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To cite this article: Portaluri Giorgio, Manoli Argyro Elisavet, Mura Rita & Vicentini Francesca (23 Apr 2025): Leading by example: how National Sports Federations implement environmentally sustainable change through human resource management, Leisure Studies, DOI: [10.1080/02614367.2025.2495272](https://doi.org/10.1080/02614367.2025.2495272)

To link to this article: <https://doi.org/10.1080/02614367.2025.2495272>



Published online: 23 Apr 2025.



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RESEARCH NOTE



Leading by example: how National Sports Federations implement environmentally sustainable change through human resource management

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ABSTRACT

Leisure organisations have ecological footprints and are subject to external pressures of diverse nature to address their change processes towards environmental sustainability. In these paths, knowledge concerning the role of human resource in leisure organisations remains unresearched. Adopting institutional theory and change management literature, this study aims at understanding whether and how organisations address environmental change through human resource management, while uncovering the drivers and challenges of these attempts. Data generated through interviews with executives of national sport federations reveal that top-management ecological conscience, the recognition of leading groups or roles, training and socio-environmental pressures are recognised as drivers of environmental change implementation. On the contrary, a substantial lack of logistic autonomy, finances and scope-oriented recruitment appear to obstruct positive change. Importantly, this study highlights that in the presence of normative and coercive vacuity within the broader system of the organisations national federations adopt a proactive bottom-up approach with respect to environmental changes. Indeed, although embryonal, limited, self-managed and uncoordinated by a supervisor authority, environmental processes of national sport federations via human resource management are in motion, pointing towards a rather optimistic future for the progress of leisure organisations.

ARTICLE HISTORY

Received 30 October 2024
Accepted 15 April 2025

KEYWORDS

Environmental sustainability; human resource management; change management; institutional theory; wave theory

Introduction

The relationship between leisure and the natural environment is widely discussed in leisure research (Erickson, 2011; Manoli et al., 2024; Salome et al., 2013; Stoddart, 2011). Many leisure activities, particularly outdoor sports, can negatively impact the environment (Salome et al., 2013; Stoddart, 2011). Research explores how leisure and sports organisations contribute to sustainability (McCullough et al., 2016), engage in Corporate Social Responsibility (Salome et al., 2013), adapt to climate change (Dingle & Stewart, 2018) and foster recreational activism (Erickson, 2011; Stoddart, 2011). Additionally, fans and athletes play key roles in sustainability efforts (Manoli et al., 2024). Environmental changes in leisure and sports organisations are driven by political, functional, or social pressures (Konstantopoulos & Manoli, 2024; McCullough et al., 2016).

Sustainability requires proactive measures across industries, as emphasised by the Paris Agreement and the UN Sustainable Development Goals (United Nations Organisation, 2019). Although sports ecology is gaining attention, research on how Human Resource Management (HRM) fosters sustainability in leisure organisations remains limited. HRM practices like sustainable recruitment, training and performance management can embed sustainability into organisational culture (Tang et al., 2018), improving environmental outcomes, employee engagement and reputation (Babiak & Trendafilova, 2011). However, their long-term effects require further study.

National Sports Federations (NSFs) significantly influence sustainability in leisure and sports (Konstantopoulos & Manoli, 2024; McCullough et al., 2016). NSFs operate within complex systems, facing challenges related to government funding (Konstantopoulos & Manoli, 2024) while navigating internal and external pressures to enhance sustainability (Mura et al., 2022).

This exploratory study examines how NSFs integrate sustainability through HRM, using institutional theory and change management literature; drawing from these theoretical bases, the ‘three waves’ model (McCullough et al., 2016) is adopted in this investigation, helping analyse the ‘if’, ‘why’ and ‘how’ of sustainability implementation in NSFs. Together, these theories provide a comprehensive understanding of sustainability in leisure organisations and are here considered as complementary frameworks for the purpose of this study.

The study addresses two key questions: Do NSFs implement sustainability through HRM? What are the main drivers and barriers? By exploring these issues, it sheds light on the often-overlooked relationship between HRM and sustainability, offering insights into how leisure organisations can enhance their environmental impact and connection with nature (Erickson, 2011; Manoli et al., 2024; Salome et al., 2013; Stoddart, 2011).

