



# Article Measuring Green Practices in Sport: Development and Validation of a Scale

Guillermo Morán-Gámez<sup>1</sup>, Antonio Fernández-Martínez<sup>2,\*</sup>, Rui Biscaia<sup>3</sup> and Román Nuviala<sup>1</sup>

<sup>1</sup> Faculty of Education Sciences, University of Cádiz, 11519 Cádiz, Spain;

- guille.morangamez@alum.uca.es (G.M.-G.); roman.nuviala@gm.uca.es (R.N.)
- <sup>2</sup> Department of Sports and Computer Science, Pablo de Olavide University, 41013 Seville, Spain
   <sup>3</sup> Department of Health, University of Bath, Bath BA2 7AY, UK; rdb51@bath.ac.uk

Department of Health, University of Bath, Bath BA2 / AY, UK; rd.
 \* Correspondence: afermar1@upo.es; Tel.: +34-954-977-602

**Abstract:** Environmental sustainability has often been associated with increased organizational profitability, efficiency, and competitiveness. A related example is green practices which have become a central component of many companies' marketing strategies and day-to-day management. The current study aims to develop and validate a scale for use in sport organizations and activities. An item bank derived from past literature was prepared, which was then assessed by a group of experts and pilot-tested. Two waves of data collection were then collected (N = 1165 and N = 567). An exploratory factor analysis was performed with the data from wave 1, and a one-dimensional solution was presented. Then, a confirmatory factor analysis followed by a multigroup analysis was performed with the data from wave 2. The results confirmed the six-item one-dimensional scale with high levels of reliability and validity and optimal fit indices. The scale is important to green practices adopted by sport organizations regarding the customer–organization relationship.

Keywords: green practices; sustainability; sports; scale development



Citation: Morán-Gámez, G.; Fernández-Martínez, A.; Biscaia, R.; Nuviala, R. Measuring Green Practices in Sport: Development and Validation of a Scale. *Sustainability* **2024**, *16*, 494. https://doi.org/ 10.3390/su16020494

Academic Editor: Mohammed Aboramadan

Received: 18 October 2023 Revised: 10 November 2023 Accepted: 23 November 2023 Published: 5 January 2024



**Copyright:** © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/).

## 1. Introduction

The sports industry may harm the natural environment [1] although to a lesser extent compared to other sectors such as energy or transport [2]. Its expansion is partly, directly, and indirectly, responsible for climate change and global warming [3] through greenhouse gas emissions, light and noise pollution, and the use of exhaustible resources [4]. The sports sectors that are usually identified as the most polluting are mega sporting events [5] and the activities of the major sports leagues [2,6], which are therefore the ones that receive the most attention. However, contamination encompasses the entire sports industry, sometimes not depending on the massiveness of the service or sector [7].

Another example of pollution generation in the sports industry is sports practice services which use equipment that is made of rubber and plastic, as well as large amounts of coal or oil derivatives [8,9]. Likewise, such services are located in sports facilities that require a considerable use of exhaustible resources, such as energy, soil, water, or waste generation, creating different kinds of impacts depending on the type of facilities [10], in addition to light and noise pollution, and greenhouse gas emissions derived from the air conditioning of different areas [11]. As a consequence of its environmental impact, the sports industry has become more aware of the environment [12], assuming the optimal position from which it can promote climate action [13]. Sports environmental concerns acquire a new dimension when the United Nations, through the Sports for Climate Action Framework [14] and the Sustainable Development Goals [15], position sustainability as a strategic line to be followed by all influential platforms in the sports sector, considering sustainability as a central element in sports policies [16].

The increase in the importance of sustainability in the sports industry [17] has produced a significant increase in academic publications related to sports and sustainability and an increase in sports-environmental action plans [2,18]. Despite the fact that existing reviews have explored sustainable initiatives developed in different sectors of the sport and recreational industries [7], leisure and health sport provision services represent the main provider of physical activities for society [19], and there is a paucity of studies analyzing the relationships between sustainability and the elements that make up these services.

Some works analyze the application of sustainability strategies in the form of green practices in different sectors related to sports practice, such as the study by Lozano and Barreiro-Gen [20] that measured the influence of sustainability in the administration of professional and amateur soccer clubs from the perspective of sports managers. In the case of sports facilities, the effectiveness and existence of sustainable management and sustainable construction systems [21], and the management of the implemented efficiency and sustainability practices have also been studied [8]. These studies, although useful to establish a beginning in the state of affairs, do not always cover the same green practices. When they are considered, not all the elements that make up the service are included, and there is no uniformity in their study, generating difficulties in the application and identification of effective sustainable strategies that improve the operation of the sports service, in addition to hindering the creation of a construct that can be related to different consumer perceptions.

Given the lack of knowledge regarding which green practices are the ones that most influence the consumers of sports practice services, and the lack of uniformity in their measurement, this article aims to design a scale that measures green practices related to the elements of the service, as well as its influence on the behavior of the sports consumer, based on the practices implemented in the leisure and recreation sector. To achieve this, the article has been divided into three studies. The objective of study 1 was to build and validate a scale that identifies which green practices impact a sports service based on the tools used in the hotel service. Study 2 then tested how adequate the model was in a different sample through confirmatory factor analysis (CFA). Finally, the measurement invariance of the scale was tested in study 3.

## 2. Literature Review

## 2.1. Green Practices

In the 1990s, the environmental movement, which focused on local environmental problems, the negative effects of economic activity on the environment, and the economic and demographic decline or zero growth, lost momentum [22]. This loss of relevance was due to it being overshadowed by the growth of the "green" [23] which distances itself from environmentalism since it offers an economic response to environmental problems [23], trying to satisfy the new consumer profile's ecological needs [24] as a result of the greater interest in knowing the consequences caused by its consumption [25].

"Green practices" are actions carried out by organizations or companies that promote respect for the environment [26], with the aim of reducing pollution and the negative environmental impacts caused by themselves [27], promoting recycling or conservation and sustainability [28]. Green practices have become an important component of companies' operational and marketing strategies based on added value [29], which helps companies to obtain a "greener image" [30], with a positive impact on customer satisfaction and loyalty [31], and greater competitiveness in the market [32]. Green practices are a strategy that is usually consolidated in industries that consume a large number of resources in their daily activities [33], a factor that does not exclude the sports industry, given the numerous ways in which it impacts on the soil, the notable use of exhaustible resources, or the emissions and waste generated by the industry's economic activities [34]. The effect on the environment is bilateral since the degradation of the environment would make sports activities impossible, forcing sports organizations to restructure their activities so as not to promote the destruction of the setting in which they are carried out, modifying their commercial strategies, as well as the management and production of their benefits [35].

## 2.2. Green Practices and Sport Services

Given the negative impact on the natural environment, the social and environmental responsibility policies of the sports industry are more relevant in the design of their commercial policies and business strategies, which have gained predominance in recent years [36] and together with technological and communication advances, have significantly improved the commercial opportunities of sports organizations [24], intending to consolidate and legitimize their position in the market [37]. Despite this, the implication of sustainability in the sectors that make up the sports industry is uneven [34,35], with sports practice services that include small sports clubs and fitness centers being the ones that have received the least amount of attention.

