played every year in this arena during sports festivals.

If we talk about winter sports, Romania is not an important destination yet from this point of view (Cernaianu & Sobry, 2017) and does not have a well-developed infrastructure as in the countries of Western Europe. However, the European Youth Olympic Winter Festival (2013) was organized in Brasov, which is the first Olympic European event held in Romania, hosting more than 900 athletes from 45 countries.

Concerning sport tourism, there is no established ranking at the national level. We can consider that football, basketball, running, and tennis are the sports branches for which many national and international competitions are organized, attracting a large number of spectators.

The main purpose of the study was to examine the profile of the runners who participated at the Raiffeisen Bank Bucharest Marathon—half marathon race—and to highlight the impact of this road race in the territory from an economic, environmental, and sociocultural perspective.

Road Races in Romania

The International Association of Athletics Federations (IAAF) awards an International Course Measurement Certificate to all marathon and half marathon races which comply with certain criteria “in order to be considered eligible for top lists, entry standards, world rankings and world records” (<https://www.iaaf.org/records/certified-roadevents>). At the top of the list is Australia with 69 races, followed by the USA (60 races) and Japan with 52 races. Of the 120 countries, Romania is situated in the first third of the rankings (the 40th) with only 7 races of a total of 1086.

The seven IAAF certified races correspond to the four most important sporting events in Romania: Brasov Marathon (two races), Volkswagen Bucharest Half Marathon (one race), Raiffeisen Bucharest Marathon (two races), and Wizz Air Cluj-Napoca International Marathon (two races) (see Table 2).

The Association of International Marathons and Distance Races (AIMS) brings together 467 member races in over 120 countries, including four full members in Romania: Wizz Air Cluj-Napoca Marathon, Brasov International Marathon powered by Telekom Sport, Raiffeisen Bank Bucharest Marathon, and Volkswagen Bucharest Half Marathon. The courses are measured by an accredited AIMS/IAAF measurer.

Table 2 The IAAF certified marathon and half marathon courses in Romania (IAAF, 2019)

No.	City	Name of the race	Event
1.	Brasov	Brasov Half Marathon	Half Marathon
2.	Brasov	Brasov Marathon	Marathon
3.	Bucharest	Raiffeisen Bucharest Half Marathon	Half Marathon
4.	Bucharest	Bucharest Half Marathon	Half Marathon
5.	Bucharest	Raiffeisen Bucharest Marathon	Marathon
6.	Cluj-Napoca	Cluj-Napoca International Half Marathon	Half Marathon
7.	Cluj-Napoca	Cluj-Napoca International Marathon	Marathon

Adapted from IAAF (2019)

Raiffeisen Bank Bucharest Marathon

The Bucharest Marathon, the largest mass sport event organized by the Bucharest Running Club Association (BRC) in partnership with the Romanian Athletic Federation (FRA) and Bucharest City Hall, and in cooperation with media partners, is the first Romanian marathon accredited, internationally recognized, and affiliated to the Association of International Marathons and Distance Races (AIMS) and International Association of Athletics Federations (IAAF). Starting with the first edition in 2008, with a few hundred runners, in 2016 the 9th edition of the event brought together over 14,000 runners from more than 60 countries who competed in many races during this event: marathon, half marathon (10 km), popular race (3 km), jogging with strollers, teens race (3 km), and kids races (0.9 km/1.4 km) (Mihai, 2016).

Within the same competition, the FRA organized the National Marathon Championship—Senior, Youth, and Junior and the National Marathon Veterans Championship.

Other important races organized in Bucharest by the BRC are the Bucharest Half Marathon and Bucharest 10 k & Family Run, which bring together teams formed by kids, parents, grandparents, and friends (no more than 15 persons in a team).

A number of NGOs with volunteers raise funds and receive part of the runners' registration fees.

As the organizers of this event said, the purpose was “to create a good social and economic impact on local community.” At the same time, this event supports many social, educational, humanitarian, and ecological causes for which the participants run and donate, such as for sick and hospitalized children, for autistic children or other persons in difficulty, for environmental programs with the mission to grow forests on degraded public fields or to help increase the area of the Athletes' Forest, etc. As specified in the event regulations, “All children aged 18 years or younger should bring recyclable materials (paper, plastic bottles, etc.) when registering for the race; funds raised from recycling such materials will be donated for tree planting in the Children's Forest (*Padurea Copiilor*)” (Raiffeisen Bank Bucharest Marathon, 2016).