Focusing on the Italian leisure system, this study examines NSFs, which play a crucial role in sports regulation and development alongside regional committees and clubs. Under the Italian National Olympic Committee (CONI), 44 NSFs manage technical, organisational and operational responsibilities, promoting sports while adhering to national and international regulations. Despite their significance, research on Italian NSFs remains scarce, limiting understanding of their operations, performance and sustainability efforts (Mura et al., 2022).

Literature review

Institutional theory

Institutional theory provides a strong framework for analysing how leisure organisations, including sports entities, navigate environmental sustainability. It explores how institutional pressures and societal expectations shape organisational strategies and decisions. This perspective suggests that sports organisations do not operate in isolation but are influenced by external institutional factors, such as legal frameworks, cultural norms and stakeholder demands (McCullough et al., 2016; Pedras et al., 2020). Within the leisure industry, institutional theory highlights that organisations adopt sustainable practices not merely for financial reasons, but to align with broader societal values and enhance legitimacy (Babiak & Trendafilova, 2011). When responding to these pressures, organisations may alter or abandon existing practices in favour of new approaches. This process, known as deinstitutionalisation, reflects how institutional norms evolve over time (Oliver, 1992).

Institutional theory identifies three main pressures that influence organisations’ sustainability efforts: coercive, normative and mimetic. Coercive pressures arise from regulatory bodies and financial sponsors, pushing organisations to comply with environmental standards. Normative pressures emerge through industry professionalisation, where sustainability becomes an expected standard. Mimetic pressures occur when organisations emulate the environmental strategies of leading peers to gain credibility and competitive parity (DiMaggio & Powell, 1983). A clear example comes from research by Konstantopoulos and Manoli (2024), who

observed how national football associations incorporate sustainability practices largely in response to these institutional forces.

A central concept within institutional theory is institutional isomorphism, which explains the tendency of organisations within an uncertain context or shared constraints to adopt similar practices, perceived as successful (DiMaggio & Powell, 1983). Isomorphism may arise due to competitive pressures, as organisations seek survival and relevance (Hannan & Freeman, 1977), or from external demands that push them towards industry-wide conformity (Dacin, 1997). In environmental sustainability, isomorphic pressures have led to widespread adoption of initiatives such as eco-friendly stadiums, carbon offsetting programmes and waste reduction strategies. Coercive isomorphism is particularly evident in large-scale sporting events, where legal regulations and sponsorship expectations drive sustainability measures (McCullough et al., 2016). The Olympic Games and FIFA World Cup, for example, increasingly integrate green policies to align with regulatory mandates and stakeholder expectations.

Despite its relevance, institutional theory remains underexplored in leisure research, necessitating further studies (Konstantopoulos & Manoli, 2024; McCullough et al., 2016; Todaro et al., 2023). Current findings highlight the critical role of coercive pressures – such as government regulations and sponsorship conditions – in shaping environmental policies (McCullough et al., 2016). However, emerging research suggests that the primary drivers of sustainability in leisure organisations are societal and market-based stakeholders rather than regulatory authorities (Todaro et al., 2023). This shift indicates that cultural expectations and public perception are key motivators for environmental action, as organisations strive to maintain legitimacy and competitiveness (Babiak & Trendafilova, 2011).

Additionally, increasing normative pressures from fans, media and advocacy groups have begun influencing sustainability in sports (Hede & Kellett, 2022). These forces drive organisations to adopt greener practices, not just in response to formal mandates but as a means of meeting evolving public expectations. These dynamic challenges the notion that sustainability initiatives stem primarily from top-down enforcement, instead highlighting the growing impact of bottom-up pressures, including market trends and consumer activism, in shaping organisational behaviour (Manoli et al., 2024).

Further expansion of institutional theory in leisure research could provide deeper insights into the interplay of these external forces. Complementarily to Institutional mechanisms, this study refers to the change management literature and adopts a specific wave model to understand how organisations internalise institutional pressures through strategic planning and HRM could help advance sustainability efforts across the industry

Implementing environmental change in sports

Effective change management frameworks are essential for sports organisations as they transition to sustainable practices. These frameworks ensure that changes are not only implemented but also sustained over time. One influential model is Kotter's (1996) eight-step process, which highlights the importance of creating a sense of urgency, forming a guiding coalition and embedding new practices into organisational culture while prioritising environmental goals. This structured approach enhances long-term sustainability efforts.

