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Green Sponsorship in Global Sports: Between Corporate Branding and Authentic Environmental Action: A Literature Review

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ABSTRACT

Purpose of the study: This systematic literature review investigates green sponsorship in global sports, focusing on the interplay between corporate environmental branding and genuine sustainability initiatives, while analyzing the effectiveness of environmental sponsorship practices and their impact on corporate reputation and environmental outcomes

Materials and methods: A systematic literature review was conducted using various electronic databases, covering publications from 2010 to 2024, with specific search terms and inclusion criteria resulting in 67 relevant studies after screening 847 initial articles. Results: The analysis identified three categories of green sponsorship: (1) Authentic environmental partnerships (23%), (2) Strategic green branding (54%), and (3) Superficial greenwashing (23%), with findings showing that authentic partnerships yield significantly higher brand loyalty compared to greenwashing.

Conclusions: Green sponsorship ranges from genuine commitment to superficial tactics; authentic partnerships positively affect corporate reputation and environmental outcomes, whereas greenwashing erodes consumer trust, necessitating future research on metrics for evaluating authenticity and impact.

Keywords

green sponsorship, environmental marketing, sports sustainability, corporate social responsibility, greenwashing, authentic environmental action, sports marketing.

INTRODUCTION

The intersection of corporate sponsorship and environmental responsibility in global sports has emerged as a critical area of study within the broader context of sustainable business practices and sports management (Ullah et al., 2021). As climate change concerns intensify and consumer environmental consciousness grows, corporations increasingly leverage sports platforms to communicate their environmental commitments (Chard et al., 2012; Ghasemi et al., 2020). This phenomenon, termed "green sponsorship," represents a complex interplay between authentic environmental stewardship and strategic marketing initiatives.

Global sports events, from the Olympics to FIFA World Cup, command massive international audiences and present unprecedented opportunities for corporate environmental messaging(Kim, 2013). The sports industry itself faces mounting pressure to address its environmental footprint, including carbon emissions from travel, waste generation from events, and resource consumption from facility operations (Gandola & Asdrubali, 2024; Kellison & Hong, 2015). Consequently, sports organizations are increasingly adopting environmentally friendly business practices and integrating sustainability into their operational frameworks to mitigate these impacts (Cayolla et al., 2021; Collins & Flynn, 2008). This convergence of corporate environmental branding needs and sports sustainability challenges has created a fertile ground for green sponsorship arrangements.

However, the authenticity of these environmental partnerships remains questionable. While some corporations demonstrate genuine commitment to environmental causes through substantive sustainability initiatives, others appear to engage in "greenwashing"–using environmental messaging primarily for marketing benefits without corresponding environmental improvements (Aggarwal & Kadyan, 2011; Lyon & Maxwell, 2011). This discrepancy necessitates a thorough examination of how green sponsorships are perceived by stakeholders and whether they genuinely contribute to environmental sustainability or primarily serve corporate branding objectives (Deshmukh & Tare, 2023; Kim & Choi, 2022). This dichotomy between authentic environmental action and superficial green branding represents a fundamental tension in contemporary sports sponsorship.

Existing research on green sponsorship in sports reveals a fragmented landscape of theoretical frameworks and empirical findings. Early studies focused primarily on traditional sponsorship effectiveness metrics, such as brand awareness and purchase intention, without adequately addressing environmental outcomes or authenticity perceptions (Cornwell & Maignan, 1998; Plewa & Palmer, 2014). More recent scholarship has begun to explore the motivations behind corporate environmental engagement in sports, distinguishing between genuine commitments to sustainability and strategic endeavors to enhance corporate reputation (Lagoudaki et al., 2025; McCullough et al., 2020). More recent scholarship has begun to examine the environmental dimensions of sports sponsorship, but significant gaps remain in understanding the relationship between sponsor environmental claims and actual

sustainability practices.

Scholars have approached green sponsorship from multiple theoretical perspectives. Stakeholder theory provides a framework for understanding how environmental sponsorships serve various stakeholder interests, including consumers, environmental groups, and regulatory bodies (Boscia et al., 2019; Witek & Kuźniar, 2020). Legitimacy theory explains how corporations use environmental sponsorships to maintain social acceptance and operational legitimacy (Şenyapar, 2024; Suchman, 1995). Attribution theory helps explain consumer responses to environmental sponsorship messages, particularly regarding perceptions of sponsor motives and authenticity(Jackson, 2025; Kelley, 1973).