The recognition of the adverse effect of sports organizations on the environment [38] has allowed sustainable strategies to gain momentum in the sports services sector [39,40]. Among all these strategies, green practices have acquired special relevance for sports managers [41], generating management changes that increase organizational effectiveness and efficiency, allowing the organization to generate less waste and reduce the damage caused to its environment [20]. Therefore, green practices become a business opportunity that improves the economic performance of the service [42], where more and more users are attracted by developing a preference for that organization [43].

The proliferation of green practices in sports services has generated a great number of analyses in the literature [44]. Thorman and Wicker [39] studied the intention of users of non-profit sports services to pay more for the implementation of green practices and their relationship with their environmental awareness. However, they did not specify which green practices the services implemented. This situation is similar to that of Behnam et al. [45], who reviewed the relationship between the users' perception of social responsibility practices made up of social, economic, and environmental components with the values of co-production and consumer commitment in the context of non-profit sports clubs.

Although they do not refer to sports practice services, there are studies such as those by Pfahl [46] and Sinnet and Gibson [47], which analyzed sustainable initiatives in sports facilities applicable to smaller clubs, defining the aspects that sports managers should take into account to implement green practices through specific objectives according to some needs and context. Although these studies consider practices that benefit the efficiency and operation of the sports facility, they ignore the green practices typical of other elements of the service, such as communication, and the environmental awareness of the instructors, among others.

The evidence from the literature related to sustainable strategies in the sports services sector is scarce, and the theoretical body is not unanimous when considering which green practices define a service that is respectful of the environment or which practices could be susceptible to changing the behavior of the users of the services. This situation makes it difficult for managers of sports practice services to develop environmentally friendly strategies that influence the choice of their service by the user, which shows the need to develop a tool that considers all the elements of the service.

#### 2.3. Sports Sector and Green Practice Tools

In the sports sector, several tools have evaluated the influence of the implementation of environmental initiatives on the consumer (Table 1).

Authors	Dimension	Missing
Santos-Pastor et al. [48]	Knowledge of the Natural Environment; Association with the Action; Attitudes, Values and Rules Stemming from the Natural Environment.	Only practices in the natural environment. It obviates the specific green practices and the role of the organization.
Hugaerts et al. [49]	Social Sustainability; Economic Sustainability; Environmental Sustainability;	Green practices are not considered. Exposes generic statements related to the dimensions as items without specifying how to interpret or evaluate them.
Trail and McCullough [50]	Needs, Values, Attitudes; Points of Attachment; Internal Constraints; External Constraints; Intentions Past Behavior	Specific green practices implemented by the organization beyond communication campaigns are not considered.
Inoue and Kent [51]	General Credibility, Perceived CSR, Perceived Fit, Perceived Effort, Perceived Impact, Issue Importance, Environmental Credibility, Daily Recycling, In-game Recycling.	The identification and intention to act sustainably is considered, but not the green practices of the company.
Sisson et al. [52]	Personal Green Practices; Intention to Participate in r.Cup Program; Intention to Visit Eco-friendly Music or Sport Events; Sustainability Courses Taken.	It obviates the specific green practices of the organization related to the elements of the service.

Table 1. Tools linking the sports sector and green practices.

Santos-Pastor et al. [48] developed a scale based on the dimensions proposed by Matas-Terrón et al. [53], in which the environmental attitude of practitioners of physical activities in the natural environment was measured, determined by environmental education, the knowledge of the environmental impact of physical practices, and their attitudes during the practice. We can also name another measurement tool, such as the one carried out by Hugaerts et al. [49], who developed a questionnaire whose items measured the presence or absence of social responsibility policies related to each of the Sustainable Development Goals (SDGs) in participatory sporting events, policies that were grouped in the economic, social, and environmental dimensions.

Trail and McCullough [54] proposed the Sports Fan Sustainability Behavior model that measured the influence that a sustainable initiative developed in a sporting event had on fans, created by Trail [36,55]. Trail and McCullough [50] extended the previous model by measuring the influence that a sustainability campaign had on the participants of a popular race, giving rise to the Sport Sustainability Campaign Evaluation Model. Both models evaluated the cultural context and its relationship with sustainability, environmental awareness, and interest, intentions of sustainable behavior during and after their participation in the event, focused on sustainable purchasing and intentions to recycle, as well as the affective response and disconfirmation of expectations.

Despite making a significant contribution to the construction of a sports consumer interpretation framework regarding green practices, these models do so from a consumer behavior perspective, from their values, attitudes, internal restrictions, and external restrictions before a green initiative. The models developed by Trail and McCullough [50,54] do not establish a theoretical basis to suggest which green practices are better accepted by users, or which green practices respond better to environmental impact and the elements of a sports practice service. Inoue and Kent [51], using Kelman's [56] internalization theory as a reference, built a questionnaire that measured, among other things, the ability of sports clubs to influence the intention of sustainable behavior of their members and fans through an initiative based on planting trees. Other tools include the questionnaires designed by McCullough and Cunningham [57], in which they used the theory of planned behavior [58] to analyze intentions to recycle the bottles used in a sporting event, and the questionnaire designed by Sisson et al. [52], in which the intention to reuse the glass offered by the organization was measured, as well as their perception of it, from the perspective of environmental citizenship and using the Sustainability Assessment Questionnaire model.

These tools respond to a similar objective, such as evaluating the effect of a green initiative on the participants of a popular sporting event, in which they had the option of recycling waste produced by themselves after a communication and ecological awareness campaign. However, they did not provide knowledge about the influence of green practices that a sports organization could implement on the intentions of sustainable behavior, sports practice, and user loyalty with the service received, but specific green initiatives in which the user had the opportunity to participate voluntarily by reducing their environmental impact.

## 2.4. Similar Sectors

Given the lack of evidence of a scale that assesses the application and measurement of green practices in sports practice services and their influence on the user, a similar economic sector in which green practices have been successfully implemented and analyzed will be taken as a reference. The sector taken as a reference will be the hotel sector for several reasons. In the first place, both the hotel and sports sectors belong to the services sector, basing their production on satisfying the so-called tertiary needs, and having a utility similar to or related to recreation and free time. Secondly, hotel and sports services are made up of similar elements, to which users and managers give similar relevance and where value judgments have similar relationships [29,59]. Finally, to the similarities and relationships previously exposed, it must be added that the hotel sector has an extensive and varied body of literature on its sustainability [60], offering a broad perspective on the applicability and effect of green practices on the user. Green practices applied in the hotel sector are similar to those presented in the sustainability plans and programs of sports facilities [8,47], which suggests a possible adaptation of sports practice to hotel services.

Bagheri et al. [61] and Bastič and Gojčič [62] found that the practices that transform a hotel into a green hotel are the staff's ecological behavior, environmentally friendly equipment, energy efficiency, the effective use of water, and natural food. Practices similar to these were considered by Yi et al. [63], Can et al. [60], Lee and Cheng [64], and Yusof et al. [31], who also included other practices, such as green purchasing, the effective and environmental management of solid waste, the efficient distribution of towels and shampoo, and user environmental education. As a consequence of the relevance that green practices have acquired in the hotel sector, a wide variety of one-dimensional [60,63] and multidimensional [64] tools have been developed to assess their impact on the user, which include green purchasing ideas, employee and consumer environmental education, energy efficiency, water conservation, and waste management from the perspective of reuse and recycling. Of all these tools, some were identified as valuing the green practices of the company and their relationship with the elements of the hotel service, which allows us to know which green practices help transform a hotel into a sustainable service and which ones would have the most influence on the consumer [29]. These tools cannot be directly applied to sports services since the elements that compose them refer to hotel characteristics that are not typical of sports services: pleasant landscape, towel reuse program, the designation of smoking areas, etc.

