

# Sustainability Initiative Awareness of Professional Sports Organizations

Subjects: **Social Issues**

Contributor: Ricardo Cayolla , Joana Quintela ,

It is undeniable that professional sports organizations (PSO) have done an enormous amount of work regarding sustainability. Despite all these efforts, the awareness of these results by the stakeholders falls far short of what was intended. In addition to the importance of visibility of the chosen topics, researchers also studied if the distance is a decisive factor for greater effectiveness in conveying the PSO's message on such an important and cross-cutting topic these days: sustainability.

sustainable initiatives (SI)

professional sport organization (PSO)

distance

awareness

## 1. Introduction

The sports industry, characterized by Underwood et al., 2001 <sup>[1]</sup> as an industry with "high levels of identification" (p. 1) among its consumers, annually moves billions of euros globally <sup>[2]</sup>. With millions of fans around the world, some of the most powerful brands on the planet are PSOs such as the Manchester United football club and the New York Yankees baseball team <sup>[3]</sup>. Sport helps to contribute to community development and greater social awareness <sup>[4]</sup> and can play a decisive role in the implementation of results related to sustainable development <sup>[5]</sup>.

The general public is increasingly interested in climate change. Regardless of the industry, consumers tend to value sustainable products and brands. Consequently, organizations often publish sustainability reports that demonstrate their sustainability-related efforts <sup>[6]</sup>. Interestingly, in the sports sector, the trend of other industries is not followed, with a scarcity of reports on what sustainability refers to, that is, "the sport sector's record of sustainability reports does not mirror this response" (p. 394).

One of the aspects to take into account in the development of a more sustainable society is through the evaluation of the effectiveness of the initiatives performed by PSOs <sup>[7]</sup>. Better communication of a PSO SI can positively influence consumers to behave in a more environmentally friendly way (e.g., by recycling) <sup>[4]</sup>. With its origins in the concepts of sustainable development, sustainability science is a new discipline <sup>[8]</sup> and sport ecology, as an emerging subdiscipline within sport management, is even newer <sup>[6]</sup>. Due to the complexity of the problems studied, as well as the increasing specific (i.e., fragmented) knowledge, having a holistic perspective thus becomes essential in this subdiscipline <sup>[8]</sup>.

In addition to the mandatory preparation of an annual sustainability report, there are three main reasons for a PSO to carry out an SI survey: (1) the perception of stakeholders is important; (2) topics such as diversity and inclusion (DIVIN); and (3) attraction and retention of human capital (ARHC) are just three of the topics considered when identifying material issues that have a greater impact on PSO activity in sustainability development.

The power that sport has in today's society can help in the way sustainability is understood and practiced by everyone. By studying the websites of 19 Major League Soccer clubs in the US, Francis et al., 2017 <sup>[9]</sup> indicate that sports institutions have made an effort to reduce their impact on the environment, and recycling is an example of this. However, the researchers conclude that the SI carried out by Major League Soccer clubs are dependent on their location, with a special predominance in the Western Conference clubs. In their own words: "The location and environment that these franchises are in tell a bit of the reason why some of the teams are making contributions to the sustainability movement" (p. 405). In this research researchers want to analyze the importance of the proximity fan residence to the PSO facilities in relation to the awareness of the SI performed.

Derived from the former literature and intended to support the emerging discipline of sport ecology, this research explores the importance of SI in sport for PSO members in the time of a pandemic. Specifically, two topics were considered, and the distance from the members' residence was taken into account in the analysis. A quantitative study was accomplished taking into account the SI and intends to (i) identify SI awareness of members; (ii) analyze the importance of distance in SI awareness; (iii) explore the relationships between the PSO assessments on the topics covered—diversity and inclusion (DIVIN) and attraction and retention of human capital (ARHC)—and the SI awareness; and (iv) examine the relationship between DIVIN and ARHC assessments and the physical distance of stakeholders.