Table 3 The dynamics of participation at the Bucharest Marathon, half marathon race, by gender (ENDU, 2016)

Year	Male	Male (%)	Female	Female (%)	Total
2012	901	76.29	280	23.71	1181
2013	1202	74.34	415	25.66	1617
2014	1552	71.03	633	28.97	2185
2015	1718	68.64	785	31.36	2503
2016	1949	70.59	812	29.41	2761

Data processed from www.endu.net/en/events/bucharest-marathon/results

As can be seen in Table 3, it is noticeable that the number of participants at the Bucharest Marathon, half marathon race, between 2012 and 2016 increased by 133.78% over the 5 years), both for women and men. However, the number of participating women represented no more than one-third that of men.

In terms of nationality, the majority are Romanian. If in 2012 about 25% of athletes were foreigners (given that the total number of participants was low), the next year the percentage decreased to 10.14% and varied around this value, with a slight increase in the number of foreign runners (see Table 4).

Starting with 2008, IAAF introduced a classification of the races (Gold, Silver, and Bronze Label) for marathon, half marathon, and other races (traditional road race distances). In 2018, the marathon race obtained the status of IAAF Road Race Bronze Label, which placed it among “the world’s leading road running events” (IAAF, 2017).

A series of concerts were organized during the two days of this sporting event. Also, the event was livestream.

The amount of 50 prizes awarded was 30,000 euros. Also, sponsors and event partners offered hundreds of amazing prizes involving products (Mihai, 2016).

The organizer club of this event (BRC) has created an Internet platform which brings together more than 1000 active volunteers involved in sport events and projects in Romania. About 700 volunteers registered on the platform, referees and coaches of the Romanian Athletics Federation, and 200 public institution employees like police agents, healthcare professionals, etc. helped to organize the sport event well.

At the hydration points and refreshment check points, energy beverages and food were made available to the runners; 38,500 liters of water, 4800 liters of energy drink, and 4 tons of fruit were offered by sponsors (Mihai, 2016).

For each race, the organizers established a maximum number of participants. According to the regulations of this event, the maximum number of runners by type of race is presented in Table 5.

The registration fee varied between 22 euro and 43 euro, depending on the date of payment. No participation fees for people with disabilities.

Table 4 The dynamics of participation at the Bucharest Marathon, half marathon race—participants from Romania and other countries (ENDU, 2016)

Year	Romania	Romania (%)	Other countries	Other countries (%)	Total
2012	887	75.11	294	24.89	1181
2013	1453	89.86	164	10.14	1617
2014	1988	90.98	197	9.02	2185
2015	2270	90.69	233	9.31	2503
2016	2473	89.57	288	10.43	2761

Data processed from www.endu.net/en/events/bucharest-marathon/results

Table 5 The maximum number of runners, by type of race

No.	Race	Maximum number of runners
1.	Marathon	1400
2.	Half marathon	3800
3.	Marathon relay	750 teams, namely $4 \times 750 = 3000$
4.	Fun race	2200
5.	Teen's race	2000
6	Kids' race	3300
7.	Jogging in diapers SAMAS	350

Adapted from Raiffeisen Bank Bucharest Marathon (2016)

Sports equipment and nutrition products of different brands were set up in an area specially designed for sale. Also, charities and NGOs promoted by this event were present (Raiffeisen Bank Bucharest Marathon, 2016).

Romanian athletes, world, European, and national champions at various sporting events, promoted the practice of sports and invited people to participate at the Bucharest International Marathon.

Methodology

A half marathon race was studied, based on the common methodology elaborated by IRNIST. Because the tools were not fully prepared at the time of the Volkswagen Bucharest Half Marathon, which took place in May 2016, we did not have the opportunity to conduct the research on this sport event. Therefore, the Bucharest International Marathon was chosen, which took place on October 8–9, 2016. This marathon is the most important street running event in this country. In order to have results that are comparable to those of other countries, only the *half marathon race* of this event was analyzed.

The questionnaire was developed in English and in Romanian, assessed by IRNIST members involved in the project, transposed in Google Forms, and sent by e-mail to the half marathon participants with the help of the organizers. During the event, the runners were informed about the study at the Sport Expo point, where they picked up the race kit, which also contained a flyer with a short description of the research.

A semi-structured interview with the Director of BRC Association was conducted and a nonparticipatory observation was undertaken focusing on the organization process during the sport event.

Results and Discussion

The data analysis was based on 148 valid questionnaires out of 153 received from the respondents. The sample ($N = 148$) of 2761 runners of half marathon race consisted of 68.24% men with an average age of 38.24 years and 31.76% women with an average age of 33.72 years. For all the respondents, the average age was 36.8 years. Of the respondents, 92.57% were Romanian, while the rest (11 runners) came from countries such as Switzerland, France, Germany, Greece, Austria, Slovakia, Republic of Moldova, and only two participants from the American continent. If we compare with the rate given by the organizers (89.74% foreigners), the difference is not significant.

