Portugal: Small Scale Sport Tourism Events and Local Sustainable Development. The Case of the *III Running Wonders Coimbra*

Ricardo Melo, Carla Sofia Andrade, Derek Van Rheenen, and Claude Sobry

Abstract Tourism is a strategic industry for the Portuguese economy, with a continual growth since the beginning of the twenty-first century. The sport tourism sector is also rapidly expanding, highlighting in particular golf, nautical sport tourism and nature sport tourism. Sporting events are also considered strategic opportunities for tourism in Portugal, especially the small scale sport tourism events, particularly, running events or races, as those who have had the greatest growth. Despite these developments, few studies have analyzed the impact of small scale sport tourism events and their potential for local sustainable development. In an effort to fill this gap in the literature, the present study focused on the III EDP Running Wonders Coimbra. An online survey was provided to a sample of 345 participants of the event. An in-depth, semi-structured interview was also conducted to the executive director of the company who organized the running race. Demographic and participation profiles of the runners, as well as, economic, environmental and sociocultural impacts were analyzed. This study concluded that, organizing such small scale sporting events on a regular basis can serve as a catalyst for local sustainable development by ensuring the use of existing resources, the involvement of the host community and a consistent flow of visitors.

R. Melo (✉)
Polytechnic Institute of Coimbra - Coimbra Education School (IPC-ESEC), Centre for Social Studies of the University of Coimbra (CES-UC), Centre for Tourism Research, Development and Innovation (CiTUR), IRNIST, Coimbra, Portugal

C. S. Andrade
Polytechnic Institute of Coimbra - Coimbra Education School (IPC-ESEC), Coimbra, Portugal

D. Van Rheenen
Graduate School of Education, University of California, Berkeley, CA, USA
e-mail: dvr@berkeley.edu

C. Sobry
Univ. Lille, EA 7369 – URePSSS – Unité de Recherche Pluridisciplinaire Sport Santé Société, F-5900, IRNIST, Lille, France
e-mail: claude.sobry@univ-lille.fr

R. Melo et al. (eds.), *Small Scale Sport Tourism Events and Local Sustainable Development*, Sports Economics, Management and Policy 18,
https://doi.org/10.1007/978-3-030-62919-9_10

Keywords III EDP Running Wonders Coimbra · Local sustainable development · Portugal · Running event · Small scale sport tourism event · Sport tourism

Introduction

Tourism is a *strategic* industry for the *Portuguese* economy, with a continual growth since the beginning of the twenty-first century. In 2016, the contribution of tourism consumption to the Gross Domestic Product (GDP) of Portugal was 12.6%; in 2017, that percentage had increased to 14.1%. In 2018, tourism contributed 14.6% to the country's GDP (Statistics Portugal, 2019). This growth can be explained by several factors, including a positive image of the country, its culture and heritage, a safe environment, good climatic conditions with natural diversity, and the hospitality of the Portuguese population (Tourism of Portugal, 2007, 2013, 2017). Public policies and private investment can both be credited with this positive image. The tourism industry in Portugal has been recognized internationally as the European and Worldwide Best Touristic Destination by the World Travel Awards for the last three consecutive years (2017–2019).

In Portugal, sport tourism is an important sector within the larger industry. For example, three sporting products are included in the top ten strategic products of the Portuguese tourism strategic policy: (i) golf; (ii) nautical tourism, which includes physical activities such as surfing, windsurfing, sailing and other nautical sports and (iii) nature tourism, which includes both soft nature sports such as trekking and hard nature sports such as rafting, kayaking, hiking and climbing (Tourism of Portugal, 2007, 2013).

Portugal is recognized as a major golf tourism destination (Hudson & Hudson, 2010) and this activity assumes a significant position in the country's tourism opportunities (Gomes, Gustavo, Melo, & Pedragosa, 2017). Globally, golf enjoyed an annual growth of 12–15% in the last decade, while there were 2.1 million travellers in 2011, and experts estimate that there will be three million golf tourists in 2020 (Tourism of Portugal, 2013). Tourism and real estate as satellite activities of golf in Portugal (Hudson & Hudson, 2010) generate a significant set of indirect and direct benefits, including within an expanding job market. This partnership has led to an increased number of golf courses and affiliated enthusiasts. In 2013, there were 88 golf courses and 14,198 affiliated players, 24.1% of whom are foreign nationals, but with a second home in Portugal (Gomes et al., 2017). The competiveness of Portugal regarding golf tourism is related to the country's favourable climatic conditions that allows enthusiasts to play the sport throughout the year. There are likewise a range of these golf courses, with different configurations and varying levels of difficulty. A significant number of signature golf courses (e.g., Robert Trent Jones Jr., Arnold Palmer, Jack Nicklaus, Arthur Hills, Nick Faldo and S. Ballesteros) can be found in Portugal. Many high-quality golf courses are concentrated in the Algarve and Lisbon regions, with several competitive golf courses include on the PGA

tournament circuit. Algarve and Lisbon were selected Golf Destination of the Year and Golf Resort of the Year (2006, 2007 and 2009) by International Association of Golf Tour Operators (IAGTO) (Tourism of Portugal, 2013). Portugal also won the World's Best Golf Destination for five consecutive years, from 2014 until 2018 (last edition) by the Golf World Awards.

The extensive coastline of approximately 943 kilometres (667 km around the Azores archipelago and 250 km along the Madeira archipelago) helps to make Portugal one of the most exclusive parts of the European Economic Area. The ocean is, thus, a natural resource and reassure, placing Portugal in the centre of an active economic market associated with the sea, including for the purposes of nautical sport tourism (Gomes & Cunha, 2017). The recognition of the value of the sea for sport, tourism and recreational activities has led to a reconfiguration in the type of economic activity in these coastal areas. For example, there has been a reduction in fishing and a marked increase in nautical sports and other tourism activities. The value of these activities has been recognized at the national and international level (Gomes & Cunha, 2017), and has led to the development of several strategic efforts, such as the *National Strategy for the Sea* (Presidência do Conselho de Ministros, 2014), the *National Strategic Plan for Tourism* (Tourism of Portugal, 2007, 213, 2017) and the *Hypercluster of the Economy of the Sea* (SaeR/ACL, 2009).

