

Chapter 2

Analysis and Segmentation of Sports Events' Participants: The Marathon Course in Palma de Mallorca



Margarita Alemany-Hormaeche, Francisco Rejón-Guardia
and María Antonia García-Sastre

2.1 Introduction

The pace of modern life often leads individuals to seek forms of escapism in their leisure time, often looking for active holidays in which sport plays a significant part. This may explain the success, in recent years, of sporting events organised in mature destinations to complement the traditional tourism product (García-Sastre, Alemany-Hormaeche, & Trías-Villar, 2015). Many people are following the trend of participating in marathons, motivated by various reasons: competition, extrinsic achievement, socialising, camaraderie and athletic identity (Gillett & Kelly, 2006).

The increasing interest in participation in sporting events has been taken into account by the organizers of these events in mature destinations as an instrument for tourism, specifically: to attract visitors outside of peak season, thereby reducing seasonality; to extend demand to alternative geographic areas; to diversify and increase the attractiveness of the destination for existing or new markets; and to project a favourable image of the destination instead other alternatives (Connell, Page, & Meyer, 2015).

This study evaluates the tourists taking part in, and the economic impact of a sporting event as a tourism instrument in the Balearic Islands. As well as being an ideal environment for the practice of sports such as running, Palma de Mallorca offers all the resources a sports tourist could wish for. This cosmopolitan city is renowned for its gastronomy, offers a wide range of cultural activities, and commercial services, and

M. Alemany-Hormaeche · F. Rejón-Guardia · M. A. García-Sastre (✉)
Department of Business & Economics, University of the Balearic Islands, Mallorca, Spain
e-mail: garcia.sastre@uib.es

M. Alemany-Hormaeche
e-mail: marga.alemany@uib.es

F. Rejón-Guardia
e-mail: f.rejon@uib.es

has good connectivity with the main European cities. The location of the city, which is open to the sea, and the design of the event routes, allow participants to enjoy the main tourist resources of the city with its abundant, Renaissance, Gothic and Modernist architectural legacy. The city of Palma has a long tradition of welcoming tourists, and currently has a total of 237 establishments with 43,633 tourist beds, plus apartments offering accommodation. This guarantees sufficient capacity to accommodate the athletes and spectators of sporting events that the city usually hosts.

In recent years, Palma has experienced a broad growth in the practice of athletics at the grassroots level. Events such as the “Cursa popular Ciutat de Palma el Corte Ingles”, “Mitja Marató Ciutat de Palma”, “10 Km Port de Palma, Cursa Popular Palmadona”, “Palma de Mallorca Maraton”, among others, are examples of the growing popularity of this type of event. Palma de Mallorca Marathon is a relatively new event, which has been held since 2015, taking over from the TUI Marathon after eleven successful years. It has the intention of growing in every respect, from the level of participation in the quality of the sport. In the most recent races, the event has had the average annual participation of 11,000 runners. Palma de Mallorca’s Marathon course is entirely urban, taking competitors past the city’s most important tourist attractions, showing runners the main monuments, and the most important, well-known streets and avenues along the 42,195 m of the route.

Following the literature review, this study is structured as follows: The first part focuses on the analysis of the levels of satisfaction experienced by the participants in the Palma de Mallorca Marathon, with the objective of identifying the main dimensions which explain satisfaction. The second part explores segmentation through cluster analysis, enabling the identification of different segments of marathon runners through variables of socio-demographics and consumer behaviour, such as loyalty and previous experience. Finally, the main conclusions and the implications for the management of the tourist destination are highlighted, as well as the limitations and future lines of research.

2.2 Literature Review

The most relevant research is described below as follows: First, the studies which evaluate sports events as tourism products are highlighted. Then, the importance of the analysis of levels of satisfaction to differentiate the profile of the sports tourist is explained. Finally, the review concludes by highlighting the usefulness of segmentation to support marketing strategy development and planning, and segmentation as a tool to identify key segments in order to better understand their needs and tourism motivations.

2.2.1 *Sporting Events as Tourism Products*

The sport has been described as one of the most important social phenomena in the world (Kurtzman & Zauhar, 2003), and the binomial of sport and tourism is becoming one of the most popular leisure and recreational experiences (Ritchie & Adair, 2004). The tourism industry, encouraged by this situation, has been promoting the development of sports tourism products, pursuing high specialization through high tech in sports equipment, and new technologies (Redmond, 1991).

There has been a recent boom in the organization of urban sporting events. The United States and Europe show clear examples of this trend and several factors explain this growth: the greater availability of consumer income for the consumption of recreational and leisure activities (Thwaites, 1999); a greater concern for health and well-being (Knop, 1987; Kurtzman & Zauhar, 1995); and the effort of cities to equip themselves with sports facilities and infrastructures as a boost for territorial development (Turner & Rosentraub, 2002). The interest of large cities in hosting major sporting events is clear, with the increasing number of agencies whose main objective is to attract sporting events to their respective communities, to coordinate the efforts of different administrations and seek the support of private sponsors (Jones, 2001).

The organization of these events occasions important benefits from both the economic and social perspectives and, of course, inherent burdens for the host cities. Among the former, the promotion and implementation of strategies for urban regeneration and tourism development should be highlighted (Benur & Bramwell, 2015; Biachini & Schengel, 1991; Loftman & Spirou, 1996), in addition to the relaunching of the image of the city linked to the success of the event (Roche, 2002), or the revitalization of the local economy through the expenditure made by visitors and participants in the events. Although sports tourism has become an important economic activity for many regions (Shonk & Chelladurai, 2008), it requires heavy investment by public administrations, whether from central or regional governments, which may not always be translated into economic benefits. There have been examples of negative experiences of cities that have hosted mega-events, where the infrastructures and equipment financed by public funds have been subsequently underutilized (Kidd, 1992; Whitson & Macintosh, 1993), or where negative effects have been detected in different segments of the host community (Hodges & Hall, 1996; Wearing & Wearing, 1996).