In addition, other tools were found that do not specify which green practices the hotel implements, despite measuring variables related to sustainability and consumer behavior, such as those that evaluate the "green image" construct (or derivatives) from the perspective of marketing and communication. [65], those that analyze dimensions such as green satisfaction, green loyalty, or green trust [66], those that consider a "greener" level [67], or those that measure consumer willingness to pay more for the organic component [68]. Therefore, the aim of this article is to construct and validate a scale, Green Practices Scale for Sport Organizations and Events (GPSport), which has the capability to measure the green practices related to service elements. Three correlative and complementary phases or studies are established: study 1, whose objective is the qualitative design of the items and the verification of the validity of the initial instrument; study 2, which aims to verify the

model in a different population; and study 3, which demonstrates the stability of the model according to gender.

#### 3. Materials and Methods

## 3.1. Study Group

For the realization of this study, the following were established as inclusion criteria: being 18 or over, holding a federative sport license, and being a member of a sports club. In study 1, a total of 1165 athletes from 27 sports clubs in Western Andalusia (Spain) participated voluntarily in the study and were surveyed between October and December 2021. Of the total population surveyed, 70.8% were men and 29.2% were women. They were aged between 18 and 74 (M = 22.63, SD = 8.28), and 59.1% had completed secondary education. A total of 56.7% of the participants practiced sports at their clubs 2–3 times per week. The mean time per training session was between 1 and 2 h for 69% of participants. In study 2, 567 sportspeople from 10 Eastern Andalusia sports clubs were randomly chosen between October and December 2021. The age range was between 18 and 67 years (M = 25.11, SD = 10.12); 31.7% were women and 68.3% were men. A total of 54% of the surveyed population had completed secondary education. The mean time per training session was between 1 and 2 h for 65.3% of participants. A total of 48.2% of the participants practiced sports at their clubs 2–3 times per week. For study 3, the surveys of the 1732 sportspeople resulting from the two previous studies were used. The age range was between 18 and 74 years (M = 23.45, SD = 9.02), with 30% women and 70% men. A total of 57.6 % of the surveyed population had completed secondary education. The mean time per training session was between 1 and 2 h for 68.7% of the participants. The average time per training session was between 1 and 2 h for 68.7%.

## 3.2. Procedure

Permission to conduct the study was sought from the University's Institutional Review Board. The heads of the organizations participating in the study were then informed, and permission was sought from the participating athletes. After obtaining their informed consent, data were collected using a self-report questionnaire in the presence of trained interviewers in the sports clubs. All data were collected anonymously and analyzed in aggregate form. The study design complied with current Spanish regulations on personal data protection, the Spanish Organic Law 3/2018 [69]. The ethical principles of the American Psychological Association (2010) and the principles enshrined in the Declaration of Helsinki (World Medical Association, 2013) governed all phases of the research. The time taken to complete the survey was approximately 10 min.

#### 3.3. Questionnaire and Item Development

The instrument validated in the study was named Green Practices Scale for Sport Organizations and Events (GPSport). The initial 20-item version of the scale is based on qualitative work adhering to the guidelines for the creation of research instruments outlined by Carretero-Dios and Pérez [70] and Muñiz and Fonseca-Pedrero [71]. In order to determine the items, a group of questions was selected on the basis of their relevance in terms of content and applicability [71]. After a review of the existing literature, elements considered in the scale design were the result of similar tools applied in the hotel sector modifications. To reinforce the content validity and applicability of the instrument, the first version underwent a twofold refinement process. Firstly, eight experts related to the field of sport management research, including managers of sports centers, PhDs with a specialization in sport management, and Sports Science university professors with experience in surveys, were asked to analyze the suitability of the items using a five-point Likert scale. Over the course of two sessions, the experts assessed whether the items were worded well for the study population, were relevant in assessing the construct "green practices", and properly represented the different topics comprising the construct. Items were accepted if at least 75% of the experts gave them an overall rating of 4 or more and if no expert

awarded them less than 3. A total of 10 items were accepted by the experts. Secondly, a pilot study was carried out with 50 participants (sports club users) in order to refine the items and prevent comprehension issues or wording errors (Table 1). A Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used.

#### 3.4. Statistical Analysis

In study 1, the GPSport scale was evaluated following the usual procedure for validating quantitative self-report questionnaires [72]: an exploratory factor analysis (EFA) was carried out, followed by a confirmatory factor analysis (CFA). Prior to this, a statistical analysis of the items was performed to calculate the means, standard deviations, skewness, kurtosis, correlation coefficients, and reliability for a scenario in which one item was removed. Subsequently, the EFA was carried out. The suitability of the EFA matrix was tested using the Kaiser–Meyer–Olkin (KMO) test and Bartlett's test of sphericity. The EFA comprised estimation via principal axis factoring [73] and oblimin rotation. We applied Kaiser's criterion [74] to identify the most appropriate number of factors to be retained while performing a parallel analysis [75] to confirm the number of factors. The reliability of the resulting instrument was then assessed using Cronbach's alpha coefficient. The average variance extracted (AVE) and composite reliability (CR) were also calculated. Adequate AVE values should be above 0.5 [76], while adequate CR values should be above 0.6 [77]. As far as Cronbach's alpha coefficient is concerned, correct values range between 0.80 and 0.90, with acceptable values around 0.70 [78].

Subsequently, CFA was performed in studies 2 and 3 using the maximum likelihood (ML) estimation method. The goodness of fit was assessed by examining various indices: the  $\chi^2$  value/degrees of freedom ratio (CMIN/DF); the root-mean-square error of approximation (RMSEA); the comparative correction index (CFI); the goodness of fit index (GFI); and the root mean square error index (RMR) [79]. Following the indications provided by Byrne [80], the Akaike information criterion (AIC) and the expected cross-validation index (ECVI) were also calculated. In study 3, factorial invariance was then calculated in order to test the stability of the model across different populations using a multigroup CFA. To ascertain whether the scale was invariant based on sex, we progressively assessed configural invariance (M1: invariance of scale structure across groups), metric invariance (M2: invariance of factor loadings across groups), strong invariance (M3: invariance of intercepts across groups), and strict invariance (M4: the invariance of residuals is added to the invariance of factor loadings and intercepts) [81]. All studies followed the following criteria: a CMIN/DF ratio with values between 3 and 5; RMSEA and RMR values below 0.08; and CFI and GFI values above 0.90, suggesting that the model is correct. Additionally, low AIC and ECVI values indicate a good model fit [82]. Measurement invariance between groups was evaluated in line with recommendations from Chen [81], which state that cut-off  $\Delta$ CFI values  $\leq$  0.01 and  $\Delta$ RMSEA values  $\leq$  0.015 suggest the absence of differences between the models. All statistical analyses were conducted using the SPSS 23 and AMOS 23 statistical packages.

#### 4. Results

## 4.1. Study 1

## 4.1.1. Quality Design of Items and Content Validity

The item bank was developed following the guidelines proposed in the relevant literature. After establishing the topics to be covered by the "green practices" construct (green/sustainable purchasing, environmental culture, energy and water resource efficiency, recycling/waste management), the 20 initial items were drawn up. An attempt was made to ensure that all domains of the construct were represented in a balanced way, avoiding under- or over-representation. Content validity was assessed using the expert judgement technique, in which eight experts participated. The experts' task was to assess whether the items were well written for the study population, were relevant for assessing the "green practices" construct, and properly represented the topics comprising the construct.

