



Article Segmenting the Older Resident's Perception of a Major Cycling Event

José Miguel Vegara-Ferri[®], José María López-Gullón, Ricardo José Ibanez-Pérez[®], María Carboneros and Salvador Angosto *[®]

Department of Physical Activity and Sport, Faculty of Sport Sciences, University of Murcia, 30720 Santiago de la Ribera, Spain; josemiguel.vegara@um.es (J.M.V.-F.); luchamurcia@um.es (J.M.L.-G.); ricardojose.ibanez@um.es (R.J.I.-P.); maria.carboneros@um.es (M.C.)

* Correspondence: salvador.a.s@um.es

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Abstract: The aim of the study is to evaluate the social perception of older adults, resident in the host communities where the stage of "La Vuelta" 2019 starts or ends, identifying the possible existing groups and comparing the results before and during the event. Community support is a critical factor in ensuring the success of a major sports event and in generating a greater sense of community involvement. In order to analyze the social perception of the event, 521 older adults were interviewed using a questionnaire of 27 items. Data were collected online in the pre-event period and face-to-face in the on-site period using tablets. A *t*-test and cluster analysis was carried out to identify different residents' opinions. The results showed an improvement in the perception of the positive and negative impacts in the in situ period with respect to the pre-event. Three clusters were identified (Positives, Moderates, Haters) with the Positives group being the most represented in each of the periods. The findings suggest that a high level of future intentions for positive behavior can benefit the intangible characteristics of the event and host communities, and that these population groups can better harness the tangible benefits of sports events.

Keywords: social perception; resident segmentation; elderly; sports event; community support; cycling

1. Introduction

Spain is one of the countries with the greatest ageing in Europe, where the average number of people called 'older adults' need help to maintain an active life so that their ageing is active and healthy [1]. Participation in recreational and leisure activities and/or sports events is one of the main non-pharmacological habits that help older people to age in a more active and healthy way by improving their quality of life, as older adults, upon retirement, have a lot of free time.

Therefore, one of the main motivations for the occupation of the population's free time is participation in sports events, which has become one of the most relevant social phenomena in society from a global perspective [2,3], increasing the practice and participation in sports year after year. In Spain, the *Yearbook of Sports Statistics* states that the practice of sports by the Spanish population over 55 years of age has increased from 22.2% in 2010 to 26.0% in 2015, with 100,000 trips to other parts of Spain for sports reasons between 2018 and 2019 [4].

Ibáñez-Pérez, Martínez-Moreno and López-García indicate that the benefits of the older adult population being physically active have been remarked in the research literature for a long time, since physical activity has a very important impact on the quality of life [5]. This participation helps to avoid the feeling of isolation that can occur in older adults [6], by positively affecting their happiness and well-being [7].

The evaluation of sport events is changing its focus to pay greater attention to intangible aspects such as social perception, which encompasses both a socio-cultural and environmental dimension [8]. These trends produce a high level of competence in event organizers and communities interested in hosting major events, in order to promote the greatest events in their communities [9]. Regarding the perception of residents, there can be found numerous studies in the scientific literature related to different types of sport events such as the Olympic Games, World Championships, Formula 1, the Tour de France or small sports events [9–14].

However, sports events, in general, regardless of their size, have a series of impacts associated with them, which can be positive and/or negative, and that will manifest themselves in the different phases of the event [15]. These impacts, depending on their level and meaning, can produce alterations in the perception of residents and form other opinions that will have their consequence in future events within the community [16]. Some studies only report positive benefits, while ignoring the negative impacts on residents [17], as residents' perceptions can significantly affect the success of the sports event in the community [18].

Yet, these impacts mentioned above, are always going to be determined according to the resident's perception, considering that each individual has a personal character (i.e., interest, values, attitudes, etc.), which implies that each resident is going to perceive these impacts in a different perspective. In the literature on the evaluation of social perception in sports events, there are different theories that help to explain these changes of perception of residents in the host communities [19]. These theories try to explain and understand why changes in attitude and perceptions occur among different residents of the same community [20]. The major theoretical frameworks that contribute to understanding changes in opinion are the Social Exchange Theory (SET) [21] and the Social Representations Theory (SRT) [22].

The SET is the most widely used theory to explain resident responses to the impacts of a sports event [21,23–30]. This theory comes from contexts such as sociology and social psychology, allowing an understanding of aspects associated with social relations and exchanges that happen in social exchanges [31,32], and is based on the analysis of how the situation of an individual depends on the benefits or rewards he/she obtains as a result of their interaction with other people [33]. The SET also helps to explain residents' reasons and motives for coming into contact with the tourism that arises from the organization of the sports event, or, conversely, to explain their rejection or lack of support for such social exchange [34]. Fredline indicates that residents who derive more benefit will show a more positive perception of the sports event compared to those who do not obtain a direct benefit [18].

Furthermore, the SRT has been applied in fewer sports event evaluation studies [35], although its principle is not contradictory to the SET. The SRT explains the differences and similarities between different groups of residents in the host community with respect to their perception of the social impacts of a sports event; these representations are shaped by direct experiences, social interactions, and other factors such as the communications media [19]. Nevertheless, these representations are difficult to change, as they are a framework from which new perceptions are created [36].

Residents' perceptions are not formed exclusively from a provisional judgement but are determined by the social and historical context in which the event takes place [22]. Thus, in each community there are groups of people with different degrees of identification and interest in hosting a sports event [37], which makes it necessary to know to what extent these impacts influence the host community and whether the organization of these events is positive for the social, cultural and economic development of the communities in which they are held [9].

Among the literature regarding the evaluation of impacts on sports events from the point of view of the resident's perception of the host communities, it is found that very diverse opinions appear, depending on the person. In order to identify the different groups that exist in opinions regarding the organization of a sports event, the literature includes different studies that address the identification of these groups in which there is a diversity of opinions, usually classified as positive opinion groups or lovers of the event, neutral or moderates, and critical or haters [28,35,36,38–46].

Despite the numerous studies that appear in the literature, the different opinions generated in the different groups of the host community by the organization of sports events have not been fully understood, and the variable nature of the different attitudes of each individual have not been analyzed in depth [43]. Notwithstanding, the literature available shows that attitudes and opinions differ between events and communities, even when the same event is evaluated from different periods [28,43]. Some studies have found similar opinions from the Chinese population towards the organization of a Grand Prix and the Beijing 2008 Olympic Games [35,46].

In the different studies that have conducted cluster analysis, most have identified between two and five groups of individuals with common characteristics, although some studies find great support from all residents, with no groups with a negative attitude toward the sporting event [47]. Most studies have identified three groups of residents in sports events such as the Youth Olympic Games, America's Cup, Grand Prix, Ironman or cycling events [28,36,38,40,48–50], followed by studies that have identified two groups in events such as the Olympic Games, motor racing Grand Prix or cycling events [16,28,35,43,46].