Mega-events, or hallmark tourism events, are important fairs, exhibitions, cultural or sporting events of an international nature, which are held regularly with a brief or limited duration, organized by a country or city, and which aim to attract an important number of participants and spectators, with international media coverage and high investment in infrastructure, logistics and security (Aguado, Osorio, Arbona, & Peña-Vinces, 2017). The scientific literature has devoted important efforts to the analysis of the economic impact generated by large-scale events (Año Sanz, Calabuig Moreno, & Parra Camacho, 2012; Baade, Baumann, & Matheson, 2008; Domingues,

Junior, & Magalhães, 2011; Li, Blake, & Thomas, 2013; Parra-Camacho, Añó-Sanz, Calabuig-Moreno, & Ayora-Pérez, 2016; Saayman & Saayman, 2012).

Major sporting events have traditionally received attention in the literature, both internationally (Baade et al., 2008; Fernández & Martínez, 2003; Pillay & Bass, 2008; Soutar & McLeod, 1993; Sturges & Brady, 2006; Waitt, 2003) and nationally (Añó Sanz et al. 2012; Barajas & Sanchez, 2011; Ramírez Hurtado, Ordaz Sanz, & Rueda Cantuche, 2007) which analyse the economic impact of major sporting events. Yet, small- and medium-sized sporting events have traditionally received little attention in the literature.

However, in recent years, sporting events have increasingly been considered as major economic driving forces, especially in medium-sized communities, with growing evidence that medium-sized events have more positive repercussions than large-scale events on host communities (Higham, 1999; Veltri, Miller, & Harris, 2009). Researchers' interest in events of small or medium dimensions has increased correspondingly (Agha & Taks, 2015; Matheson, 2012; Taks, 2013; Veltri et al., 2009). Some of the most important studies into the effects of small- or medium-sized events on host communities are those of: (Baade et al., 2008; Barajas & Sanchez, 2011; Pillay & Bass, 2008; Sturges & Brady, 2006; Veltri et al., 2009)

2.2.2 Tourist Satisfaction with the Sports Event

Customer satisfaction is defined as a pleasurable fulfilment response to a good service benefit, or reward. Customer satisfaction has become a priority for organizations, especially for those firms that work with intangible and heterogeneous assets (Cronin Jr. & Taylor, 1992). Positive indices about the client's experience with the product or the brand stimulates the intention to repurchase in the future, as well as other advantages, such as positive word-of-mouth, cross-buying, improved profits, lowered marketing expenditure and customer loyalty (Anderson, Fornell, & Lehmann, 1994; Palmatier, Dant, Grewal, & Evans, 2006).

Considering the specific characteristics of services and, especially, the heterogeneity and variability of the same, customer satisfaction is understood in relation to service quality (Cronin Jr. & Taylor, 1992; Dabholkar, Shepherd, & Thorpe, 2000; Parasuraman, Zeithaml, & Berry, 1994). Mackay and Crompton (1988) define service quality as the difference between the expectations of the consumer about each of the dimensions of the service, and what it really perceives about it. Service quality has been linked to concepts such as: customer satisfaction (Ko & Pastore, 2004); customer loyalty (Kandampully, 1998; Zeithaml, Parasuraman, & Berry, 1990); value (Laroche, Ueltschy, Abe, Cleveland, & Yannopoulos, 2004); and repurchase intention (Fornell, 1992).

In the field of sports products, the quality of services and customer satisfaction has been addressed by authors such as: Howat, Absher, Crilley, and Milne (1996), Kim and Kim (1995), and McDonald, Sutton, and Milne (1995) following the model

proposed to measure quality and satisfaction in other sectors (banking, insurance, hospitality, etc.) adapted to the characteristics of sports products.

It is usual in this context, to differentiate between two types of public for sports products. On the one hand, there are the participants directly involved in sports practice (Crompton & Mackay, 1989; Howat et al., 1996; Kim & Kim, 1995; Papadimitriou & Karteroliotis, 2000; Van der Graaf, 1994; Williams, 1998). Studies can be found on the quality of services provided in fitness centres (Alexandris, Zahariadis, Tsorbatzoudis, & Grouios, 2004); or at golf courses (Crilley, Murray, Howat, March, & Adamson, 2002). On the other hand, there are the spectators of sport (Greenwell, Fink, & Pastore, 2002; Kelley & Turley, 2001; McDonald et al., 1995; McDonald & Milne, 1998; Theodorakis, Kambitsis, & Laios, 2001; Wakefield, Blodgett, & Sloan, 1996).

Sports tourism, as a service provider, incorporates and measures quality in all its dimensions (Kouthouris & Alexandris, 2005), and the analysis of tourist satisfaction with events is a widely used analytical tool (Tkaczynski & Rundle-Thiele, 2011). There is evidence in the tourism literature of a positive correlation between tourist satisfaction and intention to return (Bigne, Sanchez, & Sanchez, 2001; Kozak, 2001; Yoon & Uysal, 2005). Green and Chalip (1998) underline the necessity for event organisers to control the expectations and experiences of participants, as these are key factors in the level of involvement, and the intention to repeat (Casper & Stellino, 2008).

2.2.3 Segmentation in Sports Tourism

Segmentation techniques are tools which allow the grouping of individuals who show similar characteristics and needs (Kotler, Bowen, Makens, Moreno, & Paz, 2004). Slabbert (2016) points out that segmentation studies analyze a matrix of consumer characteristics, which include geographical information, behaviour patterns, personality characteristics, spending, seasonality and motives. Of the different variables used in segmentation, the demographic variable is the most general, is relatively inexpensive to perform, and helps identify the profile characteristics associated with the consumer in each segment.