Resistance to change can significantly hinder the adoption of sustainable practices. Lewin's (1951) three-step model – unfreezing, changing, and refreezing – offers a useful framework for overcoming this challenge. In sports organisations, unfreezing involves raising awareness of the environmental impact of current practices to build a case for change. The changing phase includes implementing sustainable initiatives, such as obtaining green building certifications or adopting eco-friendly event management. Finally, refreezing institutionalises these changes by reinforcing and monitoring them to ensure they become embedded in the organisational culture.

Konstantopoulos and Manoli (2024) analysed football national associations and proposed a five-level sustainability spectrum, ranging from a complete absence of awareness to fully integrated strategic programmes. McCullough et al. (2016), drawing on institutional theory and innovation literature, describe three ‘green waves’ of environmental sustainability in sports, symbolising the cyclical progress and setbacks organisations face. These phases illustrate how internal and external forces interact, shaping strategic environmental decisions. Each stage includes tipping points where progress may either accelerate, stall or regress, highlighting the non-linear nature of sustainability transitions.

The ‘three wave framework’ progresses from compliance with regulations (wave 1) to operational improvements like energy efficiency and waste reduction (wave 2). The final wave embeds sustainability into an organisation’s culture and strategy, driving proactive, long-term environmental stewardship. This evolution fosters innovation and positions sports organisations as sustainability leaders (McCullough et al., 2016). To date, limited studies have extended the ‘three wave theory’ which mainly remains a theoretical framework with limited support. In particular, McCullough et al. (2016) raised nine hypotheses concerning the features and elements of the three waves, yet these propositions have never been investigated comprehensively in a study; moreover, it appears rather difficult to understand the regression tipping points in each wave (McCullough et al., 2016). However, the three wave theory remains a leading theoretical framework in change management research; moreover, it is perfectly suited for sports institutions-related research, and it draws from institutional theory too. As the theory aligns with the current manuscript perspective and focuses, we decided to adopt McCullough’s et al. (2016) ‘wave theory’ to investigate one major gap in the change management literature in sports: how ecological change can be promoted and performed through HRM.

Green human resource management and environmental sustainability

Green Human Resource Management (GHRM) is increasingly vital in promoting environmental sustainability within the leisure industry. By integrating sustainability into HR functions – such as recruitment, training, performance management and organisational culture – GHRM aligns employee behaviour with environmental objectives (Almada & Borges, 2018). This is particularly relevant for leisure organisations operating in ecologically sensitive areas and facing strong stakeholder scrutiny (McCullough et al., 2016). Mzembe et al. (2020) highlight that stakeholder pressure necessitates internal frameworks like GHRM to ensure environmental compliance and legitimacy.

A key element of GHRM is environmentally focused recruitment, which prioritises hiring individuals committed to sustainability. This strengthens an organisation’s credibility and promotes a culture of environmental awareness (Zibarras & Coan, 2015). However, Chowdhury et al. (2022) argue that many leisure organisations struggle to translate sustainability goals into recruitment strategies, often failing to emphasise environmental priorities in hiring processes.

Training and development further reinforce GHRM by equipping employees with the knowledge to implement sustainable practices. Effective training fosters a connection between individual roles and broader environmental goals, empowering staff to contribute meaningfully (Tang et al., 2018).

Performance management systems that integrate environmental targets drive accountability and continuous improvement. Setting measurable goals – such as waste reduction or increased renewable energy use – ensures sustainability remains central to operations. Incorporating these targets into employee evaluations and organisational metrics encourages long-term commitment (Almada & Borges, 2018). However, Mihalache and Mihalache (2019) caution that rigid metrics may hinder adaptability in dynamic leisure environments.

Beyond specific HR functions, GHRM fosters a cultural shift by embedding sustainability into daily operations, strengthening an organisation’s environmental reputation among stakeholders, including fans, visitors and local communities (Jackson & Seo, 2010).