## 2. Theoretical Background

As a business strategy, sustainability has assumed a prominent place <sup>[10]</sup>. From a business point of view, the environmental management of an organization is an asset and promotes the company's performance <sup>[11]</sup>. Pro-environmental behaviors related to climate change and the preservation of the planet have a positive impact on environmental sustainability <sup>[12]</sup>. In the area of sustainability, the sports industry is no exception, with sports organizations showing a growing behavior in sustainable actions <sup>[13]</sup>. Commitment to implementing sustainability initiatives is a reality because, as recent studies suggest, the social and economic objectives of sports organizations can benefit from these actions <sup>[7]</sup>. In terms of sustainable fan behavior, this has been the object of study in sporting events and in their daily lives <sup>[14]</sup>. Although the promotion of environmental initiatives by sports organizations is doubly favorable (e.g., in the links between supporters and organizations as well as in promoting more sustainable behaviors) <sup>[10][13]</sup>, their influence on the fans is not clear <sup>[12]</sup>.

Extending past research, it is researchers' goal to acknowledge how the most important professional sport organization (PSO) stakeholders (i.e., members) <sup>[2][15][16]</sup> value the topics presented within the scope of sustainability initiatives (SI) <sup>[6][17][18]</sup> and the relationship between distance and the awareness of these SI <sup>[19][20]</sup>.

### 2.1. Distance

In sport, the presence of thousands of fans accompanying their favorite teams at each sporting event has positive and negative aspects (e.g., generated economic development and increased pollution, respectively). Human travel is one of the biggest contributors to air pollution and the growing emission of greenhouse gasses is a threat to a world that claims to be more sustainable. Transport is one of the main contributors to pollution. Globally, sustainability is understood from the perspective of a triple bottom line (i.e., social, environmental and economic) as benefits that derive from company behavior in favor of the environment. In the sports industry, due to greater difficulty in measuring social and economic dimensions, the environmental dimension has been the most scrutinized by researchers.

Greenhouse gas emissions from spectator travel to and from football matches were calculated by Dosumu et al., in 2017 <sup>[20]</sup>. The researchers concluded that although CO<sub>2</sub> emissions account for less than 0.05% of transport emissions in England, football authorities must have robust travel plans and educate spectators to employ more sustainable travel plans for games. Another study concerning the carbon footprint created by spectators in transport to access university sporting events was done by Triantafyllidis et al., in 2018 <sup>[19]</sup>. One of the important factors to take into account refers to the location of the stadium in relation to the spectator's home area. The researchers chose locations on and off campus, defining them as high and low population density, respectively. They concluded that, depending on the locations concerned, the type of transport chosen by the participants is different. The analysis of these two different stadium locations gives an accurate view of how the spectators' mode of transport influenced CO<sub>2</sub> emissions and whether the stadium location changed the level of CO<sub>2</sub> emissions per spectator.

Through a qualitative study with parents of underage players from two hockey teams, Chard and Mallen, 2012 <sup>[21]</sup>, studied the environmental impact of car use for "outside" game trips. Since travel is a necessary byproduct of being able to compete in hockey, to alleviate the pollution derived from this activity, the researchers proposed measures at the individual (e.g., car-pooling) and collective (e.g., having a reorganization of the league's game schedule by the organization) levels. The environmental impacts of major sporting events are a fact and, at the political level, their consequences make action increasingly urgent, with the objective of having a more sustainable society. The "ecological footprint" of the British Football

Federation (FA) Cup final was studied by Collins and Flynn, 2008 [22], and the conclusions are that consumption activities related to food, drink and transport behavior and types of waste are the greatest impact factors in the ecological footprint.

Quantitative studies on the environmental impact of events are also relevant. In small-scale university sporting events held at a university, Dolf and Teehan, 2015, [23] investigated the carbon footprint of spectator and team travel by analyzing travel patterns. They concluded that university spectators had a smaller footprint than teams per person, but a larger overall carbon footprint. The researchers suggested measures to reduce the footprint of spectators and teams, namely through a smaller number of long-distance air travel events and increasing the vehicle occupancy rate. Most studies carried out on the carbon footprint focus on sporting events and, to a lesser extent, on sporting teams. The perspective of active participants in sport was embraced by Wicker, 2019 [24], through a study on the heterogeneity of individual consumer behavior in Germany (6537 adults, 20 sports), and whether for regular training or competitions considering travel distances and transportation is meaningful. The researchers concluded that there is a greater relationship between environmental awareness and a smaller carbon footprint in favor of individual sports to the detriment of team sports.