One of the most widely used demographic variables in the market segmentation literature is the age variable. The age of a person has been used frequently, due to the belief that it is a low-cost proxy (Sowell & Mounts Jr., 2005), and it provides the necessary information to select different age groups (Bennett, Henson, & Zhang, 2003).

In the sports literature, segmentation is used to identify more homogeneous groups of athletes showing similar needs, desires and demographic profiles (Mullin, Hardy, & Sutton, 2000). Of the demographic variables, age has been applied as a segmentation factor, since it has been shown to influence different aspects such as performance, the behaviour of the athlete, and their commitment and attitudes (Myburgh, Kruger, & Saayman, 2014). In a sporting context, age as a variable of demographic segmen-

tation implies classifying participants who belong to the same age groups and who tend to have similar interests and experience. This will influence their behaviour and patterns of participation.

Over the years, segmentation in the field of the sports tourism has used a wide range of instruments that have furthered knowledge about participants in certain sports. In the field of diving, for example, Rice (1987) classified the practitioners of this modality into three levels: hard core, tourist and potential. Nogawa, Yamaguchi, and Hagi (1996), proposed two categories for cross-country skiing and walking: sports tourist and sports excursionist. The geographical and family life cycle variables have been used by (Bojanic & Warnick, 1996) in ski resorts; demand models based on the characteristics of skiers and the attributes of ski resorts (Johnston & Elsner, 1972); psychographic profiles to identify potential skiers (Mills, Couturier, & Snepenger, 1986) or the motivations for understanding the segment of skiers (Klenosky, Gengler, & Mulvey, 1993; Richards, 1996). Hall (1992) presents two groups of sports tourists: the active participants and the hobbyist. Stebbins (1992) created the concept of “work on serious leisure” to understand the different types of sports tourist.

Previous experience or frequency of participation, are relevant behavioural variables (Kruger, Botha, & Saayman, 2012), which identify first-timers as the new market, and repeaters as the core market of a sporting event. The use of different tactics and programmes specific to each group based on this distinction may be interesting to practitioners (Filo, Funk, & O’Brien, 2008; Kaplanidou & Gibson, 2012; Um, Chon, & Ro, 2006).

It is evident that every sporting event, and the type of participants they attract, is unique, and for this reason, the organizers of sporting events must identify the different clusters that will allow them to develop specific programmes for each segment of the market (Myburgh et al. 2014). The organization of an event such as the Palma de Mallorca Marathon requires extensive knowledge of the profile of the participants in the different types of races, in order not to consider them as a homogeneous group (Kruger et al. 2012).

2.3 Methods

2.3.1 Context and Sampling

The study was undertaken in the context of the annual Palma de Mallorca Marathon (previously named the TUI Marathon) held on Sunday 15th October 2016. A questionnaire was created, with four main sections, composed of 36 mainly closed-ended questions, addressing various aspects of the experience. The first section assessed behaviourally-oriented variables such as: choice of marathon race, purpose of visit, number of accompanying persons, length of stay, and amount of expenditure. The second section measured motivation for choosing the sports destination using 12 items developed for this study. The third section evaluated previous experience and

levels of satisfaction. The final section examined the demographic characteristics of respondents. The questionnaire was provided in Spanish, English, and German and delivered by e-mail from October to November 2016. Respondents were selected opportunistically from the 7,871 competitors in the marathon. In total 1,661 runners responded to the questionnaire (response rate 21.1%).

2.4 Results

Palma de Mallorca Marathon is one of the most important sports events to be held in the city of Palma. In the 2016 event, of the 7,871 participants, 6,352 were non-local runners and 1,519 were local runners. The fact that this race had the highest number of participants of any event held in the city, led to a need to know the socio-demographic characteristics of the participants, and their levels of satisfaction with the event, in order to improve the future management of the event. In addition, the economic impact of the marathon was evaluated for the host city of Palma. The runners could register in three types of races: the 10 km race (32.76% of the participants), a half-marathon (48.60%) or the marathon (17.39%). The frequency of repetition of the participants, showed that 54.75% were attending for the first time; 17.08% for the second time; 7.69% had participated between three and five times; and 5.21% had participated 6 or more times. Of the total number of participants, 62% were men and 38% were women. By age, it was observed that 12.3% were under 35 years old, 17.1% between 35 and 39 years old, 9.3% from 40 to 44 years old, 19.2% from 45 to 49 years old, and 20.6% between 50 and 54 years old. The remaining 21.4% were 55 or older. As for the level of education of the runners, there were three large groups: 24% with primary and secondary education, 50% with a university education, and the remaining 26% declared having other types of studies.

By nationalities, the majority of the participants were German (54.9%); the second largest number were runners from the United Kingdom (20.4%); the remaining nationalities had a lower representation (6.8% Swedish, 3.4% Austrian, 3% Estonian, 1.6% Dutch, 1.6% Norwegian, 1.5% Swiss, 1.2% Italian). One of the most important questions for the organizers of the event is to know how the participants became aware of it. 31.3% declared learning about the event through their friends; 24.6% had learned about it through other runners; and 10.3% through their club. Other minority channels were: advertising in magazines (7.6%); Facebook (7.4%); relatives (5.8%); the race calendar (4.6%); or through other sources (7.6%). Regarding the sources of information used to stay informed about the event, 78% of the runners used the event webpage, 18% used Facebook, only 3% used the newsletter, and 1% used Twitter (see Table 2.1).