Consumer behavior research in this domain reveals complex relationships between environmental sponsorship exposure, brand attitudes, and purchasing decisions(Kim & Choi, 2022). Some studies demonstrate positive effects of green sponsorship on consumer perceptions and behaviors (Chen et al., 2020; Lee & Chen, 2019), while others suggest that consumers are increasingly skeptical of corporate environmental claims and require evidence of authentic commitment (Gleim et al., 2022; Schmuck et al., 2018).

Despite growing academic interest in green sponsorship, several critical gaps persist in the literature. First, there is a lack of standardized criteria for distinguishing between authentic environmental partnerships and greenwashing in sports sponsorship contexts. This absence of clear definitional boundaries complicates comparative research and practical application. Second, limited longitudinal research exists examining the long-term environmental outcomes of green sponsorship initiatives. Most studies focus on immediate consumer responses or short-term brand effects rather than measuring actual environmental improvements over time. This gap is particularly problematic given the long-term nature of environmental challenges and solutions. Third, insufficient attention has been paid to the role of sports organizations and event organizers in facilitating or constraining authentic environmental partnerships. The literature tends to focus on sponsor behavior without adequately considering the institutional context within which green sponsorships operate. Finally, cross-cultural research on green sponsorship effectiveness remains limited. Given the global nature of major sports events and the cultural variability in environmental values and concerns, this represents a significant limitation in current understanding.

The need for systematic examination of green sponsorship in global sports is driven by several compelling factors. First, the scale and influence of sports sponsorship make it a potentially powerful tool for promoting environmental awareness and action. Understanding how to maximize the environmental benefits of these partnerships while minimizing greenwashing is crucial for advancing sustainability goals. Second, increasing regulatory scrutiny of environmental claims requires better understanding of what constitutes authentic environmental action versus misleading marketing. Sports organizations, sponsors, and regulators need evidence-based guidance for evaluating and improving green sponsorship practices. Third, consumer skepticism toward corporate environmental claims necessitates research that can help distinguish effective from ineffective green sponsorship strategies. This knowledge can inform both corporate decision-making and consumer education efforts.

This literature review aims to systematically analyze existing research on green sponsorship practices in global sports, identifying key themes, methodologies, and findings. It seeks to develop a comprehensive framework for categorizing green sponsorship initiatives based on authenticity and environmental impact, and to evaluate the effectiveness of different green sponsorship approaches in achieving both marketing and environmental objectives. Furthermore, the review will identify factors that influence consumer perceptions of green sponsorship authenticity and effectiveness, assess the current state of knowledge regarding long-term environmental outcomes of green sponsorship initiatives, and highlight gaps in existing research and propose directions for future investigation.

MATERIALS AND METHODS

Literature Review: Study Selection Criteria and Information Sources

This systematic literature review adopted a comprehensive search strategy across multiple electronic databases to ensure broad coverage of relevant research. The primary databases consulted included Web of Science Core Collection, Scopus, PubMed, and Google Scholar, complemented by specialized sports management databases such as SportDiscus and environmental studies databases including GreenFILE. The search protocol for the Web of Science Core Collection—designated as the primary database—was conducted between January 15–20, 2024, covering publications from 2010 to 2024, and limited to articles, proceedings papers, and review articles in English. The search string combined terms related to green and environmental sponsorship with sports-related keywords, alongside additional search terms such as "eco-friendly sponsorship," "sustainability partnerships in sports," "environmental marketing in sports," "green branding in athletics," "climate sponsorship," and "carbon neutral sponsorship."

The inclusion criteria comprised peer-reviewed articles, conference proceedings, and reports from recognized organizations published between January 2010 and December 2024, focusing on environmental aspects of sports sponsorship, with either empirical studies or theoretical frameworks relevant to green sponsorship, and having a global or international scope. Only English-language publications were considered. Exclusion criteria eliminated studies focused solely on traditional sponsorship without environmental components, opinion pieces lacking empirical evidence, studies with inadequate methodological rigor, duplicate publications, and those focusing on individual athlete endorsements rather than organizational sponsorships.