To this end, the experts used 5-point scales to express their agreement or disagreement with the three questions posed for each item, as well as a final 5-point scale to assess the overall appropriateness of each item for the scale. After reviewing the experts' assessments, 10 items were discarded (Table 2). The 10 resulting items were pilot-tested to verify the applicability of the scale in the study population.

	Item	Inter-Expert Agreement	Mean	Standard Deviation	Skewness	Kurtosis	Corrected Item-Total Correlation	Cronbach's Alpha if the Item Is Removed	Factor Loading
Green/	1. I can buy biodegradable and/or recyclable products at the sports club	>75%	2.97	1.17	-0.093	-0.608	0.716	0.900	0.782
Sustainable purchasing	2. The products that I can buy at the sports club are local	<75%							
	3. The products that I can consume are organic	>75%	2.95	1.19	-0.027	-0.648	0.698	0.901	0.768
	<ol> <li>The sports club's managers encourage environmentally friendly practices</li> <li>The sports instructors inform</li> </ol>	>75%	3.67	1.16	-0.571	-0.456	0.720	0.899	0.732
Environmental	users about environmentally friendly practices carried out at the sports club 6. The sports club has	<75%							
culture	information available on environmentally friendly practices 7. The sports instructor has a	>75%	3.11	1.30	-0.173	-0.975	0.661	0.903	0.705
	good attitude towards or willingness to engage in environmentally friendly practices	<75%							
	8. Soap dispensers allow you to save soap	<75%							
	9. The soap dispensers use environmentally friendly soaps 10. The sports club has water	>75%	2.94	1.21	0.038	-0.728	0.629	0.905	0.653
	consumption limiters on taps and showers	<75%							
Energy and water resource efficiency	11. The lighting in the sports facility is energy efficient 12. The sports club has motion	<75%							
,	detectors installed in the lights to save energy	>75%	2.68	1.28	0.160	-0.986	0.577	0.908	0.757
	<ol> <li>There are measures in place at the sports club to increase water and energy efficiency</li> <li>The ment of the base is grown</li> </ol>	>75%	2.98	1.16	-0.051	-0.607	0.688	0.901	0.785
	14. The sports club has its own resources to produce energy (renewable energies)	<75%							
	15. The sports club has rubbish bins with waste sorting to prioritise recycling and reuse	<75%							
	16. The club provides information about waste recycling	>75%	2.75	1.26	0.166	-0.908	0.706	0.900	0.773
Recycling/	17. The cleaning agents and detergents used are environmentally friendly	>75%	3.10	1.16	-0.043	-0.631	0.675	0.902	0.741
waste management	18. Different types of waste can be disposed of in the relevant bins 19. Waste produced during	>75%	3.25	1.28	-0.223	-0.909	0.689	0.901	0.755
	the maintenance of the sports facility is recycled appropriately	<75%							
	20. The sports centre digitises as much information as possible, avoiding paper consumption (paperless office)	<75%							

Table 2. Statistical analysis of items.

4.1.2. Statical Analysis of Items

The descriptive statistics are shown in Table 3. The means of all items were within the mean value of the scale ( $3.01 \pm 1.22$ ). The skewness and kurtosis indices were below 2, indicating a univariate normal distribution of the data. The item-total correlation values were equal to or greater than 0.35, and the reliability of the instrument did not increase

when any of the items were removed, as the Cronbach's alpha value for the 10 items resulting from the expert assessment was 0.911.

			Sample		
		Women	Men	Total	
Age	Total	$22.31 \pm 8.29$	$22.77\pm8.29$	$22.63\pm8.28$	
	Between 18 and 35 years	90.9%	88.9%	89.5%	
	More than 35 years	9.1%	11.1%	10.5%	
Education (Training)	Primary Education	13.7%	16.2%	% 15.4%	
	Secondary Education	62.2%	55.6%	57.6%	
	Higher Education	24.1%	28.2%	27%	
Weekly Frequency	One time per week	11.9%	10.7%	11%	
	2–3 times per week	60.4%	51.2%	54%	
	4 or more times per week	27.7%	38.2%	35%	
Time per Session	Less than 1 h	8.8%	8.1%	8.3%	
	Between 1 and 2 h	64.2%	69.3%	67.8%	
	More than 2 h	26.9%	22.6%	23.9%	

Table 3. Sample sociodemographic characteristics.

## 4.1.3. Exploratory Factor Analysis

The measure of sampling adequacy (KMO) and Bartlett's test of sphericity were calculated for this group of items. The KMO index yielded a value of 0.930, and Bartlett's test was statistically significant ( $\chi^2 = 5981.788$ ; df = 45; p < 0.001), leading to the conclusion that a factor analysis was pertinent. The parallel analysis revealed the existence of a single factor, as only the first eigenvalue from the actual data was larger than the first eigenvalue from the random data. The resulting single factor, also obtained using Kaiser's method, explained 55.68% of the variance. The AVE value for the 10-item instrument was 0.557 and the CR value was 0.926.

## 4.1.4. Confirmatory Factor Analysis and Factor Invariance

In order to assess the adequacy of the model tested (one factor and ten items), which was extracted from the EFA, we decided to jointly assess a group of indices. Table 4 shows the information provided by the fit indices used. However, the model was re-specified on the basis of the following criteria: (1) the significance of the factor loadings, (2) the information provided by the residual matrix, and (3) the modification indices offered by the program. As a result, items 4, 9, 12, and 17 were removed. The next model, consisting of one factor and six items, showed better fit indices. Regarding reliability, Cronbach's alpha was 0.888, while AVE was 0.607 and CR was 0.902, explaining 60.72% of the variance (Table 4).

 Table 4. Adjustment statistics for the models and comparison between models using model 1 as correct.

Goodness-of-Fit Indices							
Model	CMIN/DF	CFI	RMSEA	RMR	GFI	AIC	ECVI
1 factor and 10 items	2.283	0.962	0.070	0.066	0.941	119.636	0.451
1 factor and 6 items	2.319	0.994	0.048	0.030	0.990	44.230	0.078

## 4.2. *Study* 2

After the fit of the model was verified in the Western Andalusia sample through study 1, we proceeded to carry out an AFC in a second population, namely, athletes in Eastern Andalusia (Figure 1). The present model results obtained acceptable values in the different fit indices (CMIN/DF = 2.209; CFI = 0.978; RMSEA: 0.065; RMR = 0.055; GFI = 0.971; AIC = 43.463; and ECVI = 0.260).

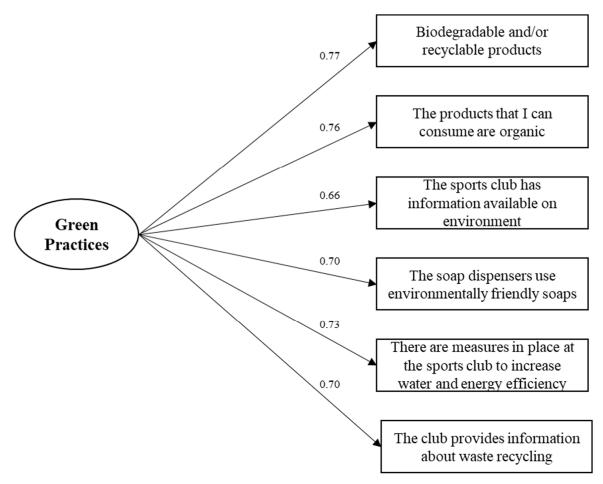


Figure 1. Tested model. Factor loadings and errors.