To evaluate the advantages that an event such as this may imply for the host city, a section of questions related to aspects of the trip and tourist expenditure were included in the questionnaire (see Table 2.2). The main results reveal that 97% of the runners arrived on the island by plane, and that 77.13% stayed in hotels; 14.03% stayed in

Table 2.1 Socio-demographic information

| Variable | Categories | % |
|----------------------------|-------------------------|-------|
| Distance | 10 km | 32.76 |
| | 21.1 km (Half Marathon) | 48.60 |
| | 42.195 km (Marathon) | 17.39 |
| Frequency of participation | Once | 54.75 |
| | Twice | 17.08 |
| | 3, 4 or 5 times | 7.69 |
| | More than 5 times | 5.21 |
| Gender | Male | 62 |
| | Female | 38 |
| Age | From 25 to 29 | 4.7 |
| | 30–34 | 5.8 |
| | 35–39 | 17.1 |
| | 40–44 | 9.3 |
| | 45–49 | 19.2 |
| | 50–54 | 20.6 |
| | 55–59 | 10.2 |
| | 60–64 | 6.8 |
| | 65–69 | 2.9 |
| | 70–74 | 1.2 |
| More than 75 | 0.3 | |
| Level of education | High School/College | 24 |
| | University | 50 |
| | Other | 26 |
| Country of origin | Germany | 54.9 |
| | UK | 20.4 |
| | Sweden | 6.8 |
| | Austria | 3.4 |
| | Estonia | 3.0 |
| | Netherlands | 1.6 |
| | Norway | 1.6 |
| | Switzerland | 1.5 |
| | Italy | 1.2 |
| | Denmark | 1.1 |
| | France | 0.9 |
| | Other | 3.7 |

(continued)

Table 2.1 (continued)

| Variable | Categories | % |
|-----------------------------|---------------------------|------|
| Awareness of the event | Friends | 31.3 |
| | Other athletes | 24.6 |
| | Club | 10.3 |
| | Advertisement in magazine | 7.6 |
| | Facebook | 7.4 |
| | Family | 5.8 |
| | AIMS Race calendar | 5.5 |
| | Expo at other events | 4.6 |
| | Poster/flyer | 3.0 |
| Information about the event | Event website | 78 |
| | Facebook | 18 |
| | Newsletter | 3 |
| | Twitter | 1 |

Source Own elaboration

rented houses or apartments; 4.76% in the homes of family or friends; 2.47% in an agritourism; and the remaining 1.62%, in other types of accommodation.

An additional but fundamental question, when analysing the economic impact of a sporting event, is to quantify not only the expenditure of the participants in the event, but also that of their accompanying party. Only 5.38% of the runners came to the event unaccompanied; the vast majority (94.62%) were accompanied to the event. Specifically, 22.05% were accompanied by one person; 11.28% by 2 persons; 13.93% by three persons; 5.21% by four persons, 7.35% by 5 persons and the remainder were accompanied by six persons or more. It should be noted that 20.51% of the runners were accompanied by a group of more than 10 people.

With regard to the length of stay, the average was 5.94 days. Only 0.5% of the participants spent one night in the city; 4.88% spent two nights. Most runners who came to the event spent several days in Palma: 19.43% three nights; 19.85% four nights; 14.63% five nights; 6.98% six nights; 17.75% seven nights; and the remaining 11.01% stayed over seven nights. In addition to participating in the Palma de Mallorca Marathon during their stay, the runners, took part in other activities such as: enjoying the sun and beach (60.99%); discovering the local cuisine (51.90%); shopping (46.30%); cultural visits (30.28%); water sports (29.68%); nightlife (27.09%); and other activities (6.56%). The overall expenditure per stay of the participants amounted to 999.78 euros, which, with an average length of stay of 5.94 days meant a daily expenditure of 168.18 euros, well above the average daily expenditure of tourists in Mallorca during the same dates (119.43 euros). A breakdown of average expenditure by runners during their stay is distributed between the following items: accommodation (361.28 euros); plane/boat (251.52 euros); food and drink (195.08

Table 2.2 Tourism behavioral variables

| Variable | Categories | % |
|--------------------------------|--------------------------------|---------------------|
| Transport | Plane | 97 |
| | Car | 2 |
| | Other | 1 |
| | Boat and car | 0 |
| Accommodation | Hotel | 77.13 |
| | Rented houses or apartments | 14.03 |
| | Staying with friends or family | 4.76 |
| | Finca/Agroturismo | 247 |
| | Other | 1.62 |
| Number of accompanying persons | None | 5.38 |
| | 1 | 22.05 |
| | 2 | 11.28 |
| | 3 | 13.93 |
| | 4 | 5.21 |
| | 5 | 7.35 |
| | 6 | 2.39 |
| | 7 | 5.38 |
| | 8 | 2.65 |
| | 9 | 2.39 |
| | 10 | 1.45 |
| | More than 10 | 20.51 |
| Length of stay | 1 night | 0.50 |
| | 2 | 4.88 |
| | 3 | 19.43 |
| | 4 | 19.85 |
| | 5 | 14.63 |
| | 6 | 6.98 |
| | 7 | 17.75 |
| | 8 | 3.78 |
| | 9 | 2.78 |
| | 10 | 3.87 |
| | | More than 10 nights |

Source Own elaboration

euros); shopping (149.69 euros); various concepts (35 euros); nightlife (120 euros); car rental (67 euros); and cultural activities (70 euros).

Finally, taking into account the expenditure of the total number of participants and their accompanying parties, the economic impact amounted to approximately 11,421,463 euros, a considerable figure for the host city, considering that Palma de Mallorca Marathon is a medium-sized event taking place on a single day, in the low-mid season of the destination.