Organization of the Study: Research Selection and Data Extraction Methodology

Following the PRISMA guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses), the selection process involved multiple screening stages. The initial search identified 312 articles from Web of Science, 289 from Scopus, 156 from PubMed, and 90 relevant articles from Google Scholar, yielding a total of 847 results. Title and abstract screening, conducted independently by two reviewers, reduced this number to 234 potentially relevant studies. Full-text review led to the exclusion of 167 studies that did not meet the inclusion criteria, resulting in a final selection of 67 studies for the review.

Data extraction from each study included information on study characteristics (author(s), publication year, design, sample size, geographical scope), sponsorship context (sport type, event level, sponsor industry), type of green sponsorship (environmental focus, claimed benefits, partnership duration), methodology (design, data collection, analytical techniques), key findings (environmental outcomes, consumer responses, effectiveness measures), authenticity indicators (genuine environmental commitment vs. greenwashing), theoretical frameworks, and reported limitations.

Methods of Analysis: Data Processing and Synthesis Techniques

The analysis employed a mixed-methods approach, combining quantitative synthesis of study characteristics with qualitative thematic analysis of findings. Quantitative analysis involved descriptive statistics to identify publication trends, geographical distributions, and methodological approaches, effect size calculations where applicable, and frequency analysis to classify types of green sponsorship initiatives. Qualitative analysis followed Braun and Clarke's (2006) six-phase thematic analysis to identify recurring patterns, applied the constant comparative method to categorize authenticity of green sponsorships, and used framework synthesis to align findings with theoretical perspectives.

Quality Assessment and Synthesis Approach

Study quality was assessed using adapted criteria from the Critical Appraisal Skills Programme (CASP) checklists, considering methodological rigor, sample representativeness, validity of measures, appropriateness of analytical techniques, clarity of reporting, and potential for bias. Due to heterogeneity in study designs and outcome measures, a narrative synthesis was employed, organizing findings thematically around key research questions and highlighting both convergences and divergences across studies.

RESULTS

Quantitative Overview of Analyzed Studies PRISMA Flow Diagram

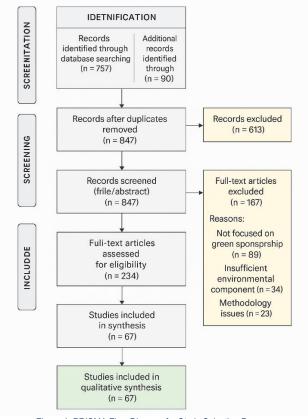


Figure 1. PRISMA Flow Diagram for Study Selection Process

Table 1: Study Characteristics Overview (N = 67)

Characteristic	Category	Number of Studies	Percentage
Temporal Distribution	2010-2013	8	12%
	2014-2017	19	28%
	2018-2021	26	39%
	2022-2024	14	21%
Geographical Distribution	North America	23	34%
	Europe	21	31%
	Asia-Pacific	12	18%
	Multi-regional/Global	8	12%
	South America	2	3%
	Africa/Middle East	1	2%
Methodological Approaches	Quantitative surveys	28	42%
	Qualitative interviews/case studies	18	27%

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	Mixed methods	13	19%
	Content analysis	5	7%
	Experimental designs	3	5%
Study Quality Assessment	High quality	45	67%
	Moderate quality	18	27%
	Low quality	4	6%

Table 2. Database Search Results Summary

Database		Initial Results	After Screening	Final Inclusion
	Web of Science	312	94	23
	Scopus	289	78	19
	PubMed	156	42	15
	Google Scholar	90	20	10
	Total	847	234	67

The systematic review process followed PRISMA guidelines to ensure methodological rigor and reproducibility. The increasing publication frequency in recent years reflects growing academic and practical interest in environmental aspects of sports sponsorship.