The implementation of these strategies have materialized in businesses, activities and events in which sport is the central factor: (1) the creation of high performance centres for surfing along the Portuguese coastline; (2) the promotion and organization of sport events such as the America's Cup 2012, the Extreme Sailing Series 2012, the Volvo Ocean Race 2012, 2015 and 2018 and the World Surf Circuit; (3) the creation of nautical sports destinations related, such as surfing in Peniche and Ericeira, as well as the big waves in Nazaré; and (4) the creation of businesses dedicated wholly to surfing and diving (Gomes & Cunha, 2017; Melo & Gomes, 2017). Nautical tourism represented almost three million travelers, approximately 1.2% of the total amount of visits made by Europeans to the country, with a market growth from 8.0 to 10.0% per year (Tourism of Portugal, 2006b).

Nature-based tourism is often presented as the fastest growing segment within the tourism industry, with an increase of between 10.0% and 30.0% per year (Balmford, et al., 2009; Bell, Tyrvainen, Sievanen, Prbstl, & Simpson, 2007; Marques, Reis, & Menezes, 2010; Mehmetoglu, 2007; Melo, Van Rheenen & Gammon, 2020). Further, it is estimated that 10.0% to 20.0% of all global international travel is, directly or indirectly, related to the enjoyment of and interaction with nature or the environment (Centre for Responsible Travel, 2015). Besides its majestic coastline, Portugal presents geomorphologic and climatic characteristics that have allowed for the development of a wide range of nature sports activities, which can be experienced under optimal conditions throughout the year. Portugal has extensive rural topography (90.0% of the territory) and natural spaces formed by environmentally protected areas (23.0% of the territory), encompassing the sea and its beaches, rivers and other aquatic spaces, along with mountains and cliffs. Worldwide, it is not easy to find such a variety and density of geography to develop nature sports activities (Melo & Gomes, 2016).

With this in mind, nature sports are now recognized as a potential and growing market for tourism development (Tourism of Portugal, 2006a). In almost all the regions of the country, the investment into this unique sector has led to the creation of a network of trekking routes, mountain biking (MTB) trails, training centres for trail running and rock climbing schools, among other areas of growth. Data from the Statistics Portugal (2019) also show the growing tendency of the private sector to offer nature sports opportunities in Portugal, as the number of companies operating in the nature and nautical tourism sectors grows. Data from 2004 until 2013 demonstrate an annual growth in almost all industry indicators, particularly in the number of companies, the number of staff and an increase in revenues (Gomes et al., 2017). It has been estimated that nature-based tourism in Portugal produces a market of 22 million tourists per year, with an average annual growth of 7.0% (1997–2004), representing 9.0% of the total number of visits made by the European travellers (Tourism of Portugal, 2006a).

Sporting events are also considered strategic opportunities for tourism in Portugal (Tourism of Portugal, 2017). Every year thousands of sporting events are organized around the world, from "mega events" that attract thousands of visitors to small scale local events that attract a small number of visitors (Sofield, 2003; Van Rheenen, Sobry, & Melo, this volume). Portugal is accompanying this growth trend. Since the turn of the century, the country has received the bid to host several worldwide sporting competitions, such as the 2004 UEFA European Championship. Other major, medium and small scale events have been organized and sponsored throughout the country, reflecting multiple sports, such as football (e.g., 2014 UEFA Champions League Final), surfing (e.g., one stage of the World Surf League in Peniche for the tenth consecutive year, beginning in 2009), trail running (e.g. Madeira Island Ultra Trail, since 2009), and road races (e.g., International Half Marathon of Lisbon, since 2013).

With the increasing interest in sport tourism events, several studies (e.g., Armstrong, 1985; Beioley, Crookston, & Tyrer, 1988; Brown, Chalip, Jago, & Mules, 2002; Crompton, 2004, 2006; Hudson, 2001; Kasimati, 2003; Lazer, 1985; Preuss, 2005, 2007) have analyzed these major sport events, highlighting the positive economic impact of hosting these kind of events. For example, a recent study investigated the organization of a sample of 17 large-scale sporting events (e.g., Football Champions League matches, Volvo Ocean Race Lisbon, and Half Marathon of Lisbon) in the city of Lisbon, Portugal, between September 1, 2014 and August 31, 2015. The study estimated that these sporting events in Lisbon combined to contribute an economic impact of 100 M€ during the 1 year period (Municipality of Lisbon and INDEG/ISCTE, 2016).

In addition to the economic impact of these events, the social and environmental impacts of these sporting events began to be studied (Weed, 2009). In this regard, several authors (e.g., Hall, 1992; Roche, 1994; Sack & Johnson, 1996) criticized the development of large-scale or mega sporting events from a sustainability perspective, focusing on the negative environmental and social impacts experienced by host or resident populations. In addition, several authors (e.g., Daniels & Norman, 2003; Getz, 2008; Gibson, Kaplanidou, & Kang, 2012; Higham, 1999; O'Brien & Chalip,

2008; Walo, Bull, & Breen, 1996) suggested that small scale sport tourism events could provide a more sustainable form of development for local and regional communities.

Following this perspective, the current study, integrated in an international project supported by the International Research Network In Sport Tourism (IRNIST), followed the same comparative methodology used to collect data in nine countries across three continents (see Van Rheenen, Sobry, & Melo, this volume). An online survey was provided to a sample of 345 participants (16.0% of the total number of participants) of the III EDP Running Wonders Coimbra, Portugal, between October 18–31, 2016. An in-depth, semi-structured interview was also conducted to the executive director of the company who organized the running race in December 2, 2016.