2.4.1 Analysis of the General Satisfaction of the Sample

With a view to evaluating the satisfaction of the competitors in the sporting event, a total of 14 items were measured using a 5-point Likert scale (1—not satisfied, 2—less satisfied, 3—neutral, 4—satisfied, 5—very satisfied). An exploratory factor analysis was carried out using a Varimax rotation, to obtain the main dimensions which would group the satisfaction of the runners in the race. The results of the adequacy of the factorial analysis show values of the Kaiser-Meyer-Olkin Test of sampling adequacy $KMO = 0.858$ (Bartlett's Test of Sphericity – $X^2(91) = 4344,876$, $p < 0.000$), indicating the presence of three dimensions. Table 2.3 shows that the main dimension of “satisfaction with the event” correlated with the “characteristics of the event location” (mean value = 4.21), which included the weather (4.57), hospitality of residents (4.38), restaurants (4.31), transport to the island by plane and boat (3.96), and additional services (3.86). The second factor of satisfaction was “race conditions” (race signage, road closures, road surface, road signage). The lowest scoring category of satisfaction was the “service and cost” factor (public transport, travel costs, other hotel services (Wi-Fi), special offers for athletes in hotels, and service costs).

2.4.2 Cluster Analysis of Event Participants

An exploratory analysis was carried out by means of a cluster in two stages, with the intention of discovering natural groupings within a set of data which would not otherwise be apparent. The results of the cluster analysis indicate that a four-cluster solution appeared to appropriate. The results of the analysis show the existence of four groups differentiated in terms of the level of sports activity and loyalty. To this end, they were segmented using the level of sports activity as criteria, in line with the classification proposed by many authors who divide the activities between gentle/moderate or hard/intense.

Among the *hard-loyal* runners, it should be noted that the vast majority have attended the event once or twice and are mainly males aged 41–50. The non-loyal hard runners have participated in the marathon between three and six, or more than six times. The *soft* runners who are loyal to the event, are those who were running

Table 2.3 Results of factor analysis of runners' satisfaction. Total variance explained by the factor analysis and rotated component matrix

| Motivation factors and items | Factor loading | Variance (%) | α | Mean |
|---------------------------------------|----------------|--------------|----------|------|
| F1: Services and cost | | 3.803 | 0.793 | 3.51 |
| Service costs | 0.812 | | | 3.30 |
| Other hotel services (ej: wifi) | 0.775 | | | 3.45 |
| Special offers for athletes in hotels | 0.750 | | | 3.31 |
| Public transport | 0.576 | | | 3.76 |
| Travel costs | 0.568 | | | 3.75 |
| F2: Characteristics of event location | | 13.678 | 0.811 | 4.21 |
| Restaurants | 0.819 | | | 4.31 |
| Hospitality of local residents | 0.773 | | | 4.38 |
| Transport to the island: plane, boat | 0.667 | | | 3.96 |
| Additional services | 0.628 | | | 3.86 |
| Weather | 0.608 | | | 4.57 |
| F3: Race conditions | | 9.358 | 0.759 | 3.76 |
| Road closures | 0.800 | | | 3.79 |
| Race signage | 0.767 | | | 3.82 |
| Pavement of route | 0.719 | | | 3.76 |
| Road signage | 0.656 | | | 3.67 |
| Total variance extracted (%) | | 58.839 | | |

Source Own elaboration

for the first or second time, and stand out for including a wider age range, and as the group spending least overall and per item at the destination. However, the group formed of the non-loyal soft runners seemed to have been loyal at some point, as the majority declared having participated in the marathon on between three to six previous occasions. This group spent significantly more overall at the destination per person, on aspects such as hotel accommodation and other items.

2.5 Conclusion and Implications

This study has analysed a marathon as a sports event of small-medium size, by examining the participating tourists and their tourism behaviour, as well as the economic impact of the race. The strong point of this research lies in having applied the vast majority of variables widely recommended by previous studies, that is, socio-demographic, geographical (place of residence), psychographic (satisfaction) and

behavioural variables (experience, expenditure, etc.) in the tourist analysis (Tkaczynski & Rundle-Thiele, 2011).

The main objective of the study was to determine the socio-demographic profile of the participants. Among the main findings it was observed that these sports tourists were mainly men of 50–54, with university education, and of German nationality. They learned about the event through friends and the event website, which was also their main source of information for following the event. The participants generally used the plane as a means of transport to the destination, they stayed in hotels near the route of the race, were accompanied, and stayed for an average of four nights in the city. The estimated economic impact generated by the event amounted to 11,421,463 euros.

Once the study sample was described, a factorial analysis of satisfaction with different aspects of the sporting event was carried out, with the intention of identifying the main factors that gather aspects of satisfaction with the race (Tkaczynski & Rundle-Thiele, 2011). The main conclusions of the study indicate that the satisfaction of the runners with the Palma de Mallorca Marathon is due to diverse factors which can be grouped into three categories: characteristics of the event location (date of the event being the most important); race conditions (highlighting the race signage); and services (mainly public transport) and cost (general travel cost as the most important), in a similar way to those conclusions reached in studies of satisfaction carried out by Shonk and Chelladurai (2008).

Competitors in the Palma de Mallorca marathon were segmented according to their level of activity as runners (Getz & McConnell, 2014; Pomfret, 2006). In addition, other variables were considered, such as future loyalty to the event and destination, tourism behaviour such as expenditure and length of stay at the destination, and socio-demographic variables. The results of the segmentation and the cluster analysis show the presence of four differentiated groups (named *hard loyal runners*, *non-loyal hard runners*, *soft runners* and *non-loyal soft runners*). The most significant findings are that runners who will attend in the future and will also run other races, were the newcomers whose tourism behaviour in terms of expenditure was found to be close to the average. Another finding of interest is that those runners who are no longer loyal and who will not run another race during the year, are those who spend significantly more on all items of expenditure. However, they are runners who have participated on previous occasions and do not intend to repeat, which may suggest a certain exhaustion of the product for these participants. In terms of expenditure, a direct correlation is observed with previous experience. Thus it is more profitable for the destination to attract older athletes who have participated previously.