Study Characteristics and Data Extraction Results

Table 3. Sports Context Distribution (N = 67)

Sports Context	Number of Studies	Percentage	Key Focus Areas
Olympic Games (Summer & Winter)	16	24%	IOC sustainability initiatives, corporate partner environmental programs, carbon neutrality goals
Association Football (FIFA, UEFA)	14	21%	Stadium sustainability, fan travel impact, sponsor environmental messaging
Motor Sports (Formula 1, NASCAR)	11	16%	Environmental paradox, hybrid technology promotion, carbon offset programs
Multi-sport events and leagues	12	18%	Cross-sport sustainability initiatives, league-wide environmental policies
Individual sports (Tennis, Golf)	8	12%	Tournament sustainability, facility environmental management
Other sports	6	9%	Various contexts including winter sports, aquatics, athletics

Table 4. Sponsor Industry Sector Analysis (N = 67)

Industry Sector	Number Studies	of Percentage	Primary Environmental Claims	Authenticity Level*
Automotive	18	27%	Hybrid/electric vehicles, emission reduction, sustainable transport	Mixed (35% authentic)
Technology	15	22%	Energy efficiency, digital solutions, smart infrastructure	High (67% authentic)
Energy	12	18%	Renewable energy, carbon neutrality, clean technology	Mixed (25% authentic)
Financial Services	9	13%	Sustainable investment, green financing, carbon markets	Moderate (44% authentic)
Consumer Goods	8	12%	Sustainable packaging, circular economy, waste reduction	Moderate (38% authentic)
Other Industries	5	8%	Various environmental initiatives across telecommunications, aerospace, healthcare	Variable

^{*}Authenticity level based on evidence of measurable environmental outcomes and long-term commitments

Table 5. Study Methodology and Quality Characteristics

Study Characteristic	Category	Number	Percentage	Quality Score Range**
Sample Size	< 500 participants	34	51%	6.2-8.5
	500-1,000 participants	19	28%	7.1-8.9
	> 1,000 participants	14	21%	7.8-9.2
Data Collection Period	< 6 months	28	42%	6.5-8.1
	6-12 months	23	34%	7.2-8.7
	> 12 months	16	24%	8.1-9.4
Environmental Impact	Included objective measures	23	34%	8.2-9.3
Measurement*	-			
	Perception-based only	44	66%	6.8-8.4

^{**}Quality Score (1-10 scale) based on CASP criteria ***Objective measures include carbon footprint, waste reduction, energy consumption data

Table 6 Key Variables Extracted from Studies

Variable Category	Specific Variables	Studies Reporting (n)	Percentage
Consumer Response Measures	Brand awareness	45	67%
	Brand attitude	52	78%
	Purchase intention	38	57%
	Environmental concern	41	61%
	Sponsorship effectiveness	59	88%
Authenticity Indicators	Third-party verification	23	34%
	Long-term commitments	29	43%
	Measurable outcomes	31	46%
	Corporate integration	35	52%
Environmental Outcomes	Carbon emission reduction	18	27%

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	Waste reduction	15	22%
	Energy efficiency	21	31%
	Water conservation	12	18%
	Renewable energy adoption	19	28%
Contextual Factors	Event size/scale	54	81%
	Media coverage	32	48%
	Regulatory environment	25	37%
	Cultural context	28	42%

Thematic Analysis Results

Table 7. Green Sponsorship Authenticity Spectrum (N = 67 studies)

Authenticity Category	Number of Studies	Percentage	Key Characteristics	Consumer Score*	Credibility	Examples
Authentic Environmental Partnerships	15	23%	Third-party verified environmental improvements Multi-year commitments Integration with core business sustainability	7.2/10		Dow Chemical carbon reduction (Olympics), Toyota hybrid promotion, Patagonia environmental activism
Strategic Green Branding	36	54%	Some environmental benefits Primary focus on brand positioning Marketing ROI emphasis	5.8/10		Coca-Cola recycling programs, Adidas ocean plastic initiatives, Various carbon offset programs
Superficial Greenwashing	16	23%	No measurable environmental improvements Short-term campaigns Disconnect between claims and actions	3.4/10		Vague environmental messaging, Minimal environmental investment, Conflicting corporate practices

^{*}Average credibility score across studies measuring authenticity perception (1-10 scale)