Due to the lack of models to evaluate environmental sustainability initiatives, Trail and McCullough, 2019 [7], created and tested a model for evaluating sustainability initiatives among participants in an endurance race. They identified that the needs and values of the participants are aspects to be considered in the initiatives to be developed by sports managers and managers. Testing the non-response bias distance covered for the run was taken into account. Orr and Schneider, 2018 [25], found that winter tourism, particularly in countries with northern climates, has been negatively affected economically due to climate change. The choice of alternatives by consumers depends on several factors, with the distance between the person's home and the location of the activity being an important one. Therefore, for active sport tourism such as cross-country skiing, the role of distance in the type of decisions taken while choosing alternatives is important. All the studies mentioned above consider distance as a common element.

## 2.2. Sustainable Initiatives Topics in the Professional Sport Organization Questionnaire

The approaches that PSOs undertake within the scope of sustainability initiatives are diverse. The International Olympic Committee, with its work entitled "Manual of Sport and Environment" [26], clarifies key concepts about sport and the environment, provides recommendations and suggests policy and concrete actions. Another study, focused on the awareness of stakeholders concerning sustainable environmental initiatives in sport (ESIS) [27] carried out by a PSO, stresses the importance of these initiatives being more publicized in order to obtain better sustainable behaviors by consumers. The study of websites of professional clubs and leagues has been used by researchers over the years [28][29][30][31]. With regard to sustainability practices, [28] the websites of 126 teams from four different leagues (NFL, MLB, NBA, NHL) were examined from three dimensions (social, environmental and economic). The researchers concluded that although the type of communication varies according to the league in question, social items are more valued than economic items. In the Asia Pacific region, dissemination of information about activities related to the environmental sustainability of different modalities (e.g., football, basketball, baseball, and rugby, among others) was analyzed [29]. Compared to North America, the researchers noted that there is less communication about sustainability initiatives by professional sports teams in the Asia Pacific region. Another study [30], regarding the website communications of teams from Major League Soccer, concludes that, with regard to sustainability, there are three key areas: the use of renewable resources, the minimization of resources and recycling. The reduction of the negative impact of the sports industry actors (i.e., professional teams and leagues), and the subsequent implementation of sustainable programs were also the object of research [31]. The researchers note that in addition to the financial and strategic advantages of the new way of being in terms of sustainability, the attraction of new customers and the enhancement of the consumer experience are factors to be taken into account. Online surveys have been utilized in different contexts, such as the study of sustainable attitudes [7], marketing sustainability through sport [32], corporate credibility in corporate social marketing [31] and the carbon footprint of active sport participants [25]. Fan engagement has also been studied under the perspective of athletics departments [17][33] or professional sport organizations [14][17].

In the PSO under study, more than 30 sports are practiced. Throughout its history, around 1860 titles have been won in all sports. Although the PSO is mostly known for football, in the ranking of sports with the most titles won, football only appears in fourth place, behind athletics, billiards and cycling [34]. According to the knowledge researchers have concerning PSO

stakeholders <sup>[27]</sup>, researchers believe that this research can be another step towards a better understanding of the behavior of one of the main stakeholders of the sports phenomenon favoring a more sustainable society. There are two SI topics focused in the questionnaire: diversity and inclusion (DIVIN) and attraction and retention of human capital (ARHC). Researchers then characterize the topics in the light of the PSO context.

### 2.2.1. Diversity and Inclusion

Three areas of action characterize the topic diversity and inclusion (DIVIN): (a) promoting equality; (b) accessibility (to the infrastructures and displacement in them); (c) sport (promotion of physical activity and practice of adapted sports). This is a topic that is characterized by having great external visibility.