The main recommendation to the management of the event points towards the need to captivate the most experienced runners once again and intensify efforts with newcomers. In relation to satisfaction, services linked to items such as public transport and travel costs should be improved, in addition to underlining the specific value of the climate, the hospitality of local residents, as well as road closures and route signage. Finally, events organized in the destination deserve greater attention, particularly in light of the continuing globalization of event tourism and heightened competition for event tourists.

Among the future lines of investigation, there is the evaluation during the time of the tourist that attends sporting events of running, as well as to see its evolution in terms of spending. A comparison with other sports events in the destination would allow the examination of the similarities or differences in the tourist participating in different events, as well as providing strategic information to the managers of the destination in order to attract one segment or another. An accurate estimate of the new money associated with a sporting event is pivotal in assessing its economic impact. Likewise, the resident's vision could be studied, for example, by evaluating negative environmental consequences, increased crime, crowding, administrative problems, security and over-commercialization, all of which can negatively influence the local community.

References

- Agha, N., & Taks, M. (2015). A theoretical comparison of the economic impact of large and small events. *International of Sport Finance*, 10(3), 199–217.
- Aguado, L. F., Osorio, A. M., Arbona, A., & Peña-Vinces, J. C. (2017). Efectos de la realización de un megaevento deportivo sobre una economía local. El caso de los Juegos Mundiales 2013 Cali. *Journal of Economics, Finance and Administrative Science*, 22(43), 131–153.
- Alexandris, K., Zahariadis, P., Tsohatzoudis, C., & Grouios, G. (2004). An empirical investigation of the relationships among service quality, customer satisfaction and psychological commitment in a health club context. *European Sport Management Quarterly*, 4(1), 36–52.
- Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *The Journal of Marketing*, 58(3), 53–66.
- Año Sanz, V., Calabuig Moreno, F., & Parra Camacho, D. (2012). Impacto social de un gran evento deportivo: el Gran Premio de Europa de Fórmula 1. *Cultura, Ciencia y Deporte*, 7(19).
- Baade, R. A., Baumann, R., & Matheson, V. A. (2008). Selling the game: Estimating the economic impact of professional sports through taxable sales. *Southern Economic Journal*, 74(3), 794–810.
- Barajas, A., & Sanchez, P. (2011). Aplicación del análisis coste-beneficio (ACB) al Campeonato de España de Natación Master 2011. *I Gijón Workshop de Economía del Deporte: El Impacto Económico en el Deporte*, Gijón, Universidad de Oviedo.
- Bennett, G., Henson, R. K., & Zhang, J. (2003). Generation Y's perceptions of the action sports industry segment. *Journal of sport management*, 17(2), 95–115.
- Benur, A. M., & Bramwell, B. (2015). Tourism product development and product diversification in destinations. *Tourism Management*, 50, 213–224.
- Biachini, F. & Schengel, H. (1991). Re-imagining the city. In J. Corner & S. Harvey (Eds.), *Enterprise and heritage: Crosscurrents of national culture* (pp. 214–234). Routledge, London.
- Bigne, J. E., Sanchez, M. I., & Sanchez, J. (2001). Tourism image, evaluation variables and after purchase behaviour: Inter-relationship. *Tourism Management*, 22(6), 607–616.
- Bojanic, D. C., & Warnick, R. B. (1996). Segmenting the market for winter vacations. *Journal of Travel & Tourism Marketing*, 4(4), 85–95.
- Casper, J. M., & Stellino, M. B. (2008). Demographic predictors of recreational tennis participants' sport commitment. *Journal of Park & Recreation Administration*, 26(3).
- Connell, J., Page, S. J., & Meyer, D. (2015). Visitor attractions and events: Responding to seasonality. *Tourism Management*, 46(C), 283–298.
- Crilley, G., Murray, D., Howat, G., March, H., & Adamson, D. (2002). Measuring performance in operational management and customer service quality: A survey of financial and non-financial metrics from the Australian golf industry. *Journal of Retail & Leisure Property*, 2(4), 369–380.