The III EDP Running Wonders Coimbra

The City of Coimbra

The *III EDP Running Wonders Coimbra – the Race of Knowledge* is an annual road race held in the city of Coimbra, Portugal. The current case study examines this running event, which was held on October 9, 2016. Coimbra is a municipality that belongs to the Center Region; it is the capital of the district bearing the same name. Coimbra is the fourth largest urban centre in Portugal (after Lisbon, Porto and Braga), and the population of the municipality in 2016 was 134,348, occupying an area of 319.40 km^2 (PORDATA, 2019). The GDP per capita of the Region of Coimbra in 2016 was 15706.6€ and the business volume generated was 9757 M€ (Statistics Portugal, 2019). The business volume generated within the Municipality of Coimbra in 2016 was 2627 M€, which corresponds to 26.9% of the total of the Center Region and 0.8% of Portugal in total (Statistics Portugal, 2019). The tertiary sector is the most important within the Center Region, generating an economic volume of 2207 M€. This amount corresponds to 83.2% of the total income generated (Statistics Portugal, 2019). Within this region, the largest employer is the health sector, corresponding to 15.0% of direct total jobs and 6.0% of indirect jobs, with a business volume of 230 M€ (PORDATA, 2019).

Historically, Coimbra is a university city, where the University of Coimbra resides. It is one of the oldest universities in Europe and one of the largest in Portugal. The university was founded by the Portuguese King D. Dinis in 1290, moving back and forth from Lisbon to Coimbra several times, before finally settling in Coimbra in 1537. The education sector, especially higher education, is extremely important in Coimbra; in 2016, 34,614 students were registered and 2612 professors were employed at higher education institutions within the city (PORDATA, 2019). Since 2013, the University of Coimbra -Alta and Sofia – has been named a UNESCO World Heritage Centre. Since then, the tourism sector in Coimbra has grown,

especially cultural tourism, and also other types of tourism, such as sport tourism. Data from Statistics Portugal (2019) report that in 2016, 572,651 tourists visited Coimbra, with an average stay of 1.5 nights.

Sport Tourism Events in Coimbra

The promotion of sport tourism events in the Region of Coimbra has also increased substantially in the past decades. Numerous sporting events have been organized, ranging from international, national, regional and local events. Several international competitions were held in 2016, such as three Judo European Cups (U21, Junior and Cadete European Cup Coimbra) and the 2016 ICF Canoe Sprint World Cup 3 at the Nautical Centre of Montemor-o-Velho. Other national and regional level events were also held within the Coimbra region, including several trail running events (e.g., *Trail de Conímbriga Terras de Sicó* and *Trilho dos Abutres*). Mountain biking (MTB) competitions are frequently sponsored at both the regional and local level (e.g., *Raid BTT Lagoas de Mira, Rota das Adegas*) organized by local associations and clubs.

The European Universities Games were held in July 2018 and organized in the city of Coimbra. This is Europe's largest higher education sporting event of the year, and the largest multisport event ever organized in Portugal. Over 4000 participants from Europe's leading universities came to compete in 13 sports between July 15–28 (EUSA, 2019).

Mirando do Corvo, a municipality within the Region of Coimbra, hosted the *Trilhos dos Abutres* – World Trail Championship from June 6–9, 2019, a joint sponsorship between the *Associação Abutrica,* the Portuguese Athletics Federation, the International Trail Running Association, and the International Association of Ultrarunners. This race follows a circular route with a total distance of 44 kilometers, and a vertical climb of 2150 meters. The most competitive part of the race took place on June 8 and brought together the world's elite runners to consecrate the new world champions in men's, women's and teams. This elite competition boasted more than 500 athletes from 52 countries. The open competition, which represents the completion of the ninth edition of the *Ultra Trilho dos Abutres*, took place on June 9 and hosted around 1000 athletes. In addition to mobilizing a total of 1500 athletes, the event received over 20 thousand visitors throughout the 4 days of the World Trail Championships (Trilhos dos Abutres, 2019).

Road race events increase each year within the Region of Coimbra. This tendency is marked by the emergence of several informal running groups and a growth in the number of running races in the country. As an example of this informal community of practice, Night Runners Coimbra is an informal group of people led by professors of the Sports and Leisure department from Coimbra Education School. Established in 2013, the Night Runners Coimbra organize an informal running race every Wednesday afternoon, with an average participation of 200 runners. These informal trends have also led to a growing tendency to organize formal events. In

2016, were organized at least seven road running events along the year in the city of Coimbra (Run Portugal, 2019).

Organization of the III EDP Running Wonders Coimbra

The *III EDP Running Wonders Coimbra* was organized by GlobalSport Ltd., a private company that sponsors sporting events in Portugal. This event is part of the EDP Running Wonders circuit – road races in cities with heritage sites recognized by UNESCO. The Running Wonders website stated that the EDP Running Wonders Race aims to foster the sustainable integration of human beings with culture and the environment. In the promotion of an active and healthy lifestyle, the event seeks to develop participant experiences that successfully integrate the practice of physical activity with environmental sustainability and cultural heritage (Running Wonders, 2016).

The *EDP Running Wonders* events take place in five distinct locations throughout the year: Douro Vinhateiro in May, Guimarães in June, Viseu in September, Coimbra in October, and Évora in November. Except for the EDP Running Wonder of Dão in Viseu, all of these races occur in world heritage sites. This exception represents the manifestation of the support of Running Wonders for the desire of the people of Viseu to see its historic centre recognized by UNESCO as World Heritage Centre. All of these races included a half marathon (21 km), a mini marathon (10 km) and a walking (5 km) event (Running Wonders, 2016).

The third edition of the EDP Running Wonders Coimbra had a total of 2155 registered participants, including 1053 in the half marathon and 1102 in the mini marathon. There was no official accounting for the number of walking participants. This number exceeded the number of participants registered in 2015, according to the organizer of the event, an increase as a result of the marketing plan implemented by the company and the event's promotion both nationally and internationally (Running Wonders, 2016).

The executive director of the company stated that the event involved a number of local entities, such as the University of Coimbra, the Academic Association of Coimbra, scout associations, student associations, professional schools, academic groups and running groups of the city. In total, there were 140 volunteers, mostly local, who helped with signage of the course and the distribution of race kits to participants.