Concerning marital status, the majority of respondents (60.81%) were married or lived with a partner. Of them, 49.32% had a bachelor's degree, 35.81% a master's degree, 2.7% a PhD, and 0.68% postdoctoral studies, which showed a very good level of education.

Regarding the work situation, the data showed us that 75.68% were employed, 10.81% self-employed, and 4.73% were company owners. According to Government decision No. 1017/2015, the gross minimum guaranteed base salary at national level starting from May 1, 2016 was 1250 RON (278 euro), with a net value of 925 RON (206 euro) for full-time employees. The average monthly nominal gross earnings in 2016 was 2887 RON (642 euro), having a net value of 2046 RON (455 euro) (NIS, 2016). Taking into account these values, we observed that the majority of the respondents (77.5%) earned above the national average salary, 15.3% between the minimum wage and the average salary, and 0.9% below the minimum wage. The rate of respondents without income was 6.3%. According to another class division, 37.2% earned between 500 and 1000 euro/month while 20.9% had a salary more than 1500 euro/month.

Data about participation in this event showed that the majority (62.84%) were not running for the first time, 82.98% of them had participated earlier, one to five times. When asked how many road races they had run the last year (2015), the answer obtained was an average of three races.

Out of a total of 141 participants who had answered the question, most of them had come to the sport event by car (52.48%, 74 respondents) while 16.31% by metro (23 respondents) and only 4.26% on foot (6 respondents).

Only 26.35% had come alone to this event. Those who were accompanied had come with 3.54 persons on average, most of them being family members (33.1%) or friends (30.4%).

As most of runners lived in Bucharest (61.49%) or not so far, the percentage of participants who had an accommodation was only 23.65%, with an average of 2.16 nights. Among them, 41.67% stayed at a hotel/motel, while 47.22% at friends or relatives.

The main reasons for choosing this sport event were because it was not too far from their home (41.22%), followed by the quality of the organization (33.11%) and

“other reasons” (23.65%), which included it being the biggest Romanian sport event of the year (4.73%) and to push their limits (5.4%).

The majority of runners (87.83%) considered that the pleasure to participate in this event was extremely and very important. At the same time, this event represented a factor of socialization for 58.78% of participants who responded to the survey, but to a greater extent, “to be healthy” seemed to be important for about 90% of runners.

The items concerning the motives with a seven-point Likert-type scale (1 = not at all important; 4 = neutral; 7 = extremely important) are represented in Fig. 1, which shows that the major motivation to participate in this event was the pleasure it provided, with an average of 6.28 points. We have to underline that “challenge the abilities” (6.17 points), “be healthy” (6.11 points), and “maintaining and/or enhancing the physical condition” (6.09 points) recorded a large average on this scale. According to this figure, “travel” (visiting other sites/destinations; learning about other traditions and cultures; visiting and defending the heritage) was the last reason that led them to Bucharest, with an average of 3.21 points.

Regarding positive elements such as environment preservation, only 39.9% considered that the organizers propose such aspects. The runners stated that one of the causes for which they ran was that part of the registration fee was being directed to *planting of trees—cause of sustainability* (28.57%). The availability of garbage bins (22.87%), collecting plastic bottles (14.3%), and eco-friendly toilets (8.57%) also represented positive elements cited by the participants.

Only 45.27% of the total runners of the sample (67 participants) declared they did something else, not just participate in the event/race. These activities, other than participation in the sporting event, are listed in Table 6. The majority of them ate out (68.18%) and went shopping (28.79%), but other leisure activities were part of their