# 4.3. Study 3

# Factor Invariance

To determine sex-based invariance, the configurational invariance (M1), metric invariance (M2), strong invariance (M3), and strict invariance (M4) were progressively assessed. As a result, the fit of the unrestricted base model was evaluated in both groups separately, obtaining different values (Table 5), although similar values emerged between men and women.

Table 5. Measurement invariance.
----------------------------------

Model	CMNI	DF	CMNI/DF	RMSEA	CFI	AIC	ECVI
Men	18.603	7	2.658	0.052	0.993	46.603	0.076
Women	18.939	7	2.706	0.073	0.979	46.939	0.147
M1	44.205	14	3.157	0.044	0.989	124.205	0.110
M2	57.514	19	3.027	0.042	0.986	127.514	0.113
M3	74.098	25	2.964	0.042	0.982	132.098	0.117
M4	97.502	34	2.868	0.041	0.977	137.502	0.122

Note. M1: Configurational; M2: Metric; M3: Strong; M4: Strict.

The structure of the instrument was then analyzed between groups (M1), resulting in excellent values overall. Next, metric invariance (M2) was analyzed, finding adequate fit indices and values similar to the M1 values ( $\Delta$ RMSEA = 0.002,  $\Delta$ CFI = 0.007), indicating that there were no differences between the models and confirming the existence of metric invariance. This made it impossible to compare strong invariance. The M3 values were adequate, and the differences with M2 were within the expected limits ( $\Delta$ RMSEA = 0.003,  $\Delta$ CFI = 0.003), confirming the existence of strong invariance. Finally, strict invariance was examined, and adequate values were obtained. The differences with M3 ( $\Delta$ RMSEA = 0.001  $\Delta$ CFI = 0.005) are within the acceptable margins to confirm this type of invariance.

## 5. Discussion

Society in general and consumers in particular are taking a keen interest in all aspects of environmental conservation and protection. For this reason, corporate marketing departments across a range of service sectors are increasingly including "green practices" in their business models as a tool to build customer loyalty. However, in the sports sector, studies and instruments analyzing green practices are almost non-existent. Therefore, this study aimed to develop and validate a scale assessing green practices in sports organizations and activities.

In study 1, the items were qualitatively designed. Drawing on a thorough literature review, a series of dimensions were selected for inclusion in the green practices construct. Green purchasing, environmental culture, resource efficiency, and recycling were the dimensions included after the literature review [64]. A total of 10 items were eliminated by the experts involved in the item refinement process. The reasons for elimination varied: a number of items were removed due to the nature of the activity, which did not require the presence of sports instructors (the item mentioned the need for their presence). Other items were eliminated as it was impossible to find certain elements in the facility or activity or because the organization could not afford to provide certain types of information.

After the qualitative analysis of the items, a quantitative analysis was carried out to maximize the metric properties of the measurement instrument [71]. In line with recommendations from Mertler et al. [72], an EFA was performed, resulting in a single-factor scale. This was confirmed by a parallel analysis, according to which only actual factors explaining a greater percentage of the variance than random factors should be analyzed [83]. The resulting single factor explained 55.68% of the variance, showing adequate reliability and validity values. A CFA was then performed which displayed adequate fit indices. Nonetheless, the decision was made to re-specify the model based on the recommendations made by the AMOS software. Four items were eliminated, which increased the percentage of the variance explained, while the AVE value increased slightly, the CR value decreased very slightly, and all the scale fit indices improved. The model was tested in a second population through study 2. The results were acceptable, demonstrating the model's stability. With the one-factor six-item model, sex-based invariance was calculated in study 3. The results suggested the presence of strict invariance. The presence of strict variance could be confirmed following that recommended by Chen [81].

The tool designed in this research can be described as functional according to Yi et al. [63], as it focuses on physical, tangible aspects of the service that reduce its environmental impact. The literature shows that functional aspects lead to improved cognitive perceptions of the service provider's image [84]. However, functional attributes may not suffice to build an environmentally friendly image of the service: these attributes must be combined with emotional aspects, which will result in a stronger attitudinal effect than a purely functional approach [63]. Moreover, highlighting the impact of green practices could generate empathy among consumers [63], transforming them into co-creators of value when using the service [85], who actively draw on their social, cultural, and personal resources to create value [86]. Attitude formation is most likely to occur as a result of an interplay of cognitive and emotional processes. Therefore, the most effective brand

strategy would be a green approach focused on generating emotional benefits supported by information about environmentally sound functional attributes.

Another point to take into consideration is that whereas in hospitality services, green practices are presented as a consolidated and therefore complex construct, in the services offered by non-profit sport clubs, they are not. Green practices were grouped into a single dimension, and the construct did not distinguish between the types of green practices employed, but in the overall presence or absence of the practices themselves. This means that, in sectors with no familiarity with green practices, athletes (users) do not distinguish between the sophistication of the practices, but only make an overall judgement on the environmental sustainability of the service.

#### 5.1. Managerial Implications

The design and validation of the scale are of significant value for managers of sports services, as well as for researchers, who now have a tool to assess the environmental sustainability actions taken by different organizations and the effects that these actions have on their consumers' future intentions. According to Trail and McCullough [87], there are no known tools in the literature assessing green or sustainable practices in sports services, which results in a limited understanding of the impact of these actions on the sports services industry. The designed tool is a prelude to the increased visibility and the extension of sustainability in the sports services sector. Its use can make consumers see that services and activities that occupy important spaces in their individual identity, such as those offered by sports clubs, are committed to the environment. This would help to extend that compromise to their individual actions in their daily lives, giving the sports clubs more responsibility and legitimacy. The greater the familiarity with sustainable realities, the greater the knowledge related to personal impact on the environment and the greater the acquisition of environmental awareness. Sports clubs have the opportunity to lead the interest in the intrinsic value of nature and sustainable development by guiding their attitudes as well as the environmentally positive behavior of their consumers.

Therefore, using this tool, sport managers and researchers can begin to evaluate their sustainable actions and their effects on sport consumers and their future behaviors and intentions. Understanding the effect that green practices may have on sport consumers will help service providers and researchers ascertain whether these practices have a positive or negative impact on the service and on the consumers' future intentions. The design of the validated scale means that it can be used in a variety of models that seek to ascertain the impact of sport on both spectators and athletes, as well as to better understand the direct and indirect effects of green practices on small-, medium-, and large-scale sports services providers.

#### 5.2. Limitations and Further Study

Given that the aim of this study was to design a tool to assess the effect of green practices on the behavior of sports services users, its main limitation is the general nature of the tool. The study presents a basic tool that can be used in different contexts and with different groups of individuals. It may need to be adapted for use in specific situations or settings that are beyond the scope of a generic instrument.

Future research on sports events, sports tourism, management of sports services, education in social values through sport, etc., could make use of the tool. The construct could also be included in models that seek to better understand user behaviors and the impact of sustainability-related physical activity and sports programs on society and on sports companies and/or organizations. The GPSport scale will help bridge the gap in knowledge regarding sustainability in sports. After a thorough segmentation of the sports services market, the tool will be able to provide accurate information on customer attitudes and behavioral intentions to inform strategies that reflect the interests of consumers and organizers of sports programs and activities. These strategies could be used to implement measures to achieve the objectives set by sports organizations regarding sustainability, as

well as financial and social goals. Without this scale and the information that it can provide, it will not be possible to ascertain the effectiveness of sustainability measures adopted by organizations and the need to continue or discontinue them.