The event had no public funding. The exception to this lack of funding was the financial contribution from the Municipality of Coimbra and the Center of Portugal Regional Tourism Entity for the payment of television coverage from local stations. During the 3 days prior to the race, news reports and interviews were conducted. On Saturday and Sunday, October 8 and 9, 2016, the *Paço das Escolas* at the University of Coimbra provided live broadcasting. On Sunday morning, there was a live broadcast of the entire race for two and a half hours. In addition, the Municipality of

Coimbra collaborated with logistical support, human resources, transportation and post-race clean-up of public spaces utilized during the event.

The event was primarily supported by sponsors, as participants' registrations represented only 10.0% of total revenue. The sponsors of the race in Coimbra are the same in all running races of the Running Wonders circuit. There were seven financial sponsors and 15 non-financial sponsors, who provided vehicles, insurance and other products. The company's main sponsor is EDP – Energies of Portugal, which is also a naming sponsor. There are also six official sponsors, who have a greater reputation than the rest, with receive publicity, at the starting and finishing lines and on the official t-shirt of the event. The remaining partners are mentioned in the website's digital communication, social networks and newsletters. Of the non-financial sponsors, AVIS is the most prominent that provides payment in kind; the company offers more than 150 vehicles throughout the year, a significant financial savings for event organizers.

Demographic and Participation Profiles of the Runners

Response data from the survey instrument was collected from 345 participants of the *III EDP Running Wonders Coimbra* event and showed that the respondents were mostly married (61.2%), male (72.8%), adults with an average age of 41 years old (40.9% between 31–40 years). The sample was primarily composed of individuals with higher levels of education (71.1%), employed (74.2%), with an income between 1001–1500 Euros (30.7%) or more than 1500 Euros (29.6%). The vast majority of participants were residents of Portugal (97.7%), mostly living outside the Municipality of Coimbra (60.6%).

According to the data, the majority (62.0%) of respondents participated in the event for the first time. The vast majority of participants travelled by car to the event (85.5%) and were accompanied (82.6%), by family members (48.7%) and/or friends (47.0%). The data found that an average of 3.8 companions (standard deviation of 3.9; maximum 35 and the minimum 1) accompanied event participants.

Only 69 of the respondents who stayed overnight in the city identified the number of overnight stays. The average stay for this group of respondents was 1.2 nights, ranging from 1 to 7 nights. Of the 66 responses obtained in relation to the type of accommodation, 39.4% of respondents reported that they stayed in a hotel/motel, 37.9% chose to stay with family or friends, 12.1% stayed in a pension or residential accommodation, while 3.0% chose a campsite to stay overnight. Of the respondents who chose the option "Other" – 12.1%, of these reported having been housed in a hostel (5 respondents, out of 8).

In order to more fully understand the motivating factors underlying the reason(s) for choosing the event, from the most important (1) to the least important (4), respondents' reported that proximity to the event was the most determining factor (with a mean of 2.31), followed by the quality of the organization of the event, (with an average of 2.34). The geographical proximity indicated as the main motivating

factor for the choice of the event is in line with the fact that the majority of respondents did not stay overnight (77.1%). The least important factor, with an average response of 2.78, was for tourism.

Regarding the reasons for participating in the event, respondents highlighted having fun, getting physical exercise, the challenge, enhanced health, and participation as a way to relax. All of these factors received an average of more than 5 on a likert-type scale (where 1 is not important and 7 is very important). Less important reasons for participating in the race were taking a trip to know the destination, the support and accompaniment of friends or family and the novelty, all with an average score of less than 4. With an average score between 4 and 5 were competition and socialization. The data demonstrated that participation in the event was the main motivation for the trip, indicated by 70.0% of respondents.

Economic Impacts

Participants were asked to rank order the greatest amount (1) to the least amount of money (6) spent during the event. The data show that travel was the most significant expenditure (average of 3.23), followed by the registration fee (average of 3.27) and food (average of 3.28). It should be noted, however, that all of these expenditures had an average rating of between 3 and 4; we can therefore conclude that there was a wide dispersion of responses to this survey question, confirmed with standard deviations ranging between 1.35 and 1.99.

With regard to the costs associated with travel, accommodation, food and souvenirs, the data show that travel expenses were the most significant. Respondents incurred travel expenses in the total amount of €12,494.50, corresponding to 50.9% of total expenses incurred (in these 4 categories). With regard to food expenses, these expenses totalled €6991, representing 28.5% of total expenses. Accommodation costs totalled €3856, corresponding to 15.7% of overall expenses. Souvenirs, totalling €1206, accounted for 4.9% of total charges.

The average amount spent per respondent on the trip to the event was € 36.21, the food assumes an average of € 20.63, the accommodation entailed an average value of € 11.17 and expenses on the purchase of souvenirs on average were of € 3.49 per participant surveyed. Overall, the total expenses of the respondents, benefitting the city of Coimbra, equalled € 15,287.00, representing on average an expense of € 44.31 per respondent. Table 1 below shows the projections of expenditure for all participants (2155). It also presents the projection of expenses to approximately double the participants (5000) if one chooses to organize another similar event. In this way, we have a greater prediction of the direct economic impact that the event provides and of the potential that it could have in the future, if and when replicated.

For the evaluation of the economic impact of the event we chose to calculate the direct economic impact based on the participants' expenses, as advocated by Barajas, Coates and Sanchez (2016). In line with Lee and Taylor (2005), direct expenses should be considered as the starting point for calculating the impact of a

Table 1 Expenditure projection [*in euros*]

Items	Expenditure projection		
	[N = 345]	[N = 2155]	[N = 5000]
Travel	12.494,50 €	78.045,36 €	181.079,71 €
Food	6.991,00 €	43.668,42 €	101.318,84 €
Accommodation	3.856,00 €	24.086,03 €	55.884,06 €
Souvenirs	1.205,50 €	7.530,01 €	17.471,01 €
Total of expenditures	24.544,00€	153.329,82€	355.753,62€
Total of expenditures in the city	15.287,00 €	95.488,36 €	221.550,72 €

small scale sporting event. The next step, if we were able to calculate all of the economic impacts associated with this event, would be to incorporate indirect and induced impacts. For this, there are several economic models developed that require the collection of data not performed in the present study. In addition, many authors emphasize that the determination of the economic impact of a sporting event is very difficult to assess and a subjective accounting, leading to lack of precision, the use of inappropriate multipliers and the risk of exaggeration in the study estimates (Barajas et al., 2016; Lee & Taylor, 2005; Saayman & Saayman, 2014).