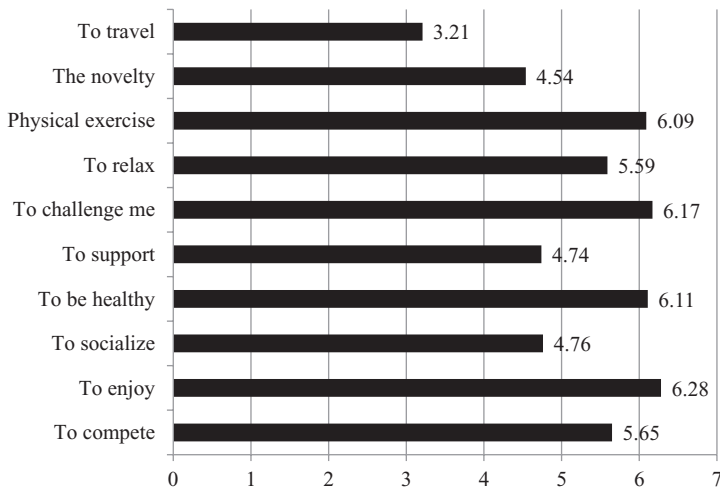


Fig. 1 Primary motives to participate in the race—averages

Table 6 Activities other than participating in the race

Did you do anything else, not just participate in the event/race? (multiple answer)	No.	% of 66 responses
Eating out	45	68.18
Shopping	19	28.79
Visit the family	16	24.24
Go to the cinema	11	16.67
Participate in cultural activities	7	10.61
Visit a museum	7	10.61
Other	7	10.61
Attending another sport event	6	9.09
Attending a show	6	9.09
Visit an attraction park	5	7.58
Participate in leisure activities	4	6.06

program too, like going to the cinema, visiting a museum, attending a show, etc. On average they spent 93.7 euro in general, in the city, from which 35.77 euro was for food and beverage.

The equipment is also important for runners; 134.8 euro on average was spent by the participants. We do not count this amount because it can be used for other sport events.

Not all the participants declared their expenses. If we multiply the minimum fee registration with the number of respondents, we get 3256 euro, but some of them spent more because they were registered later. We do not count the money spent for the equipment because it can be used for other races, but we observed that the participants invested on average about 135 euro.

The largest part of the sample would like to participate again in this event (97.97%). Also, if the city will organize other sport events, most of them said they would come to participate (95.27%).

Conclusions

Several important facts and figures were shown by this analysis which helped us to draw some discussions and conclusions. The number of participants to this sport event increased from year to year, on the one hand due to the very good organization, and on the other hand due to the international accreditation and affiliation to AIMS and IAAF, which attracted a series of high-level runners.

The research has highlighted several aspects of the runners' profile: average age 36.8 years, high level of education, married or living with a partner, earning between 500 and 1000 euro per month, which is above the average salary.

This event, although of great significance for our country, brought together mostly participants from Bucharest and the surrounding area. Their expenses in the

city are generally focused on food, shopping, and habitual activities, taking into consideration their place of residence. Also, the fact that about three-quarters of the respondents came accompanied at the event may have been perhaps an opportunity to spend time together in the city during this event. Concerning the accommodation, the economic impact was low—no more than 2.2 nights on average for no more than 13% (of the sample) who stayed at hotels or other type of accommodation, except at friends' or relatives'.

However, socialization is not at all important in comparison with relaxation, health, and pleasure to compete. Although Bucharest is an important tourist destination, visiting historical and touristic places was not an attraction for the participants.

The environmental responsibility of the organizers was appreciated by the participants. The races took place on the road, the green area was protected, the information was printed on recycled paper, and special containers were provided for waste collection. Very important were the causes for which the adult participants ran, *planting of trees*—cause of sustainability being one of them. At the same time, collection of recyclable materials by the children aged 18 years or younger with the same purpose to plant trees in the Children's Forest is a way of involving the younger generation in environmental sustainability.

Taking into consideration the fact that more than 95% of the runners wanted to participate again in the future editions of this sport event, we therefore concluded that they appreciated the organization of the races, the ambiance, and others. This kind of benefits for the population seems to have been very important despite a small economic impact of this event.

Bucharest is a big and nice city with plenty of historical monuments and agreeable places. Even if most of the participants came from Bucharest itself or from nearby towns and villages, it could be interesting to include some touristic elements on the e-site to convince the participants to spend time not only running but also visiting some touristic sites, going to a restaurant, etc. The race itself, broadcasted by TV channels, could cross the city, passing in front of the most interesting monuments. Most of the sport event organizers do not work with the local touristic bodies. Why to attract thousands of people and not trying to keep them in the city a few more hours after the race. As Gibson (1998) says, "at a policy level, there needs to be better coordination among agencies responsible for sport and those responsible for tourism".

Despite the fact that the sample size was not representative of the chosen population, we tried to conduct the study, this being part of an international project. Although the participants were informed through many ways (by email, with a flyer in the race kit, the permanent presence of a person at the organizers' stand during the event who informed the runners about the research), however the rate of answers was low. In our opinion, the lack of respondent participation was due to another study based on a survey that the organizer contracted with a specialized company and distributed in parallel with ours.

Another limitation of this study could be the length of the questionnaire, requiring 40 items to be filled in.

Future researchers must choose an event where their study will be singular and otherwise be informed on time. The use of social network to explain the purpose of the survey and the data collection method could improve as well the response rate. Adjusting the length of the questionnaire can be another necessary measure to increase the number of respondents.

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