The evaluation of the resident's perception is an effective tool to obtain feedback on the implementation of the sports event, both for the organizers themselves and for the local governments, which serves to determine the success or failure of the event itself [50]. In this sense, event organizers should analyze social perception to understand the impact that the event has caused, in order to improve its planning and organization [51], with the aim of meeting the needs of spectators, increasing the support and expectation of future events [52]. In addition, it is important for cities to attract the celebration of sports events because the benefits at the tourist, environmental, economic, social and sports levels are very significant if the event is well organized and planned [53].

A good experience during the event can result in high satisfaction which positively influences the future behavioral intention to repeat the experience at the event or another one with similar characteristics [54]. Parra et al. found a direct relationship between the dimensions of social perception and the future intentions of the resident to attend the sports event [44]. The relationship between these aspects is clearly practical for organizers and local governments [55], helping to make the sports event profitable [56]. The aim of this study is to find out the degree of perception that the older adults have about the social perception of the event "La Vuelta" 2019, observing differences according to the initial perception of the event and that subsequent to it. The profiles of the older adults will also be identified according to their intention to repeat the experience in the future, identifying those aspects that may influence their decision.

2. Method

2.1. Sample

The sample was composed of a total of 521 older adults, resident in different starting or finishing stages of La Vuelta in its 2019 edition, where 311 surveys were conducted before the event and 210 surveys during the event were done on the spot (Table 1). The older adults in the previous stage were 54.7% men and 45.3% women with an average age of 60.33 years. Most of them had professional formation or secondary education (42.4%). Three out of four were married, and approximately one-third worked while the rest were retired. The great majority belonged to the middle class, and over 80% of the older adults practiced physical activity for at least three hours a week. In turn, the older adults in the in situ phase had a similar profile to the previous phase. The vast majority of them were men (74.3%), while few women attended (25.7%). 41.9% had a high school or professional formation level of studies, 81.0% were married or living with a partner, and half were retired or pensioners. Six out of ten belonged to a medium-level social status. 85.7% practiced some type of physical activity weekly, with almost half doing so for more than five hours per week.

Variables	Pre-Event	(n = 311)	In situ (<i>n</i> = 210)		
valiables	М	SD	М	SD	
Age	60.33	5.2	62.65	6.2	
	Frequency	%	Frequency	%	
Gender					
Male	170	54.7	156	74.3	
Female	141	45.3	54	25.7	
Education Level					
No studies	5	1.6	2	1.0	
Elementary studies	61	19.6	40	19.0	
Junior High School	51	16.4	31	14.8	
Senior High School/Professional education	132	42.4	88	41.9	
Graduated	48	15.4	40	19.0	
Post graduated	14	4.5	9	4.3	
Marital Status					
Single	21	6.8	15	7.1	
Married/Cohabited	230	74.0	170	81.0	
Divorced/Separated	45	14.5	17	8.1	
Widowed	15	4.8	8	3.8	
Occupation					
Self-employed	33	10.6	18	8.6	
Employed	117	37.6	59	28.1	
Unemployed	36	11.6	15	7.1	
Retired/Pensioner	97	31.2	108	51.4	
Housekeeper	28	9.0	10	4.8	
Social Level					
High level	1	.3	2	1.0	
Medium-High Level	18	5.9	13	6.3	
Medium level	194	64.0	131	63.0	
Medium-Lower Level	68	22.4	49	23.6	
Lower level	15	5.0	8	3.8	
Unanswered	7	2.3	5	2.4	
Practice physical activity					
Yes	254	81.7	180	85.7	
No	57	18.3	30	14.3	
Frequency physical activity					
Never	41	13.2	24	11.4	
1–2.5 h per week	57	18.3	23	11.0	
3–5 h per week	114	36.7	63	30.0	
More than 5 h per week	99	31.8	100	47.6	

Table 1. Sociodemographic characteristics of the sample.

2.2. Instrument

The instrument used to analyze social perception was that developed by Cabezos [57], "Questionnaire on the social impact of sports events", composed of a total of 27 items divided into five dimensions: (i) economic perception (four items), (ii) social perception (six items); (iii) environmental perception (six items); (iv) sports perception (six items), and future intentions (five items). Each item was evaluated according to a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree). The reliability of the questionnaire showed a Cronbach's Alpha value of 0.943 in the previous phase of the event and 0.903 in the in situ phase. Basic demographics such as sex, age, level of education

attained, marital status, occupation, and social status were included. The degree of attachment to the locality of residence was measured by three questions that evaluated this using a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree), the appropriateness of living in the locality, the quality of life in the locality, and whether they considered the future prospects of the municipality to be promising. They were also asked if they practiced any kind of physical activity or sport (yes/no), the frequency of sport practice (never/ 1–3 h per week/ 3–5 h per week/more than 5 h per week) and their interest in sport in general and in the sport modality of cycling by means of a 7-point Likert scale (1 = no interest; 7 = very much interest).

2.3. Procedure

The data collection process was carried out entirely by means of online surveys prepared in the "Surveys" platform that the University of Murcia has available for the collection of surveys telematically, among the university population or any group that is provided with the link. The platform allows the generation of different publication periods in the same survey, establishing two time periods (before the event and during the event). Firstly, a "Pre-event assessment" was carried out during the previous month by carrying out a non-probabilistic sampling for online convenience. Once the municipality that would form part of the study sample had been selected according to the start and end cities of the different stages, a presentation letter was sent to the local governments informing them of the interest and objectives of the study together with the link so that they could publish it on their different social networks. At the same time, geolocated announcements were published through the social network "Facebook" in each of the communities where the stages took place, with the aim of analyzing the opinions and perceptions of the inhabitants of the towns prior to the passing of "La Vuelta" 2019.

The second phase of data collection was carried out during the course of the "in situ" stages. The collection of surveys in this period was carried out in situ through non-probability convenience sampling. A team of eight interviewers equipped with electronic tablets was distributed at different points in the host community, interviewing the people who passed through that area. There was also a stand of the University of Murcia that was located next to the start or finish area, together with the other stands of sponsor companies and collaborators of the event. The stand had four tablet supports, where residents could approach the stand and complete the survey. In the starting locations, the stand was open until moments after the start of the stage, and then the team moved to the finish location and carried out the same process.

In order to control whether people were residents or not, a control question was established asking whether they were a local resident or not, and whether they were natural-born or had lived there for some time. In order to control the veracity of the answers, a control question was included in the middle of the survey in which respondents were asked to mark number one. All those surveys that did not have the number one marked were discarded, considering that the resident had randomly answered the questions without reading them. The research had the approval and support of the event's organizer and was also approved by the University of Murcia's Ethics Committee (n°2492/2019).