Our analysis of the results verifies that the direct economic impact of the 2016 event to the city of Coimbra was approximately €95,000. If this event, or another with similar characteristics, was held twice a year and was promoted in order to increase participation, we project that these events could have a direct economic impact on the city of approximately €221,000.

Environmental Impacts

Respondents were asked about the measures related to environmental preservation adopted by the organization of the event; 314 respondents (91.0%) considered that environmental preservation measures were taken while 31 (9.0%) answered that they were not assured that such measures were taken by event organizers.

It is generally understood that the company promotes a set of measures, with the objective of minimizing the negative environmental impacts resulting from the event. Some of these measures include the use of public transportation to and from the event, recycling all trash and bottled water produced during the event, the promotion of recycling workshops and tree planting in the days leading up to the event, and the use of cork on the medals and gateways of departure and arrival (data obtained from interview and direct observation).

In addition to the performance of the event organization, it is also necessary to analyze the environmental impact based on the behaviour of the participants. For example, according to Collins, Roberts and Munday (2012), these behaviours include the means of travelling to the event, food and accommodation options, the average length of stay, the type of accommodation chosen, the recycling practices

adopted by participants and complementary activities chosen during the event. These authors conclude that the form of displacement for the event is the factor that contributes most to the ecological footprint of the participants. In this study, participants travelled on average 734 km, and the most used means of transportation were the train (65.6%) and the car (22.6%), the latter with an average occupancy of 2.6 people.

In order to analyze the "carbon footprint" related to car travel to the event, we calculated the average number of kilometres travelled per participant, taking into consideration the average occupancy rate per vehicle (Collins et al., 2012). According to those respondents who travelled by car (295 participants), we estimate that the total number of kilometres travelled was ±48,854 km. This translates to an average of ±166 km (48,854 km / 295 participants) kilometres travelled by car. When considering the average occupancy rate per vehicle (2.6 people per car), we then calculated a total of kilometres travelled by the group of respondents to be 18,790 km (48,854 km / 2,6). Therefore, on average, each respondent travelled ±64 km (166 km/2.6) to and from the event. Because this was a local and regional event, where the average number of kilometres travelled was relatively low (64 km), the participants' carbon footprint was minimized. This supports the contention that there are potential advantages in the organization of these type of small scale sporting events, as argued by Gibson et al. (2012).

Socio-Cultural Impacts

Respondents were also questioned about other activities experienced during the event besides participation in the actual race. Going out for lunch or dinner was the most noted activity, reported by 214 respondents (62.0%). Shopping was the second most common activity during the event, reported by 79 respondents (22.9%). Sixty respondents (17.4%) reported having visited relatives during the event. Less frequent activities included participation in recreational activities (10.1%), visits to museums (7.5%), visits to theme parks (6.4%), participation in cultural activities (2.0%), and participation in other sporting events (2.0%).

Finally, the data show that 98.0% of respondents liked the city of Coimbra, 97.0% intend to participate in future editions of this particular event and 92.0% intend to participate in future organized races in the city. When asked if they intend to return to the city for tourism, 63.0% of respondents confirmed this intention.

Discussion and Conclusions

Tourism is one of the fastest growing industries in Portugal and the country has been recognized globally as the Worldwide Best Touristic Destination for three consecutive years (World Travel Awards). The sport tourism sector is also rapidly expanding

as a significant part of the national tourism industry in Portugal, highlighting in particular golf, nautical sport tourism and nature sport tourism.

Event sport tourism is also one of the newest strategies of governmental tourism policies; this market is also in expansion. Despite these developments, few studies have analyzed the impact of small scale event sport tourism in Portugal.

In an effort to fill this gap in the literature on small scale sports tourism events and the potential for local sustainable development, the present study focused on the III EDP Running Wonders Coimbra. This event meets the requirements of the small scale event sport tourism advocated by Gibson (1998b), defined as an event where the number of athletes generally exceed the number of spectators and, as a rule, receive little media coverage. Through a survey administered to participants of the half and mini marathon, as well as an interview with the head of the organizing company, this study examined the participation profile and socio-demographic characteristics of race respondents. The study also sought to determine the economic, environmental and socio-cultural impacts resulting from the event.

Many authors have argued that small scale sports tourism events can support local sustainable development, providing positive inducers of economic growth while minimizing negative environmental and socio-cultural impacts (Daniels & Norman, 2003; Getz, 2008; Gibson et al., 2012; Higham, 1999; O'Brien & Chalip, 2008; Walo et al., 1996). This literature suggests that these events attract fewer participants, and are therefore less invasive to the host community; additionally, these events are more compatible with the infrastructures and resources available in the host community, and do not entail large public investment. Small scale sport tourism events have the potential to provide economic benefits to the host community, including income generated through participant expenditures on accommodations, food and beverage. This, in turn, improves the quality of life of the local population by increasing income to the area. These events likewise attract visitors who otherwise would not travel to the location. This may also increase the sense of pride of the local population by providing them with entertainment and an influx of enthusiastic visitors. Because the events are small scale, there will be less negative environmental impacts due to the lower use of motor vehicles during the event. The data from our study corroborate these conclusions.

This case study found that the direct economic impact to the city of Coimbra was roughly 95,000 Euros. Several studies confirm that promoting small scale events tends to provide economic value to the community and that the majority of participants' expenses result from accommodation and food (Daniels & Norman, 2003; Walo et al., 1996). The results found in the present study report similar findings, although these events rely on a majority of local participants and single day travellers, such that accommodation costs may not be very significant. As reported by Turco (1997, 1998) in these type of local sporting events, the distance travelled is smaller, so the capacity to attract participants to stay is also smaller, limiting the positive economic impact. An accurate projection of the economic impact of an event is critically important to the local tourist entities and host community in the decision making process, particularly as these decisions relate to the construction of

sports facilities and the development of an effective infrastructure (Barajas, Salgado, & Sánchez, 2012).