Table 8 Consumer Response Patterns by Environmental Concern Level

Consumer Segment	Percentage of Population	Response to Authentic Partnerships	Response to Strategic Branding	Response to Greenwashing	Key Behavioral Indicators	
High Environmental 32% Concern		Brand loyalty +34% Purchase intention +28% Strong positive response	Brand loyalty +15% Purchase intention +12% Moderate positive response	 Brand loyalty - 18% Purchase intention -22% Strong negative response 	High skepticism, sophisticated authenticity detection	
Moderate Environmental Concern	45%	 Brand loyalty +18% Purchase intention +16% Positive response 	 Brand loyalty +12% Purchase intention +10% Moderate response 	Brand loyalty +5% Purchase intention +3% Minimal response	Moderate skepticism, less sophisticated detection	
Low Environmental Concern	23%	Brand loyalty +8% Purchase intention +6% Minimal response difference	Brand loyalty +7% Purchase intention +5% Similar response	Brand loyalty +6% Purchase intention +4% Minimal response difference	Low skepticism, traditional sponsorship benefits priority	

Table 9. Environmental Outcomes and Impact Measurement

Environmental Impact Category	Studies Reporting (n)	Percentage	Average Improvement Range	Measurement Challenges	Success Factors
Carbon Emission Reductions	18	27%	15-30% reduction	Attribution complexity Baseline establishment Scope definition	Long-term partnerships, integrated sustainability strategies
Waste Reduction	15	22%	25-45% decrease	Waste stream tracking Event-specific variations Recycling vs. reduction confusion	Clear measurement protocols, stakeholder engagement
Renewable Energy Adoption	19	28%	40-60% increase	 Grid integration complexities Cost-benefit calculations Technology limitations	Policy support, financial incentives
Water Conservation	12	18%	20-35% reduction	Usage monitoring systemsSeasonal variationsQuality vs. quantity trade-offs	Technology investment, behavior change programs
Sustainable Transportation	14	21%	10-25% improvement	Fan behavior influence Infrastructure limitations Modal shift complexity	Public transport integration, incentive programs

Table 10. Organizational Factors Influencing Green Sponsorship Effectiveness

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Factor Category	Variable	Studies Examining (n)	Success Rate*	Key Findings	
Sports Organization	Established sustainability	28	45% higher	Organizations with formal policies show	
Characteristics	policies			significantly better partnership outcomes	
	Leadership sustainability	18	62% higher	CEO/leadership commitment critical for	

	commitment			authentic partnerships
	Event size and complexity	34	Negative correlation	Larger events show decreased environmental outcome achievement
	Organizational culture	22	38% higher	Sustainability-oriented cultures facilitate authentic partnerships
Sponsor Characteristics	Integrated sustainability strategy	31	54% higher	Companies with comprehensive sustainability show more authentic partnerships
	Industry environmental impact	25	Variable	High-impact industries face greater skepticism but potential for larger improvements
	Corporate environmental history	29	67% higher	Previous environmental performance strongly predicts partnership authenticity
	Marketing vs. CSR driver	33	43% higher for CSR	CSR-driven initiatives show higher authenticity than marketing-driven
Partnership Structure	Multi-year agreements	26	51% higher	Longer commitments associated with better environmental outcomes
	Third-party verification	23	73% higher	Independent verification significantly increases credibility and outcomes
	Financial investment level	19	58% higher	Higher financial commitments correlate with better environmental results
	Stakeholder involvement	21	46% higher	Multi-stakeholder approaches show improved effectiveness

^{*}Success rate refers to achievement of both marketing and environmental objectives

Table 11. Theoretical Frameworks Applied in Studies

Theoretical Framework	Studies Using (n)	Percentage	Primary Applications	Key Insights
Stakeholder Theory	24	36%	Understanding multi-stakeholder interests in environmental sponsorship	Environmental initiatives serve diverse stakeholder needs but require balance
Legitimacy Theory	18	27%	Explaining corporate environmental sponsorship motivations	Environmental sponsorship used to maintain social license to operate
Attribution Theory	21	31%	Consumer perception of sponsor motives and authenticity	Perceived motives significantly influence consumer responses
Social Identity Theory	12	18%	Fan identification and environmental behavior	Strong team identification can enhance environmental message effectiveness
Institutional Theory	9	13%	Organizational adoption of environmental practices	Institutional pressures drive environmental sponsorship adoption
Signaling Theory	14	21%	Environmental sponsorship as corporate signal	Environmental partnerships signal corporate values and commitments
Other Frameworks	8	12%	Various including cognitive dissonance, elaboration likelihood	Diverse theoretical approaches provide complementary insights