Despite its potential, gaps remain in understanding GHRM's implementation in the leisure industry. Most research focuses on corporate environmental responsibility and external pressures, such as media scrutiny and activist movements (Erickson, 2011; Salome et al., 2013; Stoddart, 2011). Less explored are the internal mechanisms through which HRM drives sustainability within leisure organisations.

This study aims to bridge this gap by examining both the drivers and limiting factors to GHRM adoption, offering insights into how leisure organisations can enhance environmental stewardship while balancing operational and strategic priorities.

Methods and data

Context

Among leisure organisations, NSFs are central to the organisation, regulation and development of specific sports disciplines, under the supervision of the CONI. Despite their significant role within the leisure industry, there is limited scientific research on how Italian NSFs function, perform and report, particularly concerning their environmental strategies (Mura et al., 2022). Moreover, official reports do not highlight any environmental policies for or within these organisations, something that motivated the current study (CONI Servizi - Centro Studi, 2023).

Sampling

In this study, we purposively focus on three Italian NSFs: the Italian Motorcycling Federation (IMF), the Italian Golf Federation (IGF) and the Italian Winter Sports Federation (IWSF). These federations were selected because their sports are extremely linked to the natural environment, either through active impacts like pollution or passive ones such as climate dependency (Dingle & Stewart, 2018; Mura et al., 2022).

Data collection and analysis

Five semi-structured interviews were conducted. HR managers and senior executives were identified as key informants due to their deep understanding of past, current and future environmental sustainability programmes within their NSF, as well as HR policies and practices. Given the challenges in accessing such participants, this number, although small, was deemed sufficient to gain previously undisclosed insights, as suggested in research on hard-to-reach knowledgeable interviewees (Guest et al., 2013). Table 1 shows participants' affiliations, roles and information.

The interviews lasted between 30 and 45 min. Since our study adopted Institutional Theory, change management literature and McCullough's et al. (2016) three waves framework as complementary lenses, the interview schedule focused on three main areas. First, we explored perceived pressures, deinstitutionalised processes, institutional environments and isomorphic tendencies within the sampled organisations. Secondly, we asked questions concerning the specific elements in the nine proposed statements in McCullough's et al. (2016) three waves framework (e.g. 'what is the degree of environmental expertise knowledge in your organisation?', 'Has your organisations developed a partnership with external organisations?'). Finally, we investigated inward HRM

Table 1. Participant information.

Interviewee	NSF	Role	Gender	Date
1	IGF	Environmental consultant	Female	8 November 2020
2	IMF	Head of Environmental Commission	Male	13 November 2020
3	IMF	Secretary General	Male	29 July 2021
4	IWSF	Secretary General	Female	30 November 2020
5	IWSF	Secretary General	Female	3 August 2021

strategies supporting internal environmental initiatives and outward HRM strategies engaging external stakeholders, such as local clubs and regional committees (Almada & Borges, 2018).

The interviews were translated and analysed manually using Braun and Clarke's (2006) six-step thematic analysis. Regular research team meetings ensured consistency in identifying and coding themes, enhancing validity and reliability. Emerging themes were then analysed and discussed through the theoretical lens of Institutional Theory and change management.

Findings and discussion

The data analysis revealed seven relevant emerging themes comprising four driving and three limiting forces to the implementation of environmental sustainability via human resources.

Limiting factors

Institutional pressures and regulations

Interviewees highlighted a surprising lack of coercive pressures from sports governing bodies regarding environmental policies. Managers pointed to missing regulations and expectations from sports authorities, which reduced NSF's capacity and accountability in environmental matters. As a result, NSFs approached sustainability individually and unsynchronised with the broader sports system. As Interviewee 3 explained:

'We always try to govern it in our own small way because there is individual awareness that is developing, but there is no real iron and rigid policy in this sense. This is because it is linked only to free interpretations and individual availability rather than to a real regulation'.

Regarding the Italian legal framework, NSF's progress was hindered by 'a great fragmentation of regulations at a national, regional and local level, sometimes different or in conflict with each other' (Interviewee 2). This reflects a weak coercive isomorphism, where the absence of enforcement limits uniformity in environmental efforts (DiMaggio & Powell, 1983).