In spite of the environmental preservation initiatives adopted by the organizing company for the event, such as, encouraging the use of public transportation and sustainable raw materials, the truth is that it was not possible to minimize the "carbon footprint" related to participants' travel. This is because the main form of travel to the event was by car and the majority of the respondents reside outside the Municipality of Coimbra, on average more than 40 kilometres away from the event. In addition, the Portuguese automobile fleet continues to be, in its vast majority, composed of vehicles that use fuel (gasoline and diesel). This study did not verify participants' potential use of vehicles that use electric energy, but this is an area to consider in future studies. This finding is evidenced in other studies which have emphasized that despite the environmental concerns internalized by the organizers of small scale sport tourism events, these efforts cannot overcome the "carbon" caused by the displacement of participants (Gibson et al., 2012).

Even so, the environmental impact is not nearly as significant when compared to major national and international sporting events, where the average number of kilometres travelled per participant is inevitably higher. Another major environmental problem associated with sporting events has to do with the construction of infrastructures (Gibson et al., 2012), but in the event under analysis we verified that the existing infrastructures were made use of (the use of public roads in the city, for example), so the environmental impact is also low in this area.

In socio-cultural terms, the event was not found to be overly disruptive to the local population and community. This was due, in part, to the number of participants, who did not generate the negative effects often associated with a large concentration of people (traffic congestion, urban space degradation, waste, noise, among others). The event was well received among the local community (population and entities). The fact that it benefited from television coverage and the promotion of *III EDP Running Wonders* circuits increased the media attention to the event. Consequently, there was an increased level of civic pride experienced within the local population, thanks to the notoriety achieved.

Among race participants, the organization of the event received interest, whereby the vast majority of sport tourists reported an intention to repeat participation in future events or simply return to the city for touristic purposes. The intention to return in future editions of this event and/or other races organized in the city should be taken into account by the municipal authorities and the organizing entity on the decision to host the event in the city again or on a regular basis. In this respect, Gibson (1998a) concluded that hosting a sporting event promotes tourism beyond the event itself. This is because attending an event or watching a sports event on television can motivate a visit to the host destination at a later time. Despite this assertion, with the exception of meals outside of the home, most of the respondents in this study did not experience complementary activities in addition to the participation in the event. These results do not differ from other studies which have concluded that sport tourists spend little on complementary activities to the sporting event (Daniels & Norman, 2003; Gibson et al., 2012).

This case study also found that the participants in this running race were mostly male, with an average age of 41 years. The majority of respondents were married, highly educated and employed, with a monthly income of more than 1000 Euros. The vast majority of participants were residents of Portugal, but mainly outside the Municipality of Coimbra.

These results are consistent with those of the Eurobarometer (European Commission, 2018), whose statistics on European Union physical sports activity point to the following results: there is (1) greater sporting activity among males, (2) a decrease in sports participation with advancing age, (3) greater sports practice by individuals with more training and (4) less sporting practice by people with less financial stability. Gibson et al. (2012) obtained similar results with respect to the profile of participants of the six small scale sports events she and her fellow authors studied, concluding that participants had an average age of 42 years, economic stability and higher levels of education. Similarly, Daniels and Norman (2003) reported on the Cooper River Bridge Run event that the average age of participants was 40 years.

The data collected on the participation profile allow us to conclude that the vast majority of respondents travelled by car to participate in the event. This behaviour probably does not result from lack of environmental awareness on the part of the participants, but from the difficulty of travelling to Coimbra on public transport, since political priorities at this level have neglected alternative options. The respondents participated mostly accompanied and for the first time in the race. On average, each participant was accompanied by 3.8 people, mostly with friends or family members. Most respondents did not stay overnight in the city; those who did stayed for an average of 1.2 nights, mostly staying in a hotel/motel or at the home of family and friends.

The motivation to participate in this event had primarily to do with wanting to run the race for physical exercise and to have fun. The close proximity of the race to participants' homes was also important. Again, these findings are similar to the conclusions of other studies on the participation profiles of small scale sport tourism events (Danielson & Norman, 2003; Gibson 1998a; Gibson et al., 2012). For example these type of events often attract visitors to the organizing city who otherwise would not travel there (Danielson & Norman, 2003; Gibson et al., 2012); and that the main motivations for participation are competition, fun and socialization (Gibson et al., 2012). Eurobarometer data (European Commission, 2018) on motivation for sporting practice are also in line with the conclusions of our study: for Europeans the most common reasons for engaging in sport or physical activity are to improve health, to improve fitness, to relax, have fun and improve physical performance.

The analysis of this type of data may prove to be an important tool in the decision-making process of local entities, when considering the hosting of future sporting events. The profile of past and potential participants can also prove to be a useful tool for the tourism industry, allowing providers to incorporate a variety of services adapted to these projected profiles. This allows tourist entities to adapt to the growth of sport tourism as a means for economic development and long-term social and environmental sustainability.

Parallel to the development of the present study, the current tourism development strategy in Portugal (2017–2027) is focused on the satisfaction of tourists and on the respect and involvement of the host residents (Tourism of Portugal, 2017). The objective of our study fits nicely within the larger strategic plan for Portugal. In particular, we believe the next decade will witness the increased promotion of sport tourism events that appeal to different audiences, are offered at different times throughout the year and will be organized in territories with lower population density.

Given the current strategic challenges for national tourism, in Portugal, the overall satisfaction with the organization of this particular event and the positive economic impact it has had on the city of Coimbra, we believe it makes sense to continue to promote this event in the city. This may also be a part of a larger strategy to promote the city's tourism overall, as recommended by Chalip (2001). The involvement of local entities and engaged volunteers allows the event to have a local feel and to promote civic pride. This may increase the quality of life of the local population, while generating revenue for the city.

The event also has the potential for growth, given the growing demand for these type of sporting events, coupled with its existing membership in the *EDP Running Wonders* circuit. Because the circuit includes races in cities with heritage sites recognized by UNESCO, this event projects a positive image of this historical and beautiful city. In short, organizing such small scale sporting events on a regular basis can serve as a catalyst for local sustainable development by ensuring the use of existing resources, the involvement of the host community and a consistent flow of visitors.