## 6. Conclusions

This research has produced a tool for assessing the impact of organizations' green practices on the behavior of consumers of sports services and on the relationship between the organization and consumers. This information can be used strategically to evaluate programs and activities or to launch new courses of action. The unidimensional tool contains questions relating to dimensions used in a variety of instruments, reinforcing the idea of the construct. The scale can be used to include the concept of green practices in models seeking to analyze the effect of green practices on different constructs such as quality, trust, value, loyalty, intention to be physically active, and intention to engage in sustainable behaviors. Likewise, green practices could be linked to aspects influencing sports tourism, such as emotions and the image of the cities or locations hosting a sporting event.

Author Contributions: Conceptualization, G.M.-G. and R.N.; methodology, R.B. and A.F.-M.; software, G.M.-G.; validation, G.M.-G. and R.N.; formal analysis, R.N.; investigation, G.M.-G.; writing original draft preparation, A.F.-M. and R.B.; writing—review and editing, G.M.-G. and R.N.; visualization and supervision, A.F.-M. and G.M.-G. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki, and received approval from a Committee on the Ethics of Non-Biomedical Experimentation and the Evaluation of Experiments with Genetically Modified Organisms (CEENB-OMGs) of authors' institution, number: 005/2021.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author.

Conflicts of Interest: The authors declare no conflicts of interest.

## References

- Cury, R.; Kennelly, M.; Howes, M. Environmental sustainability in sport: A systematic literature review. *Eur. Sport Manag. Q.* 2020, 23, 13–37. [CrossRef]
- Trendafilova, S.; Babiak, K. Understanding strategic corporate environmental responsibility in professional sport. *Int. J. Sport Manag. Mark.* 2013, 13, 1–26. [CrossRef]
- Wilby, R.L.; Orr, M.; Depledge, D.; Giulianotti, R.; Havenith, G.; Kenyon, J.A.; Matthews, T.K.R.; Mears, S.A.; Mullan, D.J.; Taylor, L. The impacts of sport emissions on climate: Measurement, mitigation, and making a difference. *Ann. N. Y. Acad. Sci.* 2022, 1519, 20–33. [CrossRef] [PubMed]
- 4. Breitbarth, T.; McCullough, B.P.; Collins, A.; Gerke, A.; Herold, D.M. Environmental matters in sport: Sustainable research in the academy. *Eur. Sport Manag. Q.* 2023, 23, 5–12. [CrossRef]
- 5. Cerezo-Esteve, S.; Inglés, E.; Segui-Urbaneja, J.; Solanellas, F. The Environmental Impact of Major Sport Events (Giga, Mega and Major): A Systematic Review from 2000 to 2021. *Sustainability* **2022**, *14*, 13581. [CrossRef]
- McCullough, B.P.; Orr, M.; Kellison, T. Sport ecology: Conceptualizing an emerging subdiscipline within sport management. J. Sport Manag. 2020, 34, 509–520. [CrossRef]
- 7. Dolf, M.; Teehan, P. Reducing the carbon footprint of spectator and team travel at the University of British Columbia's varsity sports events. *Sport Manag. Rev.* 2014, *18*, 244–255. [CrossRef]
- Shahron, S.A.; Abdullah, R.; Musa, S. A development of green building in Malaysia: A challenge to sports center. *PalArch's J. Archaeol. Egypt/Egyptol.* 2020, 17, 11850–11860.
- 9. Silveire, Y.; Sanabría, J.R.; Guillén, L.; Mediavilla, H.R.; Mediavilla, C.P.; Armas, N.P. Economía circular: Un reto para las instituciones deportivas latinoamericanas. *Retos Nuevas Tend. Educ. Física Deporte Recreación* **2022**, *44*, 309–318. [CrossRef]
- Watkin, G.; Mallen, C.; Hyatt, C. Management Perspectives on Plastics Free Sport Facilities' Beverage Service. J. Manag. Sustain. 2021, 1, 1–14. [CrossRef]