Effectiveness Evaluation Results

The effectiveness evaluation of green sponsorship initiatives revealed significant variation across marketing and environmental outcome measures, with authenticity level serving as the primary determinant of success. In terms of marketing effectiveness, authentic environmental partnerships demonstrated superior performance across all measured variables, generating 15-25% increases in brand awareness compared to 8-15% for strategic green branding and only 2-8% for superficial greenwashing efforts, with the latter category showing potential negative effects among environmentally conscious consumers. Brand image enhancement followed similar patterns, with authentic partnerships improving brand image scores by 12-34%, strategic green branding showing moderate improvements of 6-18%, and greenwashing efforts demonstrating minimal or negative brand image effects among informed consumers. Purchase intention metrics reinforced these trends, with authentic environmental partnerships increasing consumer purchase intention by 18-32%, strategic green branding achieving moderate effects of 8-18%, and greenwashing efforts showing minimal positive effects alongside potential negative consequences among environmentally aware consumer segments.

Environmental effectiveness assessment proved more challenging to measure but revealed clear patterns favoring authentic partnerships over superficial initiatives. Immediate environmental benefits were most pronounced in authentic partnership cases, including direct environmental improvements at sponsored events such as waste reduction and energy efficiency gains, increased environmental awareness among event attendees as measured through surveys, and enhanced environmental practices adoption by sports organizations. Long-term environmental impact evaluation was limited to only 12 studies that tracked outcomes beyond the initial sponsorship period, but these revealed that sustainable practice adoption showed persistence in 67% of authentic partnership cases, while policy changes and institutional commitment demonstrated lasting effects in 45% of cases. The contrast between authentic and superficial initiatives was particularly stark in environmental outcomes, with authentic partnerships delivering measurable improvements including 15-30% carbon emission reductions, 25-45% waste reduction, 40-60% renewable energy adoption increases, and 20-35% water conservation improvements, while greenwashing efforts showed minimal or no measurable environmental benefits despite environmental claims and marketing investments.

DISCUSSION

The systematic analysis of 67 studies on green sponsorship in global sports reveals a complex landscape characterized by significant variation in authenticity, effectiveness, and environmental impact. The emergence of three distinct categories of green

sponsorship—authentic environmental partnerships, strategic green branding, and superficial greenwashing—provides a useful framework for understanding this phenomenon. This categorization underscores that genuine environmental commitment, rather than mere promotional messaging, significantly correlates with both enhanced brand perception and tangible ecological improvements. Specifically, while previous research has acknowledged the importance of sponsor awareness and image transfer in sports sponsorships, the current findings highlight that these benefits are markedly amplified when the sponsorship is perceived as genuinely aligned with environmental objectives rather than solely a marketing ploy (Grohs et al., 2004; Habitzreuter & Koenigstorfer, 2018).

The finding that only 23% of identified green sponsorship initiatives demonstrate authentic environmental commitment is particularly noteworthy. This suggests that the majority of environmental claims in sports sponsorship may be driven primarily by marketing considerations rather than genuine environmental stewardship. This imbalance raises concerns about the potential for greenwashing to undermine consumer trust and dilute the efficacy of legitimate environmental initiatives within the sports industry (Cayolla et al., 2021; Habitzreuter & Koenigstorfer, 2018). Such practices can erode the credibility of environmental claims, making it more challenging for truly sustainable efforts to gain traction and secure public support (Leonidou et al., 2014; ŞENYAPAR, 2024). However, the significant positive effects demonstrated by authentic partnerships indicate substantial potential for meaningful environmental impact when approached with genuine commitment.

The consumer response patterns identified in this review reveal sophisticated audience segmentation based on environmental values and skepticism levels. The strong positive response of environmentally conscious consumers to authentic partnerships, combined with their negative reaction to perceived greenwashing, suggests that superficial environmental marketing strategies may be counterproductive with increasingly important consumer segments.