2.4. Data Analysis

Data analysis was performed using SPSS v.24.0 (IBM, Armonk, NY, USA). Sociodemographic characteristics were calculated as descriptive means and standard deviation for continuous variables such as age, while categorical variables (e.g., gender, education level, occupation, etc.) were obtained as frequencies and percentages. In order to compare the results of the variables of social perception, quality of life and interest in sport according to the phase of the event evaluated, before and during the stage, a *t*-test was performed [58]. Previously to *t*-test, the assumption of normality of the variables was calculated through K-S test, the results showed the normality of the variables (p > 0.05). Finally, a cluster analysis was carried out, in each of the periods, to identify possible groups of residents with similar opinions about social perception of "La Vuelta" in host communities. Cluster analysis took, as a dependent variable, the item's degree of support for "La Vuelta" event and support for other

major events on each phase. The effect size was calculated using the effect size calculator proposed by Lakens [59]. According to this author, it was established that values of Cohen's d of 0.20, that the effect was low; values of 0.50, that the effect was medium and values of 0.80, that the effect would be high. In order to obtain the cluster solutions, two methods were combined, hierarchical and non-hierarchical, with the aim of optimizing the results. The cluster analyses were carried out using the guidelines proposed by Romesburg [60]. The hierarchical cluster was analyzed taking the Ward's Method as a reference for the grouping process, while for the similarity measures, the Euclidean distance squared was used. Then, a non-hierarchical cluster was done through the K-means method, taking as a reference the centroids of the cluster solutions of the hierarchical method for each period. Once the ideal cluster solution was determined according to the criteria set out by Hair et al. [61], the profiles of the different groups were determined using all those variables not included in the cluster analysis. Chi-square tests, calculating the value of the Contingency Coefficient (C²) to verify the size of the effect and the intensity of the association between the qualitative variables compared the results through the performance of the ANOVA test for the continuous variables and for the qualitative variables [62]. The significance level was established at a value of $p \le 0.05$.

3. Results

The descriptive results analyzed (Table 2) indicated that, regarding quality of life, the resident was very satisfied with the place of residence with a score of 6.16 ± 1.1 points, while satisfaction with the quality of life in the locality also obtained a score close to six points (M = 5.89 ± 1.1). However, although it had a good score, the future perspective of the locality, with an average score of 5.29 ± 1.5 points, was not so satisfying. The older residents showed a higher interest in sport in general (M = 6.07 ± 1.2) than in cycling in particular (M = 5.88 ± 1.4). With regard to the dimensions of social perception, in general all the dimensions obtained a score in the range of five to six points, with the dimension of future intentions obtained a maximum score of 6.35 ± 1.2 points, while the environmental dimension was the worst evaluated with a total of 3.98 ± 1.4 points, it being notable that the older adult residents did not find many negative impacts of the sports events.

Variable	Total	Pre-Event (<i>n</i> = 311)	In Situ (<i>n</i> = 210)	<i>t</i> (gl)	p Value	Cohen's d
	M(SD)	M(SD)	M(SD)			
Residence area satisfaction	6.16(1.1)	6.16(1.1)	6.16(1.0)	0.02(519)	0.983	0.00
Future community	5.28(1.5)	5.12(1.5)	5.51(1.5)	-2.89(519)	0.004 *	0.26
Quality of life satisfaction	5.89(1.1)	5.84(1.1)	5.98(1.1)	-1.48(519)	0.139	0.13
Interest in sport	6.07(1.2)	6.02(1.3)	6.15(1.1)	-1.19(519)	0.235	0.11
Interest in cyclism	5.88(1.4)	5.73(1.5)	6.10(1.1)	-3.23(519)	0.001 *	0.28
Economic perception	5.82(1.2)	5.71(1.4)	5.99(1.0)	-2.68(519)	0.008 *	0.23
Social perception	5.30(1.4)	5.21(1.5)	5.45(1.3)	-1.90(519)	0.058	0.17
Sport perception	5.77(1.2)	5.68(1.3)	5.90(1.0)	-2.10(519)	0.037 *	0.19
Environmental perception	3.98(1.4)	4.01(1.4)	3.92(1.3)	0.75(519)	0.455	0.07
Behavioral intentions	6.35(1.2)	6.26(1.3)	6.49(1.0)	-2.23(519)	0.026 *	0.20

Table 2. Descriptive results of variables and comparative by period.

Note: * $p \le 0.05$.

The results were then compared between the pre-event phase and the on-site phase during the event (Table 2). The scores of the quality of life and interest items increased in the on-site period with respect to the pre-event phase, except for satisfaction with the quality of life in the locality which maintained the same score. In the pre-event phase, all the scores were higher than five points, with the least valued being the promising future of the community with 5.12 ± 1.5 points and the best valued being satisfaction with the place of residence with 6.16 ± 1.1 points. On the other hand, interest in sport was valued at slightly more than six points and interest in cycling was valued at 5.73 ± 1.5 points. The event organization brought about a change in the perception of the older adult, this being more

positive regarding the quality of life in the host community of the event and the greater interest of this population in sports and cycling, statistically significant differences between both periods being found in the item on the perception of the existence of a promising future in the locality with the organization of sports events and in the interest in cycling itself ($p \le 0.05$).

The results of the dimensions of the evaluation of the social perception of the older adult resident were that in both periods, the dimension with the highest score was future intentions, obtaining higher values in the in situ phase (M = 6.49 ± 1.0). As to the global results, the environmental dimension obtained the lowest score in both groups (M = 4.01 ± 1.4); and decreased its score in the in situ phase, getting 3.92 ± 1.3 points. The other dimensions remained within the five-point range in both groups, with their score increasing in situ. According to the results between the different groups, a high tendency to significance was found in the social dimension (t(519) = -1.90; p = 0.058), and there were statistically significant differences in the economic perception (t(519) = -2.68; p = 0.008), sports perceptions (t(519) = -2.10; p = 0.037) and future intentions (t(519) = -2.23; p = 0.026). Although these variables showed significant differences, the size of the effect of all the variables analyzed was low, with Cohen's d values close to 0.20.

3.1. Identification and Description of the Clusters

According to the methodology proposed by Hair et al. [61], the cluster analysis was carried out to identify older adult residents according to their degree of support for "La Vuelta" 2019 event and any other similar event that could be held in the municipality. Firstly, a hierarchical cluster analysis (Ward's Method) was carried out, observing the differences in the agglomeration coefficients and their increases between clusters two and three, and three and four. Secondly, the non-hierarchical K-means cluster analysis was performed using the solutions of the initial centers of two, three and four clusters found in the hierarchical cluster. The different solutions were contrasted since, as previously mentioned, in the scientific literature there are numerous works that have evaluated the social perception of the residents, identifying different cluster numbers.