With regard to the promotion of equality, with the contribution of an internationally renowned brand, the PSO carried out a campaign to promote equality and gender. Entitled “Many Faces”, the aim was to reinforce the message of equality, regardless of skin color or gender <sup>[35]</sup>. More recently, the PSO marked the International Day of Persons with Disabilities by releasing several images in which the athletes from the Adapted Sports section of the club appear together with professional players from different sports <sup>[36]</sup>.

In the design and planning of the Estádio do Dragão (FC Porto stadium) as well as the adjacent infrastructure (e.g., the Dragão Arena and office buildings) sustainability was a priority objective. FC Porto Stadium is the axis of the environmental strategy of the club, being the first football stadium in the world to be awarded five stars by UEFA, receiving integrated quality and environmental certification <sup>[37]</sup>. The stadium is on the same level as the best football clubs in Europe, with a capacity of 50,033 spectators <sup>[38][39]</sup>. In the 2018/2019 season, before the mobility restrictions imposed by COVID-19, FC Porto had an 82.6% stadium occupancy rate, one of the highest in the Portuguese League <sup>[38]</sup>. As for accessibility, access and mobility are important factors (e.g., stairs, turnstiles, elevators, access ramps, and signage) and recently the stadium—the PSO's main infrastructure—was ranked first in the world in terms of inclusivity for the colorblind <sup>[40]</sup>.

With regard to the practice of adapted sports, the PSO has around 100 federated athletes in seven sports (boccia, basketball, football 7, futsal, swimming, table tennis and goalball) <sup>[41]</sup>. The importance that the PSO gives to adapted sports is visible in that the trophies won by athletes are presented <sup>[42]</sup> in one of the most visited cultural places in the city, the FCP Museum, which boasts the top position in museums to visit in the northern region of the country and, together with Estádio do Dragão, is distinguished by TripAdvisor as 1 of the top 10 tourist attractions in Porto city <sup>[43][44]</sup>.

### 2.2.2. Attraction and Retention of Human Capital

The topic attraction and retention of human capital (ARHC) is crucial for any organization, and the sports industry is no exception. Attracting talented human capital is the gateway to the organization and the beginning of engagement with the organization. Retention, on the other hand, refers to a bidirectional effort between the organization and the employee in order to achieve organizational goals. This topic is also characterized by three areas of action: (a) keeping human resources motivated; (b) strengthening cohesion and team spirit; (c) leveraging talent and adding value to talent. It is a topic that is characterized by not having external visibility.

Employing hundreds of collaborators, promoting the practice of sports to thousands of practitioners followed by millions of fans, and moving hundreds of millions of euros annually, the enormous visibility of PSOs in society increases the degree of responsibility of their most direct stakeholders: the collaborators. The three action areas defined above in this topic are fundamental to the economic, financial, sporting and social success of the PSO.

## References

1. Underwood, R.L.; Klein, N.M.; Burke, R.R. Packaging communication: Attentional effects of product imagery. *J. Prod. Brand Manag.* 2001, 10, 403–422.
2. Senaux, B. A stakeholder approach to football club governance. *Int. J. Sport Manag. Mark.* 2008, 4, 4–7.