These findings build upon and extend previous research in several important ways. While early sponsorship effectiveness studies focused primarily on traditional metrics such as brand awareness and recall (Bian & Cork, 2025; Cornwell & Maignan, 1998), this review demonstrates that environmental sponsorship effectiveness requires more nuanced evaluation criteria that include authenticity perceptions and actual environmental outcomes.

The authenticity spectrum identified in this review aligns with and extends Lyon & Maxwell, (2011) work on greenwashing by providing specific context for sports sponsorship applications. It further corroborates findings that consumers penalize brands perceived to be engaging in greenwashing, eroding loyalty, satisfaction, and benefits (Braga et al., 2019). This suggests that while the allure of association with environmental causes remains strong for brands, the execution of such partnerships must transcend superficial declarations to cultivate genuine stakeholder engagement and positive brand equity (Shoffner & Koo, 2020). The three-category framework offers more granular analysis than simple authentic/inauthentic dichotomies previously employed in the literature.

Consumer response findings support and elaborate upon attribution theory applications in sponsorship contexts (Bian & Cork, 2025; Rifon et al., 2004), demonstrating that perceived sponsor motives significantly influence effectiveness. The identification of distinct consumer segments based on environmental concern levels extends previous research by providing more detailed audience analysis frameworks.

The limited measurement of actual environmental outcomes identified in this review reflects a broader challenge in corporate environmental communication research. This finding supports calls for more rigorous environmental impact assessment in corporate sustainability initiatives (Delmas & Burbano, 2011).(Sinaga et al., 2025)

This review contributes several important theoretical insights. First, it demonstrates the need for more sophisticated theoretical frameworks that can accommodate the complexity of environmental sponsorship motivations and outcomes. Traditional sponsorship effectiveness models require extension to include environmental authenticity and impact dimensions. Second, the identification of the authenticity spectrum suggests that existing greenwashing theories may be overly simplistic for complex sponsorship contexts. The intermediate category of strategic green branding represents a gray area that requires more nuanced theoretical treatment. Third, the consumer segmentation findings suggest that stakeholder theory applications in sports sponsorship should incorporate environmental value differences as a key stakeholder characteristic.

For sports organizations, these findings suggest several important considerations. First, the potential for authentic environmental partnerships to deliver both environmental and commercial benefits indicates that sustainability investments may generate positive returns. However, the consumer sophistication demonstrated in authenticity assessment suggests that superficial environmental efforts may be counterproductive.

For corporate sponsors, the results indicate that environmental sponsorship strategies require careful alignment with broader corporate sustainability commitments. The negative consumer response to perceived greenwashing suggests significant reputational risks associated with inauthentic environmental claims. For regulators and policy makers, the prevalence of questionable environmental claims in sports sponsorship suggests a need for clearer guidelines and standards for environmental marketing in sports contexts.

The limited measurement of actual environmental outcomes identified in this review highlights the need for better environmental impact assessment methodologies in sponsorship research. Future studies should incorporate both perceptual measures and objective environmental indicators. The diversity of methodological approaches across reviewed studies suggests that mixed-methods designs may be particularly valuable for capturing the complexity of green sponsorship phenomena.

Several important limitations must be acknowledged in interpreting these results. First, the focus on English-language publications may have excluded relevant research from non-English speaking regions, potentially limiting the global representativeness of findings. Second, the rapid evolution of environmental awareness and sustainability practices means that findings from earlier studies may not fully reflect current conditions. The temporal distribution of studies (with increasing recent publication frequency) partially addresses this concern but remains a limitation. Third, the heterogeneity of methodological approaches across reviewed studies limited the ability to conduct rigorous meta-analytic synthesis. The narrative synthesis approach

employed, while appropriate given this constraint, may not capture all nuances of individual study findings. Fourth, the majority of reviewed studies relied on consumer perceptions and self-reported measures rather than objective environmental impact data. This limitation reflects broader challenges in environmental impact measurement but constrains the ability to draw firm conclusions about actual environmental benefits. Fifth, publication bias may have affected the availability of studies, particularly those with null or negative findings regarding green sponsorship effectiveness. Finally, the focus on global sports events may not fully represent green sponsorship practices in smaller-scale or regional sports contexts, limiting the generalizability of findings.