Budget and finances

Without coercive pressures, no governmental funds are allocated for NSF's environmental policies. Lacking official financial support, NSFs rely on marginal funds for sustainability initiatives. Interviewee 3 noted: 'Funds due to the Federations are based on a series of parameters that do not explicitly provide for financing measures for environmental sustainability actions'. Similarly, Interviewee 4 added: 'No categories or specific items relating to environmental sustainability in the organisational budget; everything falls under generic cost items'.

Interviewee 1 suggested introducing tax deductions to encourage sustainability. However, financial constraints limit HRM efforts, affecting both scope and long-term ecological commitment, aligning with findings that budget constraints hinder sustainability initiatives (Trendafilova et al., 2013).

Recruitment

Environmental education, know-how and experience are not prioritised in NSF recruitment. Two factors explain this: first, small federation sizes (fewer than 60 employees) lead to low turnover, with personnel focusing on administrative, legal and planning tasks. Second, roles remain primarily administrative, as Interviewee 3 stated: 'Environmental skills profile is certainly not taken into consideration'.

However, Interviewee 4 emphasised the need for younger employees: 'The inclusion of younger people is fundamental, people who have a much more projected vision towards what is the future. A more digital, more environmental vision'. These findings indicate that ecological knowledge remains limited among employees, demonstrating a lack of key elements from the environmental first wave (McCullough et al., 2016).

Drivers

Management, working groups and roles

Environmental initiatives depend on top management, including the President, Council and General Secretary. Their commitment is crucial for organisational progress, as Interviewee 2 stated: ‘Having upper managers with a sharp vision of why environmental strategies are crucial is the prerequisite for the development of a plan for environmental sustainability’. Once leadership embraces sustainability, the challenge lies in spreading this commitment throughout the organisation. Interviewee 2 explained: ‘This process must be adequately managed and guided to permeate all levels, considering the complexity of the organisational structure’.

This aligns with McCullough et al. (2016), who stress leadership’s role in embedding sustainability within sports organisations. As leaders prioritise sustainability, HRM fosters eco-friendly practices and enhances NSF’s long-term resilience (Almada & Borges, 2018).

To implement environmental strategies, top-management delegates tasks to subordinate roles. For instance, commissions issue guidelines and training directives (Interviewee 3). Dedicated ‘green teams’ ensure sustainability through communication, training and monitoring (Almada & Borges, 2018; Pfhall, 2010). These teams embed environmental responsibility into organisational culture, helping NSFs overcome resistance and establish leadership in sustainability (Pfhall, 2010).

Operationally, NSFs train environmental operators to enforce regulations and daily activities. As Interviewee 2 described: ‘It is important to have a dedicated team that facilitates this cultural transition, taking up the challenge of permeating the world of motorcycling with environmental sustainability in sports competitions’.

Training and formation

NSFs focus on internal environmental training, developed by working groups and executives. Training aims to ‘foster environmental awareness both at the level of daily internal level at work, both here and in the local areas’ (Interviewee 5). Additionally, IMF environmental delegates receive a ‘training cycle [that] includes both theoretical lessons and fieldwork illustrating the various issues to be analysed in the performance of their role’ (Interviewee 2).

Ecological knowledge is also transferred to athletes and coaches. Interviewee 4 noted: ‘The training is much more technical, but within these modules, there are always specific sections related to environmental sustainability’. NSFs also engage external professionals to support clubs, as illustrated by IGF: ‘It has been providing expert consultancy on all agronomic, landscape and naturalistic issues for clubs for years with on-call interventions’ (Interviewee 1). Moreover, NSFs organise ‘moments of encounter (conferences and meetings) for all operators from the regional bodies to the smallest motorcycle club’ (Interviewee 2).

Internal normative frameworks

To implement ecological policies, NSFs established internal normative frameworks for personnel. These include binding regulations during official competitions and non-binding guidelines for daily activities. Together, they serve as a *vade mecum* providing best practices for environmental management.

HRM’s primary role in environmental transformation is cultural, promoting organisational sensitivity. Interviewee 3 explained: ‘A regulation is not enough to be able to change the reality that has existed up until now, we need awareness over time of a behavioural tradition that is consolidated’. However, Interviewee 2 emphasised increasing external pressures: ‘The will to organise and participate in official events must be combined with sustainability by responding to the various requests coming from outside: alongside increasingly stringent regulations’.