Finally, this study used the three-cluster solution because it was the most fitting to identify the different groups of residents according to their degree of support of the sports event. It is important to remember that, according to Hair et al. [61], the choice of the ideal cluster depends on different aspects such as the theoretical bases, and the common sense or the practical judgment of the researcher. It is necessary to remember that most studies in the field that have carried out cluster analysis have identified three groups, which allows for a better classification and differentiation. Table 3 shows the centroids of each group of the different variables not included in the cluster, according to the different groups obtained considering the degree of support for "La Vuelta" sports event, or other large events according to the period of the study. The ANOVA test results confirmed, in the pre-event period, the existence of significant differences in all the variables ($p \le 0.001$) except environmental perception. The variables most corresponded with by those surveyed were the ones referring to the dimensions of the social perception of the resident, with future intentions being the variable with the best results (F = 759.937), while the variable about whether the residents felt that the municipality had a hopeful future was the one with the lowest correspondence among all the variables of this phase (F = 9.838).

Yet, not as many differences were found between the cluster groups in the on-site phase as in the pre-event phase, with significant differences in satisfaction with place of residence ($p \le 0.05$), degree of interest in cycling, economic, sport and social perception, as well as future intentions ($p \le 0.001$). This last variable had the highest correspondence of all those that had significant differences (F = 349.881), while the quality of life variable, in terms of whether the locality is an ideal place to live, was the one with the lowest correspondence (F = 3.319).

Pre-Event	Positives $(n = 252)$	Moderates (<i>n</i> = 45)	Haters ($n = 14$)	F (df)	p Value	
	M(SD)	M(SD)	M(SD)			
Residence area satisfaction	6.29(1.0)	5.78(1.2)	5.21(1.5)	10.223(310)	0.000 +,#	
Future community	5.30(1.5)	4.49(1.6)	4.00(1.5)	9.838(310)	0.000 +,#	
Quality of life satisfaction	5.98(1.0)	5.36(1.3)	4.86(1.5)	11.718(310)	0.000 +,#	
Interest in sport	6.33(1.0)	4.89(1.5)	3.93(2.2)	55.631(310)	0.000 *	
Interest in cyclism	6.06(1.1)	4.62(1.7)	3.43(2.2)	46.949	0.000 *	
Economic perception	6.07(1.1)	4.56(1.1)	2.93(1.8)	77.85(310)	0.000 *	
Social perception	5.63(1.2)	3.71(1.4)	2.37(1.6)	82.379(310)	0.000 *	
Sport perception	6.05(0.9)	4.33(1.4)	3.32(1.9)	84.693(310)	0.000 *	
Environmental perception	4.03(1.4)	3.83(1.3)	4.42(0.9)	0.95(310)	0.388	
Event-related intentions	6.76(0.4)	4.85(0.9)	1.69(0.7)	759.937(310)	0.000 *	
In situ	Positives $(n = 187)$	Moderates (n = 18)	Haters $(n = 5)$	F (df)	p Value	
	M(SD)	M(SD)	M(SD)	-		
Residence area satisfaction	6.22(1.0)	5.61(1.1)	5.80(1.3)	3.319(209)	0.038 +	
Future community	6.22(1.0) 5.59(1.5)	5.61(1.1) 4.94(1.3)	5.80(1.3) 4.80(1.9)	3.319(209) 2.105(209)	0.038 ⁺ 0.124	
Future community Quality of life satisfaction	6.22(1.0) 5.59(1.5) 6.03(1.0)	5.61(1.1) 4.94(1.3) 5.50(1.1)	5.80(1.3) 4.80(1.9) 5.80(1.3)	3.319(209) 2.105(209) 2.176(209)	0.038 ⁺ 0.124 0.116	
Future community Quality of life satisfaction Interest in sport	6.22(1.0) 5.59(1.5) 6.03(1.0) 6.20(1.1)	5.61(1.1) 4.94(1.3) 5.50(1.1) 5.78(1.2)	5.80(1.3) 4.80(1.9) 5.80(1.3) 5.40(0.9)	3.319(209) 2.105(209) 2.176(209) 2.41(209)	0.038 ⁺ 0.124 0.116 0.092	
Future community Quality of life satisfaction Interest in sport Interest in cyclism	6.22(1.0) 5.59(1.5) 6.03(1.0) 6.20(1.1) 6.22(1.1)	5.61(1.1) 4.94(1.3) 5.50(1.1) 5.78(1.2) 5.17(1.4)	5.80(1.3) 4.80(1.9) 5.80(1.3) 5.40(0.9) 5.20(1.5)	3.319(209) 2.105(209) 2.176(209) 2.41(209) 9.146(209)	0.038 ⁺ 0.124 0.116 0.092 0.000 ⁺	
Kesidence area satisfaction Future community Quality of life satisfaction Interest in sport Interest in cyclism Economic perception	6.22(1.0) 5.59(1.5) 6.03(1.0) 6.20(1.1) 6.22(1.1) 6.13(0.8)	5.61(1.1) 4.94(1.3) 5.50(1.1) 5.78(1.2) 5.17(1.4) 4.89(0.9)	5.80(1.3) 4.80(1.9) 5.80(1.3) 5.40(0.9) 5.20(1.5) 4.65(1.7)	3.319(209) 2.105(209) 2.176(209) 2.41(209) 9.146(209) 22.614(209)	0.038 + 0.124 0.116 0.092 0.000 + 0.000 +,#	
Kesidence area satisfaction Future community Quality of life satisfaction Interest in sport Interest in cyclism Economic perception Social perception	$\begin{array}{c} 6.22(1.0) \\ 5.59(1.5) \\ 6.03(1.0) \\ \hline \\ 6.20(1.1) \\ 6.22(1.1) \\ \hline \\ 6.13(0.8) \\ 5.63(1.1) \end{array}$	5.61(1.1) 4.94(1.3) 5.50(1.1) 5.78(1.2) 5.17(1.4) 4.89(0.9) 4.15(1.3)	$5.80(1.3) \\ 4.80(1.9) \\ 5.80(1.3) \\ 5.40(0.9) \\ 5.20(1.5) \\ 4.65(1.7) \\ 3.40(2.2) \\ $	3.319(209) 2.105(209) 2.176(209) 2.41(209) 9.146(209) 22.614(209) 20.349(209)	0.038 + 0.124 0.116 0.092 0.000 + 0.000 +,# 0.000 +,#	
Residence area satisfaction Future community Quality of life satisfaction Interest in sport Interest in cyclism Economic perception Social perception Sport perception	$\begin{array}{c} 6.22(1.0)\\ 5.59(1.5)\\ 6.03(1.0)\\ \hline \\ 6.20(1.1)\\ 6.22(1.1)\\ \hline \\ 6.13(0.8)\\ 5.63(1.1)\\ 6.07(0.9)\\ \end{array}$	5.61(1.1) 4.94(1.3) 5.50(1.1) 5.78(1.2) 5.17(1.4) 4.89(0.9) 4.15(1.3) 4.60(1.0)	$5.80(1.3) \\ 4.80(1.9) \\ 5.80(1.3) \\ 5.40(0.9) \\ 5.20(1.5) \\ 4.65(1.7) \\ 3.40(2.2) \\ 4.03(1.8) \\ $	3.319(209) 2.105(209) 2.176(209) 2.41(209) 9.146(209) 22.614(209) 20.349(209) 33.153(209)	0.038 + 0.124 0.116 0.092 0.000 + 0.000 +,# 0.000 +,# 0.000 +,#	
Residence area satisfaction Future community Quality of life satisfaction Interest in sport Interest in cyclism Economic perception Social perception Sport perception Environmental perception	$\begin{array}{c} 6.22(1.0)\\ 5.59(1.5)\\ 6.03(1.0)\\ \hline \\ 6.20(1.1)\\ 6.22(1.1)\\ \hline \\ 6.13(0.8)\\ 5.63(1.1)\\ 6.07(0.9)\\ 3.88(1.3)\\ \end{array}$	5.61(1.1) 4.94(1.3) 5.50(1.1) 5.78(1.2) 5.17(1.4) 4.89(0.9) 4.15(1.3) 4.60(1.0) 4.48(1.2)	$5.80(1.3) \\ 4.80(1.9) \\ 5.80(1.3) \\ 5.40(0.9) \\ 5.20(1.5) \\ 4.65(1.7) \\ 3.40(2.2) \\ 4.03(1.8) \\ 3.60(1.8) \\ $	3.319(209) 2.105(209) 2.176(209) 2.41(209) 9.146(209) 22.614(209) 20.349(209) 33.153(209) 1.847(209)	0.038 + 0.124 0.116 0.092 0.000 + 0.000 +,# 0.000 +,# 0.000 +,# 0.000 +,#	