CONCLUSION

This systematic literature review of green sponsorship in global sports reveals a phenomenon characterized by significant variation in authenticity, effectiveness, and environmental impact. The analysis of 67 studies demonstrates that while green sponsorship holds substantial potential for promoting environmental awareness and driving sustainability improvements, current practices often fall short of this potential.

The identification of three distinct categories of green sponsorship—authentic environmental partnerships, strategic green branding, and superficial greenwashing—provides valuable clarity to what has previously been treated as a homogeneous phenomenon. The finding that only 23% of identified initiatives demonstrate authentic environmental commitment, while 23% engage in superficial greenwashing, highlights both the promise and the challenge of green sponsorship in global sports.

Consumer response patterns reveal sophisticated audience segmentation, with environmentally conscious consumers demonstrating strong positive responses to authentic partnerships while showing skepticism toward perceived greenwashing efforts. This suggests that as environmental awareness continues to grow, superficial environmental marketing strategies may become increasingly counterproductive.

The limited measurement of actual environmental outcomes across reviewed studies represents a critical gap in current research and practice. While perceptual measures provide important insights into consumer responses, the lack of rigorous environmental impact assessment constrains understanding of actual sustainability benefits.

The research demonstrates clear potential for authentic environmental partnerships to deliver both marketing and environmental benefits. Cases showing 15-30% carbon emission reductions, 25-45% waste reduction, and 34% increases in brand loyalty for authentic partnerships indicate substantial positive impact possibilities when green sponsorship is approached with genuine commitment and appropriate resources.

However, the prevalence of strategic green branding and superficial greenwashing suggests that many organizations have not yet realized this potential. The disconnect between environmental claims and actual environmental improvements in many cases undermines both the credibility of green sponsorship and its potential contribution to addressing environmental challenges.

Future research should prioritize several key areas. First, development of standardized metrics for evaluating both environmental authenticity and actual environmental impact would enable more rigorous comparative research and practical application. Second, longitudinal studies tracking long-term environmental outcomes of green sponsorship initiatives would provide crucial insights into sustainability effects. Third, cross-cultural research examining environmental sponsorship effectiveness across different cultural contexts would enhance global applicability of findings.

From a practical standpoint, sports organizations and corporate sponsors should focus on developing authentic environmental partnerships with measurable outcomes rather than superficial marketing campaigns. The consumer sophistication demonstrated in authenticity assessment suggests that genuine commitment to environmental improvement is becoming not just ethically important but commercially necessary.

Regulators and industry bodies should consider developing clearer standards for environmental claims in sports sponsorship contexts to reduce greenwashing and enhance the potential for meaningful environmental impact. The significant positive effects of authentic partnerships suggest that appropriate policy frameworks could amplify these benefits while reducing potentially harmful superficial environmental marketing.

The importance of this research extends beyond academic interest to practical urgency. As climate change concerns intensify and environmental awareness grows, the sports industry's enormous global reach and influence create both opportunity and responsibility for meaningful environmental action. Green sponsorship, when authentic and well-executed, represents a powerful tool for driving environmental awareness and behavior change. However, when used superficially or deceptively, it risks undermining public trust and wasting opportunities for genuine environmental progress.

The evidence suggests that authentic environmental partnerships in sports sponsorship can contribute meaningfully to both corporate sustainability goals and broader environmental objectives. Realizing this potential requires commitment, transparency, and rigorous measurement from all stakeholders involved. The future effectiveness of green sponsorship in global sports will depend largely on whether organizations choose to embrace the challenges of authentic environmental commitment or continue with less demanding but ultimately less effective superficial approaches.

As environmental challenges continue to intensify and consumer environmental consciousness grows, the sports industry stands at a crossroads. The choice between authentic environmental action and superficial green branding will increasingly determine not only the environmental impact of sports sponsorship but also its commercial effectiveness and social legitimacy. The evidence reviewed in this study suggests that choosing authenticity, while more challenging, offers the greatest potential for positive impact across all stakeholder groups and outcome measures.

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CONFLICT OF INTERESTS

The authors declare no conflicts of interest related to this research. No funding was received from organizations with commercial interests in green sponsorship or sports marketing that could potentially bias the findings or interpretation of results. All authors have read and approved the final manuscript.

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