- Crompton, J. L., & Mackay, K. J. (1989). Users' perceptions of the relative importance of service quality dimensions in selected public recreation programs. *Leisure Sciences, 11*(4), 367–375.
- Cronin Jr., J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *The Journal of Marketing, 55*–68.
- Dabholkar, P. A., Shepherd, C. D., & Thorpe, D. I. (2000). A comprehensive framework for service quality: An investigation of critical conceptual and measurement issues through a longitudinal study. *Journal of Retailing, 76*(2), 139–173.
- Domingues, E. P., Junior, A. A. B., & Magalhães, A. S. (2011). Quanto vale o show?: Impactos econômicos dos investimentos da Copa do Mundo 2014 no Brasil. *Estudos Econômicos (São Paulo), 41*(2), 409–439.
- Fernández, I., & Martínez, A. (2003). *El impacto económico de la Copa del América*. Instituto de Economía Internacional, Universidad de Valencia.
- Filo, K. R., Funk, D. C., & O'Brien, D. (2008). It's really not about the bike: Exploring attraction and attachment to the events of the Lance Armstrong Foundation. *Journal of Sport Management, 22*(5), 501–525.
- Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. *The Journal of Marketing, 56*(1), 6–21.
- García-Sastre, M. A., Alemany-Hormaeche, M., & Trías-Villar, M. (2015). Are regional political decisions the key element in reducing seasonal variation in tourism? The case of the Balearic Islands. *Tourism Economics: The Business and Finance of Tourism and Recreation, 21*(6), 1207–1219.
- Getz, D., & McConnell, A. (2014). Comparing trail runners and mountain bikers: Motivation, involvement, portfolios, and event-tourist careers. *Journal of Convention & Event Tourism, 15*, 69–100.
- Gillett, P., & Kelly, S. (2006). 'Non-local' masters games participants: An investigation of competitive active sport tourist motives. *Journal of Sport Tourism, 11*(3–4), 239–257.
- Green, B. C., & Chalip, L. (1998). Sport tourism as the celebration of subculture. *Pergamon Annals of Tourism Research, 25*(2), 275–291.
- Greenwell, T. C., Fink, J. S., & Pastore, D. L. (2002). Assessing the influence of the physical sports facility on customer satisfaction within the context of the service experience. *Sport Management Review, 5*(2), 129–148.
- Hall, C. M. (1992). *Adventure, sport and health tourism* (pp. 141–158).
- 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.
- Hodges, J., & Hall, C. (1996). The housing and social impacts of mega events: Lessons for the Sydney 2000 Olympics. In *Tourism down under II; towards a more sustainable tourism* (pp. 152–166).
- Howat, G., Absher, J., Crilley, G., & Milne, I. (1996). Measuring customer service quality in sports and leisure centres. *Managing leisure, 1*(2), 77–89.
- Johnston, W. E., & Elsner, G. H. (1972). Variability in use among ski areas: A statistical study of the California market region. *Journal of Leisure Research, 4*(1), 43.
- Jones, C. (2001). Mega-events and host-region impacts: Determining the true worth of the 1999 Rugby World Cup. *International Journal of Tourism Research, 3*(3), 241–251.
- Kandampully, J. (1998). Service quality to service loyalty: A relationship which goes beyond customer services. *Total Quality Management, 9*(6), 431–443.
- Kaplanidou, K., & Gibson, H. (2012). Differences between first time and repeat spectator tourists of a youth soccer event: Intentions and image approaches. *Current Issues in Tourism, 15*(5), 477–487.
- Kelley, S. W., & Turley, L. W. (2001). Consumer perceptions of service quality attributes at sporting events. *Journal of Business Research, 54*(2), 161–166.
- Kidd, B. (1992). The Toronto Olympic commitment: Towards a social contract for the Olympic Games. *Olympika: The International Journal of Olympic Studies, 1*(1), 154–167.
- Kim, D., & Kim, S. Y. (1995). QUESC: An instrument for assessing the service quality of sport centers in Korea. *Journal of sport management, 9*(2), 208–220.

- Klenosky, D. B., Gengler, C. E., & Mulvey, M. S. (1993). Understanding the factors influencing ski destination choice: A means-end analytic approach. *Journal of leisure research*, 25(4), 362–379.
- de Knop, P. (1987). Some thoughts on the influence of sport on tourism. In *International seminar and workshop on outdoor education, recreation and sport tourism. Proceedings of an international seminar* (pp. 38–45). Wingate Institute for Physical Education and Sport.
- Ko, Y. J., & Pastore, D. L. (2004). Current issues and conceptualizations of service quality in the recreation sport industry. *Sport marketing quarterly*, 13(3), 158–166.
- Kotler, P., Bowen, J., Makens, J., Moreno, R. R., & Paz, M. D. R. (2004). *Marketing para turismo*. Pearson Pr.
- Kouthouris, C., & Alexandris, K. (2005). Can service quality predict customer satisfaction and behavioral intentions in the sport tourism industry? An application of the SERVQUAL model in an outdoors setting. *Journal of Sport & Tourism*, 10(2), 101–111.
- Kozak, M. (2001). Repeaters' behavior at two distinct destinations. *Annals of tourism research*, 28(3), 784–807.
- Kruger, M., Botha, K., & Saayman, M. (2012). The relationship between visitor spending and repeat visits: An analysis of spectators at the Old Mutual Two Oceans Marathon. *Acta Commercii*.
- Kurtzman, J., & Zauhar, J. (1995). Tourism sport international council. *Annals of tourism Research*, 22(3), 707–708.
- Kurtzman, J., & Zauhar, J. (2003). A wave in time-The sports tourism phenomena. *Journal of Sport Tourism*, 8(1), 35–47.
- Laroche, M., Ueltschy, L. C., Abe, S., Cleveland, M., & Yannopoulos, P. P. (2004). Service quality perceptions and customer satisfaction: Evaluating the role of culture. *Journal of International Marketing*, 12(3), 58–85.
- Li, S., Blake, A., & Thomas, R. (2013). Modelling the economic impact of sports events: The case of the Beijing Olympics. *Economic Modelling*, 30, 235–244.
- Loftman, P., & Spirou, C. (1996). Sports stadiums and urban regeneration: the British and US experience. In *Tourism and Culture Conference*. University of Northumbria Sept.
- Mackay, K. J., & Crompton, J. L. (1988). A conceptual model of consumer evaluation of recreation service quality. *Leisure Studies*, 7(1), 40–49.
- Matheson, V. (2012). Assessing the infrastructure impact of mega-events in emerging economies.
- McDonald, M. A., Sutton, W. A., & Milne, G. R. (1995). TEAMQUAL: Measuring service quality in professional team sports. *Sport Marketing Quarterly*, 4(2), 9–15.
- McDonald, M., & Milne, G. (1998). Measuring service quality in professional sport. In *Proceedings of the 6th Congress of the European Association of Sport Management*.
- Mills, A. S., Couturier, H., & Snepenger, D. J. (1986). Segmenting Texas snow skiers. *Journal of Travel Research*, 25(2), 19–23.
- Mullin, B. J., Hardy, S., & Sutton, W. A. (2000). *Sport marketing* (2nd ed.). Champaign, IL: Human Kinetics.
- Myburgh, E., Kruger, M., & Saayman, M. (2014). A motivation-based typology of triathletes. *South African Journal for Research in Sport, Physical Education and Recreation*, 36(3), 117–134.
- Nogawa, H., Yamaguchi, Y., & Hagi, Y. (1996). An empirical research study on Japanese sport tourism in sport-for-all events: Case studies of a single-night event and a multiple-night event. *Journal of Travel Research*, 35(2), 46–54.
- Palmatier, R. W., Dant, R. P., Grewal, D., & Evans, K. R. (2006). Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of marketing*, 70(4), 136–153.
- Papadimitriou, D. A., & Karteroliotis, K. (2000). The service quality expectations in private sport and fitness centers: A reexamination of the factor structure. *Sport Marketing Quarterly*, 9(3), 157–164.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Reassessment of expectations as a comparison standard in measuring service quality: Implications for further research. *The Journal of Marketing*, 111–124.