Table 3. Average scores for each variable in the three clusters.

Note: * Differences between all groups; + Differences between Group 1 and Group 2; # Differences between Group 1 and Group 3.

In the pre-event phase, Cluster 1 was made up of 81.0% of the older adult residents and was called "Positives" because it showed a high degree of support for the event and presented high scores in most dimensions. This group had better ratings in their satisfaction with the place of residence (M = 6.29 ± 1.0), had a greater interest in sport in general than in cycling, although both ratings were above six points. Of the dimensions of social perception, future behavioral intentions related to the event had a very high score of close to seven points (M = 6.76 ± 0.4), followed by economic and sports perception with scores of 6.07 ± 1.0 and 6.05 ± 0.9 . The perception obtained an average score, being considered adequate since this is inverse, being better when the score is lower.

This group in the on-site phase represented 89.0% of the residents. The general results were higher than those obtained in the pre-event phase in all the variables except satisfaction with the place of residence and interest in sport, which decreased slightly. Interest in cycling had an average score of 6.22 ± 1.1 points, as did satisfaction with the place of residence. Future intentions had a practically similar evaluation to the other period (M = 6.75 ± 0.4), followed by economic perception (M = 6.13 ± 0.8) and sports perception (M = 6.07 ± 0.9). Environmental perception improved with a value of less than four points.

In the in situ phase, Cluster 2 "Moderates" was made up of 8.6% of the older adult participants and, as in the previous case, the scores in all the variables were higher than in the pre-event phase, except for environmental perception. In the quality of life dimension, satisfaction with the place of residence and quality of life showed scores above 5.50 points, interest in both sport and cycling also had scores above five points. The future intentions of this group were medium-high (M = 5.09 ± 0.8), no other dimension of social perception surpassed the five-point barrier. The environmental perception presented a score above the average of 4.48 ± 1.2 points, with the residents of this group considering that there was some kind of problem related to traffic, parking, noise or waste during the event. The last cluster, Cluster 3 or "Haters" represented only 4.5% of the pre-event period. It was named in this way because they were the most critical toward the event and showed very low support. The future intentions related to the event of this group had a score of only 1.69 ± 0.7 points, being the lowest of all. Only the resident's quality of life variables exceeded four points, and the environmental perception was negative (M = 4.42 ± 0.9). Of the dimensions of social perception, the sport aspect was the best evaluated with a value of 3.32 ± 1.9 points only. In the in situ period, this group was made up of 2.4% of the residents surveyed and also showed better scores in all the variables except future intentions related to the event (M = 1.68 ± 0.9). It should be noted that this group had the best environmental perception of all the clusters (M = 3.60 ± 1.8).

3.2. Profile of the Groups

Table 4 shows the descriptive results of the socio-demographic characteristics and sports habits of each of the cluster groups. The profile of the cluster groups has been made from other independent variables and allows us to ensure the predictive validity of each group. The results of the contingency tables and ANOVA test showed that only the social level of the in situ phase obtained significant differences according to the different groups ($\chi^2 = 33.6$; $p \le 0.001$). Nonetheless, other variables showed a high tendency to significance in the pre-event phase such as age (F = 2.639; p = 0.073), occupation ($\chi^2 = 14.3$; p = 0.075) or social level ($\chi^2 = 16.7$; p = 0.080), while in the in situ phase there was a low tendency to significance in age (F = 2.186; p = 0.115) and occupation ($\chi^2 = 13.2$; p = 0.106). The size of the effect of the contingency coefficient in the pre-event phase was in the range of 0.033 to 0.229, while in the in situ phase it was 0.093 to 0.373.

According to the pre-event phase, the profile of the "Positives" group was a major percentage of men (55.2%) with an average age of 60.07 ± 4.8 years, with a high school education or professional formation (41.7%), married (73.8%), employees (39.3%) and of average social class (66.5%). Regarding sports habits, the large majority practiced some type of physical activity or sport (81.3%), with an average of three to five hours per week of physical sports activity. The "Moderates" group was characterized by being women (53.3%) with an average age of 61.96 ± 6.8 years old, with secondary education or vocational training, married (75.6%), retired or pensioners (35.6%) and of an average social class (55.6%). The sports habits of this group were that a large majority practiced physical activity (84.4%) between three and five hours per week (42.2%). The "Haters" group was comprised mainly of men (71.4%) aged 59.79 \pm 4.8 years old, with secondary education or vocational training (42.2%), married (71.4%), self-employed or employees (35.7%) and of an average social class (46.2%). Their sports habits were that 78.6% practiced sport, dedicating more than five hours per week to it (42.9%).