- 11. Mallen, C. Sport environmental measurement tools, certification, and reporting. In *Sport and Environmental Sustainability*, 1st ed.; Dingle, M., Ed.; Routledge: Oxford, UK, 2020; pp. 183–200. [CrossRef]
- 12. Smith, A.C.; Westerbeek, H.M. Sport as a vehicle for deploying corporate social responsibility. J. Corp. Citizsh. 2007, 25, 43–54. [CrossRef]
- Casper, J.M.; McCullough, B.P.; Smith, D.M.K. Pro-environmental sustainability and political affiliation: An examination of USA college sport sustainability efforts. *Int. J. Environ. Res. Public Health* 2021, 18, 5840. [CrossRef] [PubMed]
- UNFCCC. Sports for Climate Action Framework; United Nations: New York, NY, USA, 2017; Available online: https://unfccc.int/ climate-action/sectoral-engagement/sports-for-climate-action (accessed on 25 November 2022).
- Plataforma del Voluntariado en España. Objetivos de Desarrollo Sostenible: Un Pacto Para Cambiar el Mundo. PVE: Madrid, Spain, 2020. Available online: https://plataformavoluntariado.org/wp-content/uploads/2020/05/guia-ods-tercer-sector-1.pdf (accessed on 25 November 2022).
- 16. Trendafilova, S.; McCullough, B.; Pfahl, M.; Nguyen, S.N.; Casper, J.; Picariello, M. Environmental sustainability in sport: Current state and future trends. *Glob. J. Adv. Pure Appl. Sci.* 2014, *3*, 9–14.
- 17. Eslaminejad, A.; Taybi-Sani, S.M.; Morsal, B. Designing the Green Tourism Supply Chain Management Model in the Sport Industry. J. Tour. Hosp. Res. 2022, 9, 65–82.
- Jiménez-García, M.; Ruiz-Chico, J.; Peña-Sánchez, A.R.; López-Sánchez, J.A. A bibliometric analysis of sports tourism and sustainability (2002–2019). Sustainability 2020, 12, 2840. [CrossRef]
- 19. Escamilla-Fajardo, P.; Núñez-Pomar, J.M.; Gómez-Tafalla, A.M. Exploring environmental and entrepreneurial antecedents of social performance in Spanish sports clubs: A symmetric and asymmetric approach. *Sustainability* **2020**, *12*, 4234. [CrossRef]
- Lozano, R.; Barreiro-Gen, M. Civil society organizations as agents for societal change: Football clubs' engagement with sustainability. Corp. Soc. Responsib. Environ. Manag. 2022, 30, 820–828. [CrossRef]
- Rahmani, H.; Hami, M.; Dosti, M. Identificando los factores que afectan al desarrollo sostenible en instalaciones deportivas de la provincia de Jorasán Razaví. SPORT TK-Rev. EuroAmericana Cienc. Deporte 2020, 19, 15–124. [CrossRef]
- 22. Peattie, K.; Charter, M. Green Marketing. In *The Marketing Book*, 5th ed.; Barker, M., Ed.; Butterworth Heinemann: Oxford, UK, 2003; pp. 765–795.
- 23. Papadas, K.K.; Avlonitis, G.J.; Carrigan, M. Green marketing orientation: Conceptualization, scale development and validation. *J. Bus. Res.* **2017**, *80*, 236–246. [CrossRef]
- 24. González-Serrano, M.H.; Añó-Sanz, V.; González-García, R.J. Sustainable sport entrepreneurship and innovation: A bibliometric analysis of this emerging field of research. *Sustainability* **2020**, *12*, 5209. [CrossRef]
- Hu, J.; Xiong, L.; Lv, X.; Pu, B. Sustainable rural tourism: Linking residents' environmentally responsible behaviour to tourists' green consumption. Asia Pac. J. Tour. Res. 2021, 26, 879–893. [CrossRef]
- Dang-Van, T.; Wang, J.; Vo-Thanh, T.; Jiang, X.; Nguyen, N. Green practices as an effective business strategy to influence the behavior of hotel guests in the luxury hotel sector: Evidence from an emerging market. *Bus. Strategy Environ.* 2022, 48, 1227–1299. [CrossRef]
- Acuña-Moraga, O.; Severino-González, P.; Sarmiento-Peralta, G.; Stuardo-Solar, C. Consumo sustentable en Chile: Una aproximación a los objetivos de desarrollo sostenible (ODS). *Inf. Tecnol.* 2022, 33, 181–190. [CrossRef]
- Moise, M.S.; Gil-Saura, I.; Ruiz-Molina, M.E. "Green" practices as antecedents of functional value. guest satisfaction and loyalty. J. Hosp. Tour. Insights 2021, 4, 722–738. [CrossRef]
- 29. Hanaysha, J.R.; Al-Shaikh, M.E.; Joghee, S.; Alzoubi, H.M. Impact of innovation capabilities on business sustainability in small and medium enterprises. *FIIB Bus. Rev.* **2022**, *11*, 67–78. [CrossRef]
- 30. Merli, R.; Preziosi, M.; Acampora, A.; Lucchetti, M.C.; Ali, F. The impact of green practices in coastal tourism: An empirical investigation on an eco-labelled beach club. *Int. J. Hosp. Manag.* **2019**, *77*, 471–482. [CrossRef]
- Yusof, N.; Awang, H.; Iranmanesh, M. Determinants and outcomes of environmental practices in Malaysian construction projects. J. Clean. Prod. 2017, 156, 345–354. [CrossRef]
- 32. Yadav, R.; Pathak, G.S. Determinants of consumers' green purchase behavior in a developing nation: Applying and extending the theory of planned behavior. *Ecol. Econ.* **2017**, *134*, 114–122. [CrossRef]
- Hagmann, C.; Semeijin, J.; Vellenga, D. Exploring the green image of airlines: Passenger perceptions and airline choice. J. Air Transp. Manag. 2015, 43, 37–45. [CrossRef]
- Orr, M.; Inoue, Y. Sport versus climate: Introducing the climate vulnerability of sport organizations framework. *Sport Manag. Rev.* 2019, 22, 452–463. [CrossRef]
- 35. Orr, M.; Inoue, Y.; Seymour, R.; Dingle, G. Impacts of climate change on organized sport: A scoping review. *Wiley Interdiscip. Rev. Clim. Change* **2022**, *13*, e760. [CrossRef]
- 36. Trail, G. Marketing Sustainability through Sport, 1st ed.; Sport Consumer Research Consultants: Seattle, DC, USA, 2016.
- Ratten, V. Sport entrepreneurship: Challenges and directions for future research. *Int. J. Entrep. Ventur.* 2012, *4*, 65–76. [CrossRef]
   McCullough, B.P.; Kellison, T.B. Go green for the home team: Sense of place and environmental sustainability in sport. *J. Sustain. Educ.* 2016, *11*, 1–14.
- 39. Thormann, T.F.; Wicker, P. Determinants of pro-environmental behavior among voluntary sport club members. *Ger. J. Exerc. Sport Res.* 2021, *51*, 29–38. [CrossRef]

- 40. Guevara, J.C.; Sandino, M.; Gómez, A.; Urdaneta, R. La Agenda 2030 y las prácticas de responsabilidad social corporativa en las federaciones deportivas colombianas. *Retos Nuevas Tend. Educ. Física Deporte Recreación* **2023**, *48*, 450–460. [CrossRef]
- Casper, J.; Pfahl, M.; McSherry, M. Athletics department awareness and action regarding the environment: A study of NCAA athletics department sustainability practices. *J. Sport Manag.* 2012, 26, 11–29. [CrossRef]
- 42. León-Quismondo, J.; García-Unanue, J.; Burillo, P. Best practices for fitness center business sustainability: A qualitative vision. *Sustainability* 2020, 12, 5067. [CrossRef]
- 43. Nyadzayo, M.W.; Leckie, C.; McDonald, H. CSR, relationship quality, loyalty and psychological connection in sports. *Mark. Intell. Plan.* **2016**, *34*, 883–898. [CrossRef]
- 44. Fonseca, I.; Bernate, J. Modelos de responsabilidad social corporativa en el sector deporte: Una revisión sistemática. *Retos Nuevas Tend. Educ. Física Deporte Recreación* **2022**, 43, 1106–1115. [CrossRef]
- Behnam, M.; Anagnostopoulos, C.; Byers, T.; Papadimitriou, D.A. The impact of perceived corporate social responsibility on value-in-use through customer engagement in non-profit sports clubs: The moderating role of co-production. *Eur. Sport Manag.* Q. 2023, 23, 789–810. [CrossRef]
- 46. Pfahl, M. The environmental awakening in sport. Solut. J. 2013, 4, 67–76.
- 47. Sinnett, B.; Gibson, F. Sustainability and recreational sports facilities: An exploratory study regarding levels of institutional adoption. *Recreat. Sports J.* **2016**, *40*, 92–104. [CrossRef]
- Santos-Pastor, M.L.; Cañadas, L.; Martínez-Muñoz, L.F. Scale for environmental attitude in physical activities in natural environments. *Apunts. Educ. Física I Esports* 2019, 137, 43–55. [CrossRef]
- 49. Hugaerts, I.; Scheerder, J.; Helsen, K.; Corthouts, J.; Thibaut, E.; Könecke, T. Sustainability in participatory sports events: The development of a research instrument and empirical insights. *Sustainability* **2021**, *13*, 6034. [CrossRef]
- 50. Trail, G.T.; McCullough, B.P. Marketing sustainability through sport: Testing the sport sustainability campaign evaluation model. *Eur. Sport Manag. Q.* **2020**, *20*, 109–129. [CrossRef]
- Inoue, Y.; Kent, A. Sport teams as promoters of pro-environmental behavior: An empirical study. J. Sport Manag. 2012, 26, 417–432. [CrossRef]
- 52. Sisson, A.; Grisamore, A.; Jang, J. Green practices with reusable drinkware at music and sporting events: A hospitality undergraduate student perspective. *J. Hosp. Tour. Educ.* **2021**, *33*, 1–13. [CrossRef]
- 53. Matas-Terrón, A.; Tójar-Hurtado, J.C.; Jaime-Martín, J.J.; Benitez-Azuaga, F.M.; Almeda, L. Diagnóstico de las actitudes hacia el medio ambiente en alumnos de secundaria: Una aplicación de la TRI. *Rev. Investig. Educ.* **2004**, *22*, 233–244.
- 54. Trail, G.; McCullough, B. Marketing sustainability through sport: The importance of target market insights. In *Routledge Handbook* of Sport and the Environment, 1st ed.; McCullough, B.P., Kellison, T.B., Eds.; Routledge: Oxford, UK, 2017; pp. 134–148.
- 55. Trail, G. Marketing sustainability through sport organizations. In *Introduction to Environmental Sport Management*, 1st ed.; McCullough, B.P., Ed.; Forwarding Sport Sustainability, LLC.: Seattle, DC, USA, 2015; pp. 81–101.
- 56. Kelman, H.C. Interests, relationships, identities: Three central issues for individuals and groups in negotiating their social environment. *Annu. Rev. Psychol.* 2006, 57, 1–26. [CrossRef]
- McCullough, B.P.; Cunningham, G.B. Theory of planned behavior, recycling intentions, and youth baseball. *Int. J. Sport Manag. Mark.* 2011, 10, 104–120. [CrossRef]
- Ajzen, I.; Madden, T.J. Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. J. Exp. Soc. Psychol. 1986, 22, 453–474. [CrossRef]
- Nuviala, A.; Grao-Cruces, A.; Fernández-Ozcorta, E.; Nuviala, R. Asociación entre calidad del servicio deportivo, valor y satisfacción de usuarios en España. Univ. Psychol. 2015, 14, 589–598. [CrossRef]
- 60. Can, A.S.; Turker, N.; Ozturk, S.; Alaeddinoglu, F. Tourists' perception of green practices in eco-friendly hotels: A case study from the Antalya region of Turkey. *J. Tour. Chall. Trends* **2014**, *7*, 9–25.
- 61. Bagheri, M.; Shojaei, P.; Jahromi, S.A.; Kiani, M. Proposing a model for assessing green hotels based on ecological indicators. *Tour. Hosp. Res.* **2020**, *20*, 406–422. [CrossRef]
- 62. Bastič, M.; Gojčič, S. Measurement scale for eco-component of hotel service quality. *Int. J. Hosp. Manag.* 2012, *31*, 1012–1020. [CrossRef]
- 63. Yi, S.; Li, X.; Jai, T.M. Hotel guests' perception of best green practices: A content analysis of online reviews. *Tour. Hosp. Res.* 2018, 18, 191–202. [CrossRef]
- 64. Lee, W.H.; Cheng, C.C. Less is more: A new insight for measuring service quality of green hotels. *Int. J. Hosp. Manag.* 2018, 68, 32–40. [CrossRef]
- 65. Martínez, P. Customer loyalty: Exploring its antecedents from a green marketing perspective. *Int. J. Contemp. Hosp. Manag.* 2015, 27, 896–917. [CrossRef]
- 66. Chen, Y.S. The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *J. Bus. Ethics* **2010**, *93*, 307–319. [CrossRef]
- 67. Kim, W.G.; Li, J.; Han, J.S.; Kim, Y. The influence of recent hotel amenities and green practices on guests' price premium and revisit intention. *Tour. Econ.* 2017, 23, 577–593. [CrossRef]
- Kang, K.H.; Stein, L.; Heo, C.Y.; Lee, S. Consumers' willingness to pay for green initiatives of the hotel industry. *Int. J. Hosp. Manag.* 2012, 31, 564–572. [CrossRef]