- Parra-Camacho, D., Añó-Sanz, V., Calabuig-Moreno, F., & Ayora-Pérez, D. (2016). Percepción de los residentes sobre el legado de la America's Cup. *Cuadernos de Psicología del Deporte*, 16(1), 325–338.
- Pillay, U., & Bass, O. (2008). Mega-events as a response to poverty reduction: The 2010 FIFA World Cup and its urban development implications. *Urban Forum*.
- Pomfret, G. (2006). Mountaineering adventure tourists: A conceptual framework for research. *Tourism Management*, 27(1), 113–123.
- Ramírez Hurtado, J. M., Ordaz Sanz, J. A., & Rueda Cantuche, J. M. (2007). Evaluación del impacto económico y social de la celebración de grandes eventos deportivos a nivel local: el caso del Campeonato de Tenis femenino de la ITF en Sevilla en 2006. *Revista de Métodos Cuantitativos para la Economía y la Empresa*, 3.
- Redmond, G. (1991). *Changing styles of sports tourism: industry/consumer interactions in Canada, the USA and Europe* (pp. 107–120).
- Rice, K. (1987). Special report: SCUBA diving: Dive market requires specialized skill and information. *Tour and Travel News*, 9, 7–24.
- Richards, G. (1996). Production and consumption of European cultural tourism. *Annals of tourism research*, 23(2), 261–283.
- Ritchie, B. W., & Adair, D. (2004). *Sport tourism: Interrelationships, impacts and issues* (Vol. 14). Channel View Publications.
- Roche, M. (2002). *Megaevents and modernity: Olympics and expos in the growth of global culture*. Routledge.
- Saayman, M., & Saayman, A. (2012). Determinants of spending: An evaluation of three major sporting events. *International Journal of Tourism Research*, 14(2), 124–138.
- Shonk, D. J., & Chelladurai, P. (2008). Service quality, satisfaction, and intent to return in event sport tourism. *Journal of sport management*, 22(5), 587–602.
- Slabbert, L. M. (2016). The impact of an accreditation system for trails on growth in hiking tourism.
- Soutar, G., & McLeod, P. (1993). Residents' perceptions on impact of the America's Cup. *Annals of Tourism Research*, 20(3), 571–582.
- Sowell, C. B., & Mounts Jr., W. S. (2005). Ability, age, and performance: Conclusions from the Ironman Triathlon World Championship. *Journal of Sports Economics*, 6(1), 78–97.
- Stebbins, R. (1992). *Amateurs, professionals and serious leisure*. London: McGill.
- Sturgess, B., & Brady, C. (2006). Hosting the FIFA World Cup. *World Economics*.
- Taks, M. (2013). Social sustainability of non-mega sport events in a global world. *EJSS. European Journal for Sport and Society*, 10, 121–141.
- Theodorakis, N., Kambitsis, C., & Laios, A. (2001). Relationship between measures of service quality and satisfaction of spectators in professional sports. *Managing Service Quality: An International Journal*, 11(6), 431–438.
- Thwaites, D. (1999). Closing the gaps: Service quality in sport tourism. *Journal of Services Marketing*, 13(6), 500–516.
- Tkaczynski, A., & Rundle-Thiele, S. R. (2011). Event segmentation: A review and research agenda. *Tourism Management*, 32(2), 426–434.
- Turner, R. S., & Rosentraub, M. S. (2002). Tourism, sports and the centrality of cities. *Journal of Urban Affairs*, 24(5), 487–492.
- Um, S., Chon, K., & Ro, Y. (2006). Antecedents of revisit intention. *Annals of Tourism Research*.
- Van der Graaf, A. J. (1994). Service quality and sport centers. *European Journal of Sport Management*, 1(1), 42–57.
- Veltri, F. R., Miller, J. J., & Harris, A. (2009). Club sport national tournament: Economic impact of a small event on a mid-size community. *Recreational Sports Journal*, 33(2), 119–128.
- Waitt, G. (2003). Social impacts of the Sydney Olympics. *Annals of Tourism Research*, 30(1), 194–215.
- Wakefield, K. L., Blodgett, J. G., & Sloan, H. J. (1996). Measurement and management of the sportscape. *Journal of Sport Management*, 10(1), 15–31.

- Wearing, B., & Wearing, S. (1996). Refocussing the tourist experience: The flaneur and the choraster. *Leisure studies, 15*(4), 229–243.
- Whitson, D., & Macintosh, D. (1993). Becoming a world-class city: Hallmark events and sport franchises in the growth strategies of Western Canadian cities. *Sociology of Sport Journal, 10*(3), 221–240.
- Williams, M. H. (1998). *The ergogenics edge: Pushing the limits of sports performance*. Human Kinetics Publishers.
- Yoon, Y., & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. *Tourism Management, 26*(1), 45–56.
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. Simon and Schuster.