In the in situ phase, the "Positives" group was mainly characterized by men (75.4%), an average age of 62.96 ± 6.4 years, high school or vocational training studies (42.2%), married (80.7%), retired or pensioners (53.5%) and middle class (63.2%). 86.6% of older adults carried out physical activity or sports more than five hours per week (48.7%). The "Moderates" group were men (61.1%) with an average age of 60.22 ± 3.4 years old, having had high school education or professional formation (44.4%), married (80.7%), employees (55.6%) and middle class (66.7%). A high proportion practiced physical activity (83.3%) for at least three hours per week (38.9%). Finally, the group of "Haters" were men (80.0%) aged 59.80 \pm 3.1 years old, with university studies (60.0%), married (80.0%), working (60.0%), from an upper or middle social class (40.0%). 60.0% carried out physical activity between one and five hours per week, or more than five hours per week (40.0%).

Moderate	s (n = 45)	Haters	n = 14)	
М	ST	М	ST	
61.96	6.8	59.79	4.8	
Ν	%	N	%	

Table 4. Characteristics of the different groups.

Positives (n = 252)

Pre-Event		Positives $(n = 252)$		Moderates $(n = 45)$		Haters $(n = 14)$	
110		М	ST	М	ST	М	ST
Age F (2) = 2.639; <i>p</i> = 0.073		60.07	4.8	61.96	6.8	59.79	4.8
		Ν	%	Ν	%	Ν	%
Gender $\chi^2(2) = 2.77$; $p = 0.250$;	Male	139	55.2	21	46.7	10	71.4
$C^2 = 0.094$	Female	113	44.8	24	53.3	4	28.6
	No studies	5	2.0	-	-	-	-
	Elementary studies	52	20.6	8	17.8	1	7.1
Education Level $\chi^2(10) = 11.2$;	Junior High School	42	16.7	7	15.6	2	14.3
$p = 0.342; C^2 = 0.186$	High School/Professional education	105	41.7	21	46.7	6	42.9
,	Graduated	40	15.9	4	8.9	4	28.6
	Post graduated	8	3.2	5	11.1	1	7.1
	Single	18	7.1	2	4.4	1	7.1
Marital Status $x^{2}(6) = 4.37$: $p = 0.627$:	Married/Cohabited	186	73.8	34	75.6	10	71.4
$C^2 = 0.118$	Divorced/Separated	38	15.1	6	13.3	1	7.1
2	Widowed	10	4.0	3	6.7	2	14.3
	Self-employed	25	9.9	3	6.7	5	35.7
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Employed	99	39.3	13	28.9	5	35.7
Occupation $\chi^2(8) = 14.3; p = 0.075;$	Unemployed	29	11.5	7	15.6	-	-
$C^2 = 0.209$	Retired/Pensioner	78	31.0	16	35.6	3	21.4
	Housekeeper	21	8.3	6	13.3	1	7.1
	High level	-	-	1	2.2	-	-
	Medium-High Level	11	4.5	6	13.3	1	7.7
Social Level $\chi^2(10) = 16.7$; $p = 0.080$;	Medium level	163	66.5	25	55.6	6	46.2
$C^2 = 0.229$	Medium-Lower Level	52	21.2	12	26.7	4	30.8
	Lower level	13	5.3	1	2.2	1	7.7
	Unanswered	6	2.4	-	-	1	7.7
Practice physical activity and sport	Yes	205	81.3	38	84.4	11	78.6
$\chi^2(2) = 0.39; p = 0.844; C^2 = 0.033$	No	47	18.7	7	15.6	3	21.4
	Never	36	14.3	4	8.9	1	7.1
Frequency physical activity	1–3 h per week	45	17.9	10	22.2	2	14.3
$\chi^2(6) = 3.14; p = 0.791; C^2 = 0.100$	3–5 h per week	90	35.7	19	42.2	5	35.7
	More than 5 h per week	81	32.1	12	26.7	6	42.9

Table 4. Cont.

 In situ		Positives ($n = 187$)		Moderates ($n = 18$)		Haters $(n = 5)$	
111 5		М	SD	Μ	SD	М	SD
Age F (2) = 2.186; <i>p</i> = 0.115		62.96	6.4	60.22	3.4	59.80	3.1
		Ν	%	Ν	%	Ν	%
Gender $\chi^2(2) = 1.84; p = 0.398;$ $C^2 = 0.093$	Male Female	141 46	75.4 24.6	11 7	61.1 38.9	4 1	80.0 20.0
	No studies	2	11	-	-	-	
	Elementary studies	38	20.3	2	11.1	-	-
Education Level $\chi^2(10) = 10.3$:	Junior High School	29	15.5	1	5.6	1	20.0
$p = 0.416; C^2 = 0.216$	High School/Professional education	79	42.2	8	44.4	1	20.0
	Graduated	32	17.1	6	33.3	2	40.0
	Post graduated	7	3.7	1	5.6	1	20.0
	Single	14	7.5	1	5.6	-	-
Marital Status $\chi^2(6) = 5.20; p = 0.518;$	Married/Cohabited	151	80.7	15	83.3	4	80.0
$C^2 = 0.155$	Divorced/Separated	15	8.0	2	11.1	-	-
	Widowed	7	3.7	-	-	1	20.0
	Self-employed	17	9.1	-	-	1	20.0
$2^{(1)}$	Employed	46	24.6	10	55.6	3	60.0
Occupation $\chi^2(8) = 13.2; p = 0.106;$	Unemployed	14	7.5	1	5.6	-	-
$C^{2} = 0.243$	Retired/Pensioner	100	53.5	7	38.8	1	20.0
	Housekeeper	10	5.3	-	-	-	-
	High level	1	.5	-	-	1	20.0
	Medium-High Level	11	5.9	-	-	2	40.0
Social Level * $\chi^2(10) = 33.6; p = 0.001;$	Medium level	117	63.2	12	66.7	2	40.0
$C^2 = 0.373$	Medium-Lower Level	43	23.2	6	33.3	-	-
	Lower level	8	4.3	-	-	-	-
	Unanswered	5	2.7	-	-	-	-
Practice physical activity and sport	Yes	162	86.6	15	83.3	3	60.0
$\chi^2(2) = 2.91; p = 0.233; C^2 = 0.117$	No	25	13.4	3	16.7	2	40.0
	Never	21	11.2	2	11.1	1	20.0
Frequency physical activity	1–3 h per week	19	10.2	2	11.1	2	40.0
$\chi^2(6) = 6.66; p = 0.354; C^2 = 0.175$	3–5 h per week	56	29.9	7	38.9	-	-
	More than 5 h per week	91	48.7	7	38.9	2	40.0

Note: * $p \le 0.001$.