3. Baker, B.J.; McDonald, H.; Funk, D.C. The uniqueness of sport: Testing against marketing's empirical laws. *Sport Man. Rev.* 2016, 19, 378–390.
4. Triantafyllidis, S.; Darvin, L. Mass-participant Sport Events and Sustainable Development: Gender, Social Bonding, and Connectedness to Nature as Predictors of Socially and Environmentally Responsible Behavior Intentions. *Sustain. Sci.* 2021, 16, 239–253.
5. United Nations. Transforming our World: The 2030 Agenda for Sustainable Development, A/RES/70/1. 2015, p. 41. Available online: <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20.pdf> (accessed on 11 October 2021).
6. McCullough, B.P.; Orr, M.; Kellison, T.B. Sport Ecology: Conceptualizing an Emerging Subdiscipline Within Sport Management. *J. Sport Manag.* 2020, 34, 509–520.
7. Trail, G.T.; McCullough, B.P. Marketing sustainability through sport: Testing the sport sustainability campaign evaluation model. *Eur. Sport Manag. Q.* 2019, 20, 109–129.
8. Komiyama, H.; Takeuchi, K. Sustainability Science: Building a New Discipline. *Sustain. Sci.* 2006, 1, 1–6.
9. Francis, T.; Norris, J.; Brinkmann, R. Sustainability initiatives in professional soccer. *Soccer Soc.* 2017, 18, 396–406.
10. Inoue, Y.; Kent, A. Investigating the role of corporate credibility in corporate social marketing: A case study of environmental initiatives by professional sport organizations. *Sport Manag. Rev.* 2012, 15, 330–344.
11. Maditati, D.R.; Munim, Z.H.; Schramm, H.-J.; Kummer, S. A review of green supply chain management: From bibliometric analysis to a conceptual framework and future research directions. *Res. Cons. Recycl.* 2018, 139, 150–162.
12. Trail, G.T.; 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.
13. Casper, J.M.; Pfahl, M.E.; McCullough, B.P. Intercollegiate sport and the environment: Examining fan engagement based on athletics department sustainability efforts. *J. Issues Intercol. Athl.* 2014, 7, 65–91.
14. Casper, J.M.; Bocarro, J.N.; Lothary, A.F. An examination of pickleball participation, social connections, and psychological well-being among seniors during the COVID-19 pandemic. *World Leis. J.* 2021, 63, 330–346.
15. Covell, D. Attachment, Allegiance and a Convergent Application of Stakeholder Theory: Assessing the Impact of Winning on Athletic Donations in the Ivy League. *Sport Mark. Quart.* 2005, 14, 168–176. Available online: <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=18451704&site=ehost-live> (accessed on 16 November 2021).
16. García, B.; Welford, J. Supporters and football governance, from customers to stakeholders: A literature review and agenda for research. *Sport Manag. Rev.* 2015, 18, 517–528.
17. Casper, J.M.; McCullough, B.P.; Pfahl, M.E. Examining environmental fan engagement initiatives through values and norms with intercollegiate sport fans. *Sport Manag. Rev.* 2020, 23, 348–360.
18. Trendafilova, S.; Babiak, K. Understanding strategic corporate environmental responsibility in professional sport. *Int. J. Sport Manag. Mark.* 2013, 13, 1–26.
19. Triantafyllidis, S.; Ries, R.J.; Kaplanidou, K. Carbon Dioxide Emissions of spectators' transportation in collegiate sporting events: Comparing on-campus and off-campus stadium locations. *Sustainability* 2018, 10, 241.
20. Dosumu, A.; Colbeck, I.; Bragg, R. Greenhouse gas emissions as a result of spectators travelling to football in England. *Sci. Rep.* 2017, 7, 1–7.