References

Armstrong, J. (1985). International events and popular myths. In *International events: The real tourism impact. Proceedings of the Canada Chapter Travel and Tourism Association Annual Conference* (pp. 9–37). Edmonton, Canada: Canada Travel and Tourism Association.

Balmford, A., Beresford, J., Green, J., Naidoo, R., Walpole, M., & Manica, A. (2009). A global perspective on trends in nature-based tourism. *PLoS Biology, 7*(6).

Barajas, Á., Coates, D., & Sánchez, P. (2016). Beyond retrospective assessment. Sport event economic impact studies as a management tool for informing event organization. *European Research on Management and Business Economics, 22*(3), 124–130.

Barajas, Á., Salgado, J., & Sánchez, P. (2012). Problemática de los Estudios de Impacto Económico de Eventos Deportivos. *Estudios de Economía Aplicada, 30*(2), 441–462.

Beioley, S., Crookston, M., & Tyrer, B. (1988). London docklands: The leisure element. *Leisure Management, 8*(2), 30–33.

Bell, S., Tyrvainen, L., Sievanen, T., Prbstl, U., & Simpson, M. (2007). Outdoor recreation and nature tourism: A European perspective. *Living Reviews in Landscape Research, 1*, 1–46.

Brown, G., Chalip, L., Jago, L., & Mules, T. (2002). The Sydney Olympics and brand Australia. In N. Morgan, A. Pritchard, & R. Pride (Eds.), *Destination branding: Creating the unique destination proposition* (pp. 165–185). Oxford, UK: Elsevier.

Centre for Responsible Travel. (2015). *The case for responsible travel: Trends & statistics 2015*. Retrieved from: https://ecotourism.app.box.com/s/rxiyp65744sqilmrybfk8mys3qvjbe9g. Accessed 05 Nov 2019.

Chalip, L. (2001). Sport and tourism: Capitalising on the linkage. In D. Kluka & G. Schillin (Eds.), *The business of sport* (pp. 77–90). Oxford, UK: Meyer & Meyer.

Collins, A. J., Roberts, A., & Munday, M. C. (2012). *The environmental impacts of major cycling events: Reflections on the UK Stages of the Tour de France*. The Center for Business Relationships Accountability Sustainability & Society, Cardiff University.

Crompton, J. (2004). Beyond economic impact: An alternative rationale for the public subsidy of major league sports facilities. *Journal of Sport Management, 18*(1), 40–58.

Crompton, J. (2006). Economic impact studies: Instruments for political shenanigans. *Journal of Travel Research, 45*(1), 67–82.

Daniels, M., & Norman, W. (2003). Estimating the economic impacts of seven regular sport tourism events. *Sport & Tourism, 8*(4), 214–222.

European Commission. (2018). *Special Eurobarometer 472: Report – sport and physical activity*. Brussels, Belgium: European Commission.

European University Sports Association [EUSA]. (2019). *European Universities Games 2018*. Retrieved from: https://www.eusa.eu/events/games/coimbra-2018. Accessed 05 Nov 2019.

Getz, D. (2008). Event tourism: Definition, evolution, and research. *Tourism Management, 29*(3), 403–428.

Gibson, H. (1998a). Active sport tourism: Who participates? *Leisure Studies, 17*(2), 155–170.

Gibson, H. (1998b). Sport tourism: A critical analysis of research. *Sport Managment Review, 1*, 45–76.

Gibson, H., Kaplanidou, K., & Kang, S. J. (2012). Small-scale event sport tourism: A case study in sustainable tourism. *Sport Management Review, 15*(2), 160–170.

Gomes, R. A., Gustavo, N., Melo, R., & Pedragosa, V. (2017). PORTUGAL: A growing sport sector in a dominant state model. In A. Laine & H. Vehmas (Eds.), *Private sport sector in Europe – a cross-National Perspective* (pp. 269–285). Cham, Switzerland: Springer.

Gomes, R. M., & Cunha, L. (2017). Contribution for a model of determination of the sport value of the portgugese coast. Beach sports value index of Figueira da Foz. In R. Melo & C. Sobry (Eds.), *Sport tourism: New challenges in a globalized world* (pp. 175–200). Newcastle upon Tyne, UK: Cambridge Scholars Publishers.

Hall, C. (1992). Adventure, sport nd health tourism. In C. M. Hall & B. Weiler (Eds.), *Special interest tourism* (pp. 141–158). London: Belhaven Press.

Higham, J. (1999). Commentary – sport as an avenue of tourism development: An analysis of the positive and negative impacts of sport tourism. *Current Issues in Tourism, 2*(1), 82–90.

Hudson, I. (2001). The use and misuse of economic impact analysis. *Journal of Sport & Social Issues, 25*(1), 20–39.

Hudson, S., & Hudson, L. (2010). *Golf tourism*. Oxford, UK: Goodfellow Publishers Limited.

Kasimati, E. (2003). Economic aspects and the Summer Olympics: A review of related research. *International Journal of Tourism Research, 5*(6), 433–444.

Lazer, T. (1985). The 1985 Los Angeles Olympics. In *International events: The real tourism impact. Proceedings of the Canada Chapter Travel and Tourism Association Annual Conference* (pp. 137–140). Edmonton, Canada: Alberta.

Lee, C., & Taylor, T. (2005). Critical reflections on the economic impact assessment of a mega-event: The case of 2002 FIFA World Cup. *Tourism Management, 26*(4), 595–603.

Marques, C., Reis, E., & Menezes, J. (2010). Profiling the segments of visitors to Portuguese protected areas. *Journal of Sustainable Tourism, 18*(8), 971–996.

Mehmetoglu, M. (2007). Typologising nature based tourists by activity-theoretical and practical implications. *Tourism Management, 28*, 651–660.

Melo, R., & Gomes, R. (2016). Understanding nature sports organizations in Portugal. *The Open Sports Sciences Journal, 9*, 13–25.