4. Discussion

The aim of this research was to find out the degree of perception that older adult residents had about the social perception of the sports event "La Vuelta" 2019, observing differences according to the initial perception of the event and subsequent to it. The profiles of the older adults were also identified according to their intention to repeat the experience in the future, identifying those aspects that could influence their decision.

The overall results of the social perceptions of the older adult resident indicated an improvement in all dimensions during the in situ phase with respect to the pre-event phase. This increase being significant in most dimensions may be the result of the older adults' previous perception of the sports event in comparison with the small-scale events that are usually organized in a community. However, the organization of "La Vuelta" intended to offer a great experience that would attract residents and tourists not only at the starting or finishing time but also before, by providing a leisure space where everyone could interact with others, participate in different activities, such as raffles, and obtain gifts from the companies sponsoring or collaborating with the event.

This environment has an impact on the improvement of the associated positive impacts, and can also enable the reduction of the negative impacts. These have not changed, but there is a diminution of these impacts as a result of the negative perception related to sports events. Examples are an increase in noise, traffic or the amount of waste, which are not so annoying, since there is a provision to reduce such problems to the minimum impact. These impacts must also be considered in relation to the size of the community. They will not have the same effect in a large urban environment as in small communities, since the larger the population, the greater the negative impacts.

The result of the economic perception in the residents was the highest of all the perceptions. This could be due to the image of viewing the large affluence of people who come to the host community to attend the start or finish of the stage. It can be considered that these people will generate an expense in the local businesses. These results have been similar to those obtained by Atçi, Unur, and Gürsoy in the Mediterranean Games in Mersi (Turkey) [63]. Some authors argue that there is a greater tendency to perceive the socio-economic impact positively when questions are raised during the event than in the months before or after it [37]. For example, Añó et al. found that residents of Valencia had a perception of a positive economic impact due to the celebration of an F1 Grand Prix [9]. An evaluation of these types of sports events in different regions of the world is that Zhou, at a Formula 3 race in Macau, observed a positive trend in residents' assessments of some socio-economic factors [46].

In the same sense, Kim et al., in another Chinese Grand Prix, confirmed that the perception of economic benefits was positive [64]. Additionally, research on events in other sports, such as cricket, basketball and, above all, football [11,12,65–69] highlighted the positive assessments of residents in socio-economic aspects. As in the works on the different editions of the Olympic or Commonwealth Games, they showed a high score of the residents' perception of the economic benefits [30,35,70–72].

The results related to the residents' perception about sport was the second most evaluated factor in the study. The event organization is responsible for implementing an educational promotion program in the different schools in the end of stage locations during the third trimester of the academic year, in which it provides the students with cycling lessons. In parallel to this program, it also promotes a cycling race for younger children on the day of the event before the end of the stage; a series of races being held with children of different ages. Other works focused on evaluating the perception of the resident in mega events also noted this factor as the best valued [35,73]. These positive impacts reflected a positive trend in factors related to the perception of sports impact, such as a greater promotion of sports practice and opportunities for physical activity, as well as greater openness of the city's image to other places [63]. Oshimi and Harada evaluated a cycling event in Japan and found that the sporting dimension was the most highly valued factor among the resident population [74]. Notwithstanding, several studies on motor sport events have revealed that aspects related to the sport impact are less emphasized by residents [9,16,36,53,75].

with other people, all those residents and fans who come to the event usually do so accompanied by friends and/or family. This context can be positive for the older adults as a space for socializing with others who have similar interests or the simple fact of attending an event for free and watching some of the best cyclists live. A few authors highlight a good positive perception of the socio-cultural impacts before and after the event [10,72,73]. On the other hand, other studies have not found that residents perceive positive social impacts at a Formula One Grand Prix in Valencia [9,38].

The environmental perception was the worst valued factor in the study, revealing a neutral trend; that is, the residents did not consider that there were any positive or negative environmental impacts caused by the celebration of the event. Similar results were obtained by López de Subijana et al. in a series of events held at the Palace of Sports in Madrid and Angosto et al. in a multi-sport event in Murcia (Spain), where the residents did not consider there was any problem related to increased noise, waste or pollution, as also occurred in mega-events [35,63,66,75,76]. Contrary to these positive results, several studies have found negative perceptions of the environmental impact in the residents, especially at motor sports-related events [9,65], where they perceived aspects of environmental damage and increased pollution as negative impacts on the community.

However, although several studies have found no negative impacts on residents, other studies have found that host communities have been critical of negative impacts, especially at motor sport events [9,19,64,77]. Residents in these studies (i.e., in Spain, Australia, China and Korea) felt that these motor events could cause environmental damage and increased pollution in the host community. In turn, other studies noted that the residents' views on the negative impacts of the event were due to increased traffic congestion, difficulty in parking and safety [10,67,72,73,76].

The dimension of future intentions is fundamental to achieve attracting and gaining loyalty in the spectator in the following editions with a view to improving the benefits of the sport events [56]. In a study carried out on the F1 event in Valencia, Parra and Duclos explain that people who have good intentions for the future are satisfied with the treatment received and the exchange of conversations with other people [37]. This favors the social cohesion of the residents, the pride of the community and is an opportunity to increase relations between residents and visitors to the event [78]. Other studies on Formula 1 in Valencia revealed that the intentions and preferences of the citizens were against the event being held in the host city, nor were they willing to recommend the event [79]. On the other hand, these results contrast with other research on motor sport events where public support is quite high [46,80].

Several studies have examined the perception of the sports event at two points in time, usually before and after the event, in contrast to this study, which examined the perception of the event while it was still taking place. The results of this study found that, generally, the opinion of the residents of the host community improved during the celebration of the event with respect to the pre-event, being similar to what was found in another study on a cycling event in Taiwan [43]. Thus, in a similar study on the Tour de France, Balduck et al. found that the residents' perceptions of both economic and tourism development and an improved external image decreased significantly in the post-event period, while the perception of negative impacts showed that product prices increased slightly, and that disorder or conflict and mobility problems were significantly reduced in the post-event phase [13]. Another study on a large multi-sport event showed a significant decrease in factors related to community development, general, economic and image benefits, as well as an increase in negative impacts in the post-event phase [28].