- 69. Government of Spain. Law 3/2018 of Protection of Personal Data and Guarantee of Digital Rights. 2018. Available online: https://www.boe.es/eli/es/lo/2018/12/05/3/dof/spa/pdf (accessed on 5 June 2023).
- 70. Carretero-Dios, H.; Pérez, C. Normas para el desarrollo y revisión de estudios instrumentales. *Int. J. Clin. Health Psychol.* 2005, *5*, 521–551.
- 71. Muñiz, J.; Fonseca-Pedrero, E. Ten steps for test development. *Psicothema* 2019, 31, 7–16. [CrossRef]
- 72. Mertler, C.; Vannatta, R.; LaVenia, K. Advanced and Multivariate Statistical Methods: Practical Application and Interpretation, 7th ed.; Routledge: Oxford, UK, 2021.
- 73. Briggs, N.E.; MacCallum, R.C. Recovery of weak common factors by maximum likelihood and ordinary least squares estimation. *Multivar. Behav. Res.* 2003, *38*, 25–56. [CrossRef]
- 74. Kaiser, H.F. The application of electronic computers to factor analysis. Educ. Psychol. Meas. 1960, 20, 141–151. [CrossRef]
- 75. Horn, J.L. A rationale and test for the number of factors in factor analysis. Psychometrika 1965, 30, 179–185. [CrossRef] [PubMed]
- 76. Bagozzi, R.P.; Yi, Y. On the evaluation of structural equation models. *J. Acad. Mark. Sci.* **1998**, *16*, 74–94. [CrossRef]
- Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E.; Tatham, R.L. *Multivariate Data Analysis*; Pearson: Lodon, UK, 2006; Volume 16.
   Streiner, D.L. Starting at the beginning: An introduction to coefficient alpha and internal consistency. *J. Personal. Assess.* 2010, *80*,
- 99–103. [CrossRef] [PubMed]
  79. Marôco, J. Análise de Equações Estruturais: Fundamentos Teóricos, Software & Aplicações, 3rd ed.; ReportNumber Lda: Pêro Pinheiro,
- 79. Maroco, J. Analise de Equações Estruturais: Fundamentos Teoricos, Software & Aplicações, Sid ed.; Reportivumber Lda: Pero Pinneiro, Portugal, 2014.
- 80. Byrne, B.M. Structural Equation Modeling With AMOS, EQS, and LISREL: Comparative Approaches to Testing for the Factorial Validity of a Measuring Instrument. *Int. J. Test.* **2001**, *1*, 55–86. [CrossRef]
- 81. Chen, F. Sensitivity of goodness of fit indexes to lack of measurement invariance. *Struct. Equ. Model. A Multidiscip. J.* 2007, 14, 464–504. [CrossRef]
- 82. Kline, R. Convergence of structural equation modeling and multilevel modeling. In *The SAGE Handbook of Innovation in Social Research Methods*, 1st ed.; Vogt, W., Williams, M., Eds.; Sage Publicartion: New York, NY, USA, 2011; pp. 562–589. [CrossRef]
- 83. Kahn, J.H. Factor Analysis in Counseling Psychology Research. *Train. Pract. Princ. Adv. Appl. Couns. Psychol.* **2006**, *34*, 684–718. [CrossRef]
- 84. Hartmann, P.; Ibáñez, V.A.; Sainz, F.J.F. Green branding effects on attitude: Functional versus emotional positioning strategies. *Mark. Intell. Plan.* 2005, 23, 9–29. [CrossRef]
- Ballantyne, D.; Williams, J.; Aitken, R. Introduction to service-dominant logic: From propositions to practice. *Ind. Mark. Manag.* 2011, 2, 179–180. [CrossRef]
- 86. Agrawal, A.K.; Rahman, Z. Roles and resource contributions of customers in value co-creation. *Int. Strateg. Manag. Rev.* 2015, *3*, 144–160. [CrossRef]
- 87. Traill, G.; McCullough, B.P. Differential effects of internal and external constraints on sustainability intentions: A hierarchical regression analysis of running event participants by market segment. *J. Manag. Glob. Sustain.* **2018**, *6*, 1–30. [CrossRef]

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.