21. Chard, C.; Mallen, C. Examining the linkages between automobile use and carbon impacts of community-based ice hockey. *Sport Manag. Rev.* 2012, 15, 476–484.
22. Collins, A.; Flynn, A. Measuring the environmental sustainability of a major sporting event: A case study of the FA Cup Final. *Tour. Econ.* 2008, 14, 751–768.
23. 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.* 2015, 18, 244–255.
24. Wicker, P. The carbon footprint of active sport participants. *Sport Manag. Rev.* 2019, 22, 513–526.
25. Orr, M.; Schneider, I. Substitution interests among active-sport tourists: The case of a cross-country ski event. *J. Sport Tour.* 2018, 22, 315–332.
26. International Olympic Committee. Manual on Sport and the Environment. 2005. Available online: <https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Documents/Olympism-in-Action/Environment/Manual-on-Sport-and-the-Environment.pdf> (accessed on 15 October 2021).
27. Cayolla, R.; Santos, T.; Quintela, J.A. Sustainable Initiatives in Sports Organizations—Analysis of a Group of Stakeholders in Pandemic Times. *Sustainability* 2021, 13, 9122.
28. Ciletti, D.; Lanasa, J.; Ramos, D.; Luchs, R.; Lou, J. Sustainability Communication in North American Professional Sports Leagues: Insights from Web-Site Self-Presentations. *Int. J. Sport Commun.* 2010, 3, 64–91.
29. Wall-Tweedie, J.; Nguyen, S.N. Is the Grass Greener on the Other Side? A Review of the Asia-Pacific Sport Industry's Environmental Sustainability Practices. *J. Bus. Ethics* 2018, 152, 741–761.
30. Mallen, C.; Chard, C.; Sime, I. Web Communications of Environmental Sustainability Initiatives at Sport Facilities Hosting Major League Soccer. *J. Manag. Sustain.* 2013, 3, 115–130.
31. Blankenbuehler, M.; Kunz, M.B. Professional Sports Compete to Go Green. *Am. J. Manag.* 2014, 14, 75–81.
32. Trail, G.; McCulloch, B. A Longitudinal Study of Sustainability Attitudes, Intentions, and Behaviors. *Sustain. Sci.* 2021, 16, 1503–1518.
33. Inoue, Y.; Kent, A. Sport Teams as Promoters of Pro-Environmental Behavior: An Empirical Study. *J. Sport Manag.* 2012, 26, 417–432.
34. Sapo. 1860 Titles. 2018. Available online: <https://desporto.sapo.pt/futebol/primeira-liga/artigos/fc-porto-125-anos-e-1860-titulos-dragoes-correm-para-mais-um-campeonato> (accessed on 15 October 2021).
35. FCPorto. Many Faces. 2020. Available online: <https://www.fcporto.pt/pt/noticias/20200117-pt-many-faces-estes-sao-os-artistas-que-vao-cantar-pela-igualdade> (accessed on 15 October 2021).
36. Maisfutebol. The Same Ambition. 2021. Available online: <https://maisfutebol.iol.pt/desporto-adaptado/wendell/a-mesma-ambicao-fc-porto-assinala-o-dia-da-pessoa-com-deficiencia> (accessed on 15 October 2021).
37. Greensavers. A Estratégia de Sustentabilidade do Futebol Clube do Porto. 2013. Available online: <https://greensavers.sapo.pt/a-estrategia-de-sustentabilidade-do-futebol-clube-do-porto> (accessed on 25 November 2021).
38. Transfermarkt. Número de Espectadores 21/22. 2021. Available online: [https://www.transfermarkt.pt/liga-portugal-bwin/besucherszahlen/wettbewerb/PO1/saison\\_id/2021](https://www.transfermarkt.pt/liga-portugal-bwin/besucherszahlen/wettbewerb/PO1/saison_id/2021) (accessed on 25 November 2021).
39. The Stadium Guide. Europe's Largest Football Stadiums. 2021. Available online: <https://www.stadiumguide.com/figures-and-statistics/lists/europes-largest-football-stadiums/> (accessed on 25 November 2021).

40. FC Porto. Colour Inclusion. 2021. Available online: <https://www.fcporto.pt/pt/noticias/20210106-pt-fc-porto-aposta-na-inclusao-pela-cor-nas-suas-infraestruturas> (accessed on 25 November 2021).
41. FC Porto. Adapted Sport. 2021. Available online: <https://www.fcporto.pt/pt/modalidades/desporto-adaptado/> (accessed on 25 November 2021).
42. FC Porto. Adapted Sports Trophies are Already in the Museum. 2021. Available online: <https://www.fcporto.pt/pt/noticias/20210713-pt-trofeus-mais-recentes-do-desporto-adaptado-ja-estao-no-museu> (accessed on 18 November 2021).
43. FC Porto. Museu FC Porto e Estádio do Dragão Recebem Prémio Travellers Choice. 2020. Available online: <https://www.fcporto.pt/pt/noticias/20200821-pt-museu-fc-porto-e-estadio-do-dragao-recebem-premio-travellers-choice> (accessed on 18 November 2021).
44. Tripadvisor. Museums in Porto. 2021. Available online: [https://www.tripadvisor.pt/Attractions-g189180-Activities-c49-Porto\\_Porto\\_District\\_Northern\\_Portugal.htm](https://www.tripadvisor.pt/Attractions-g189180-Activities-c49-Porto_Porto_District_Northern_Portugal.htm) (accessed on 18 November 2021).

---

Retrieved from <https://encyclopedia.pub/entry/history/show/54429>