Melo, R., & Gomes, R. (2017). Profiling the Typologies of Nature Sports Organizations in Portugal. In M. Peris-Ortiz, J. Álvarez-García, & M. C. del Rio-Rama (Eds.), *Sport management as an emerging economy activity* (pp. 235–255). Cham, Switzerland: Springer.

Melo, R., Van Rheenen, D., & Gammon, S. J. (2020). Part I: Nature sports: A unifying concept. *Annals of Leisure Research, 23*(1), 1–18.

Municipality of Lisbon and INDEG/ISCTE. (2016). *Avaliação do Impacto dos Grandes Eventos Desportivos em Lisboa* (pp. 2014–2015). Lisbon, Portugal: Municipality of Lisbon.

O'Brien, D., & Chalip, L. (2008). Sport events and strategic leveraging: Pushing towards the triple bottom line. In A. Woodside & D. Martin (Eds.), *Tourism management: Analysis, behaviour, and strategy* (pp. 318–338). Oxford, UK: CAB International.

PORDATA. (2019). *Bases de Dados Portugal Contemporâneo* [Databases Contemporary Portugal]. Lisboa, Portugal: Fundação Francisco Manuel dos Santos. Retrieved from: https://www.pordata.pt/. Accessed 05 Nov 2019.

Presidência do Conselho de Ministros. (2014). Resolução do Conselho de Ministros n.° 12/2014. Estratégia Nacional para o Mar 2013–2020. *Diário da República n.° 30/2014, Série I de 2014-02-12*, 1310–1336.

Preuss, H. (2005). The economic impact of visitors at major multi-sport events. *European Sport Management Quarterly, 5*(3), 281–301.

Preuss, H. (2007). The conceptualisation and measurement of mega sport event legacies. *Journal of Sport & Tourism, 12*(3–4), 207–228.

Roche, M. (1994). Mega-events and urban policy. *Annals of Tourism Research, 21*(1), 1–19.

Run Portugal. (2019). *Agenda/Coimbra*. Retrieved from: https://www.runportugal.com/agenda. Accessed 05 Nov 2019.

Running Wonders. (2016). *Running Wonders*. Retrieved from: http://www.runningwonders.com/. Accessed 15 Dec 2016.

Saayman, M., & Saayman, A. (2014). Appraisal of measuring economic impact of sport events. *South African Journal for Research in Sport, Physical Education and Recreation, 36*(3), 151–181.

Sack, A. L., & Johnson, A. T. (1996). Politics, economic development, and the Volvo international tennis tournament. *Journal of Sport Management, 10*(1), 1–14.

SaeR/ACL. (2009). *O Hypercluster da Economia do Mar. Um Domínio de Potencial Estratégico para o Desenvolvimento da Economia Portuguesa*. Lisboa, Portugal: SaeR/ACL.

Sofield, T. (2003). Sports tourism: From binary division to quadripartite construct. *Journal of Sport & Tourism, 8*(3), 144–165.

Statistics Portugal INE. (2019). *Conta Satélite do Turismo (2016–2018)* [Tourism Satellite Account (2016–2018)]. Lisbon, Portugal: Statistics Portugal.

Statistics Portugal INE. (2019). *Informação Estatística* [Statistics Information]. Lisbon, Portugal: Statistics Portugal. Retrieved from: https://www.ine.pt/xportal/xmain?xpgid=ine_main&xpid=INE. Accessed 05 Nov 2019.

Tourism of Portugal. (2006a). *Turismo de Natureza* [Nature Tourism]. Lisbon, Portugal: Tourism of Portugal.

Tourism of Portugal. (2006b). *Turismo Náutico* [Nautic Tourism]. Lisbon, Portugal: Tourism of Portugal.

Tourism of Portugal. (2007). *Plano Estratégico Nacional* do *Turismo* para o desenvolvimento do *turismo* em *Portugal* [Tourism national strategic plan for the Portuguese tourism development]. Lisbon, Portugal: Tourism of Portugal.

Tourism of Portugal. (2013). *Plano Estratégico Nacional* do *Turismo. Revisão e objetivos 2013–2015* [Tourism national strategic plan. Revision and goals for 2013–2015]. Lisbon, Portugal: Tourism of Portugal.

Tourism of Portugal. (2017). *Estratégia Turismo 2027 – Liderar o Turismo do Futuro* [Tourism Strategy 2027 – Leading the Tourism of the Future]. Lisbon, Portugal: Tourism of Portugal.

Trilhos dos Abutres. (2019). Trilhos dos Abutres, "an epic race". *Portuguese ultra-trail running, from Miranda do Corvo.* Retrieved from: https://trilhos.abutres.net/en/abutres-2019-trail-world-championships-results/. Accessed 05 Nov 2019.

Turco, D. (1997). Are we there yet? Understanding the impacts of competitive vacations. *Cyber-Journal of Sports Marketing, 1*(4) Http://www.cjsm.com

Turco, D. (1998). Travelling and turnovers measuring the economic impacts of a street basketball tournament. *Journal of Sport Tourism, 5*(1), 7–14.

Van Rheenen, D., Melo, R., & Sobry, C. (this volume). Comparative method of analysing small scale sport tourism events: Half marathons. In R. Melo, D. Van Rheenen, & C. Sobry (Eds.), *Small scale sport tourism events and local sustainable development. A cross-national comparative perspective* (pp. 43–54). Cham, Switzerland: Springer.

Van Rheenen, D., Sobry, C., & Melo, R., (this volume). Running tourism and the global rise of small-scale sport tourism events. In R. Melo, D. Van Rheenen, & C. Sobry (Eds.), *Small scale sport tourism events and local sustainable development. A cross-national comparative perspective* (pp. 1–17). Cham, Switzerland: Springer.

Walo, M., Bull, A., & Breen, H. (1996). Achieving economic benefits at local events: A case study of a local sports event. *Festival Management and Event Tourism, 4*(3/1), 95–106.

Weed, M. (2009). Progress in sports tourism research? A meta-review and exploration of futures. *Tourism Managment, 30*(5), 615–628.