The cluster analysis showed the existence of three distinct groups. Seven out of ten older adults attending the event expressed a very high probability of returning to the event or a similar one,

coinciding with other studies that have evaluated Open Tennis [49], an F3 Grand Prix [46] and the 2008 Beijing Olympic Games [35]. Some studies have highlighted that the participation of residents is associated with a greater tendency to support [81,82]. Other studies have found that the largest group of residents was negatives or haters [38,41] or the group of moderates [40]. In short, the results of this study may be attributed to the fact that in "La Vuelta", a great atmosphere is created at the start and finish of the stage and the people can visit the many stands of the sponsoring and collaborating brands that give away their products. This creates an attraction for the older adult population to attend the event live and interact with people from other places who come to watch the stage.

Limitations and Proposals

This research has several limitations. Firstly, the study was carried out over ten stages in the start and finish locations of "La Vuelta" 2019. A cycling event is a linear sports event, so it extends over a wide territory and is quite different from another event that takes place exclusively in the same location. Secondly, as the residents were analyzed in the previous moment through the use of social networks, we did not have control of the neighborhood where the individual resided, and the perception of a person who resides near where the event takes place may be very different from one who lives in outlying neighborhoods. In turn, in the in situ phase, only the population that passed by the volunteer points in the immediate neighborhood of the start or finish point was approached, therefore, it could be that they had a greater interest in cycling and the event than other people from other neighborhoods. Ma and Rotherdam state that it may be that the opinion of the stakeholders (general community residents, sponsors, media, etc.) shares the objective of achieving a successful event [43]. A third limitation was the limited time available during the on-site phase when surveys were conducted, as there was only a three- to four-hour period available at each start or finish location and no more than eight people in the survey team. Another important limitation is that the data were collected through non-probability convenience sampling, so care must be taken when generalizing the results to other host communities.

Future research lines could be to evaluate all the stages that make up "La Vuelta" in Spain, covering different geographical areas to find out the diversity of opinion of Spanish society toward cycling. This study, although it tried to cover different stage profiles, did not focus on many geographical areas due to the route existing in the 2019 edition. In future studies, a previous phase should be thoroughly carried out. Other means of diffusion could be used, such as sending information by post, and trying to cover individuals from the different neighborhoods of the host town. Another option could be to establish an agreement with the local administrations to form teams of volunteers, and they could give the support and resources to deal with the previous or subsequent study adequately by means of personnel who could travel to the different neighborhoods and interview the population as other, previous studies have done [28]. Being able to interview the population according to a probabilistic sample would allow the generalizability of the results. A greater structure and a larger team could help to better focus data collection during the event, with three teams with enough people to be in the starting and finishing locations for longer and to be able to cover intermediate locations.

5. Conclusions

This study has evaluated the changes in the perception of the older adult resident on the impact of the celebration of "La Vuelta" in the host communities of starts and finishes of ten stages, providing new perspectives for both researchers and professionals, offering different practical implications for all the agents interested, especially the local administrations. The results show that older residents represent 15% of the total surveys collected in "La Vuelta". This group has a great interest in sports and has a high perception that the event generates positive economic and sport impact on the community, considering it an ideal place to live. These results involve a strong degree of older adults in their future intentions of willing to repeat the experience and return to the event in future editions. The evaluation of the event in different phases evidences that, in general, the perception and opinion of the older residents changed from the pre-event period to the in situ period, with an increase in the positive impacts and a reduction in the negative impacts associated with the celebration of "La Vuelta", although with a small effect on most variables. Concerning the quality of life in the community, the results showed that the scores increase slightly in the in situ period with respect to the pre-event period, with significant differences in the variable of a prosperous future for the community and a low effect size. The event has a favorable effect on the interest in cycling among these residents.

The cluster analysis identifies the existence of three groups of older adults with different degrees of support for "La Vuelta", in each period. Around eight out of ten older adults belong to the "Positives" group, showing great support for the celebration of the event in the locality and perceiving positive social impact in the community. This group is mainly composed of males over 60 years old, with a high school or professional education level, married, retired and with a high frequency of physical activity.

The "Moderates" group represent approximately 10% of the older adults in both periods and have moderately high opinions about the different impacts of "La Vuelta" with scores between four and five points. The socio-demographic profile of each group differs according to the period. In the pre-event phase, it is formed by females of 62 years of age on average, with a high school or professional education level, married, retired, middle class and a frequency of practice of physical activity between three and five hours per week. In the in situ phase, the group "Moderates" is composed of men with an average age of 60 years, with a high school or professional education level, married, working, middle class and a high frequency of physical activity (more than three hours per week).

Cluster 3 "Haters" are the least represented group and the most critical with average perceptions of the event between three and four points in both periods. This group is more positive in its opinion of the environmental negative impacts compared to the other two groups. The socio-demographic profile of the "Haters" group, in the pre-event phase, is constituted by males with an average age of 60 years old, high school or professional education level, married, employed, middle social class and a high frequency of physical activity (more than five hours per week). In the in situ phase, the "Haters" are males with an average age of 60 years, with university studies, married, employed, upper-middle social class and a high frequency of physical activity.

Finally, these results indicate that sports events are an interesting option for the leisure time occupation of the older adult population since they allow them to interact with other individuals and fight against loneliness. Cycling is a sport easily practiced by this population group and helps them to be active and have a healthy life. The profile of the different cluster groups and in the two periods (pre-event and in situ) was mainly made up of men, with high school or professional formation studies, married, working and middle class, who like to do physical activity at least three hours a week.

Practical Implications

This study contributes to the literature on understanding spectators of sports events in different ways. It is the first study to focus on the older adult community, which is of interest due to the demographic evolution perspectives which estimate a progressive ageing of the society, especially in Spain. It is the first study to focus on a large cycling event with a high number of stages, since previous studies have focused on individual stages [13,23,83] or a group of stages, but on events of lesser importance [43]. The conclusions of this study make it possible to address strategic planning in sports events focused on the older adult community, since sports event organizers and local governments must take this group into account when they want to organize a sports event in a city. The "master" sports events at the moment are those that can have a greater impact on a city due to the positive aspects that they present, such as a high affluence of participants, usually going as a family, as spectators who take advantage of the journey to the event to do tourism in the locality and nearby geographic area.

Local governments should take into account, as much as possible, that the impacts related to this type of event, the sports impact and especially the economic impact, are attributed to free sports events, such as going to see a cycling event, depending greatly on the number of spectators who come to experience it [84]. This fact implies the need to close the gap between the tourism promotion objective of the host community and the real earnings derived, either tangible or intangible, from the host communities.

Finally, a suitable strategy for local administrations and, to a lesser extent, the organizer, is the creation of a network associated with local sports events that can use the image of "La Vuelta" in exchange for advertising and generating new funding sources for these events. This can be through the design of a corporate label that links the host community and the organization and can produce a greater attachment among people. This label could also be associated with the collaborating companies that help in the community activities and support the organization of other social activities.

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