Social and environmentalist pressures

Social expectations, sensitivities and narratives, amplified by mass and social media, drive NSF's ecological adaptations. As Interviewee 2 stated: 'Responding to these requests means listening to requests from outside, meeting expectations, strengthening the image of the federation and continuing to invest in good practices'.

Environmental groups play a significant role in holding NSF's accountable. Interviewee 4 highlighted: 'There were strong discussions certainly also on the part of environmentalists who rightly wanted to have a guarantee that the environment would be respected'.

Despite weak political and institutional pressures, environmentalist demands actively push organisations towards sustainability (Erickson, 2011; Stoddart, 2011). Findings indicate that NSF's are more responsive to normative social pressures than to coercive or mimetic pressures (DiMaggio & Powell, 1983).

Discussion

As it emerged through our findings, one major scenario exists: even when not nudged towards ecology, not only the investigated NSF's implemented environmental change in their own way and for their own sake, but they also have been endorsing a proactive bottom-up approach stimulating the Italian sports and leisure systems. Indeed, this study highlights the lack of coercive institutional pressures from governmental sports authorities as a significant barrier to the effective implementation of environmental sustainability through HRM, particularly in the context of the Italian sports ecosystem. This lack reduces the urgency and accountability for environmental action within NSF's. The absence of regulatory pressures contrasts with the concept of coercive isomorphism discussed by DiMaggio and Powell (1983), where organisations are compelled to adopt certain practices due to governmental and authoritarian mandates. In the case of studied NSF's, the lack of such pressures results in a fragmented approach to environmental sustainability, with each federation pursuing independent initiatives rather than a cohesive national strategy. Instead of regulatory enforcement, NSF's operate through loosely structured, autonomous strategies, aligning with institutional theory's premise that in weakly regulated fields, organisations rely on internal agency rather than external compulsion. This highlights how institutional voids can hinder uniform environmental progress, reinforcing the role of normative and mimetic pressures – such as social advocacy – as stronger drivers of ecological adaptation.

Thus, it appears fair to argue that an embryonal deinstitutionalisation process in favour of environmental sustainability via HRM (McCullough et al., 2016) has been started by the investigated organisations; from this perspective, sampled NSF's appear to be taken on a proactive behaviour towards ecological themes, possibly stimulating both their own supervised associations as well as the surrounding Italian sports system to intervene and promote environmental practices. Previous studies adopting Institutional Theory had indicated how leisure organisations might adopt bottom-up approaches to environmental issues (Konstantopoulos & Manoli, 2024) and presented results confirm this consideration.

As underlined by McCullough et al. (2016), most sports organisations remain bound to the first wave of environmental sustainability where 'awareness is generated and initial thoughts on foundational strategies emerge in the psyche of the organization' (McCullough et al., 2016, p. 1050); this seems to partially be the case in the NSF's studied, since the sampled organisations appear to adopt environmental initiatives in line with professional knowledge and expertise in their upper management, 'sustainability teams' and specific institutionalised figures, and they consequently make their initiatives visible and clear to their stakeholders like clubs, circuits and athletes. No performance data concerning initial initiatives were retrieved and thus dissemination throughout professional networks remains absent. Nevertheless, some elements of their initiatives – e.g. establishing partnership with external organisations like universities, training and formation across teams and athletes' utilisation as dissemination of institutionalised practices emerge at times – appearing as

positive small steps in NFSS' environmental paths towards the much desired 'second wave' of sustainability (McCullough et al., 2016). In contrast, the third wave still remains distant for different reasons including the organisations' lack of routine, normative environmental sustainability efforts, the limited (only mentioned by one organisation studied) engagement with external stakeholders in their actions (i.e. IGF's committee members) and their lack of interest to obtain a more structured and externally certified approach.

Limitations, future research and conclusions

This study builds on existing research exploring the leisure industry's role in reducing ecological footprints (Erickson, 2011; Manoli et al., 2024; Salome et al., 2013; Stoddart, 2011). Specifically, it examines the strategic role of HRM in promoting environmental sustainability within leisure organisations, uncovering the dynamics, initiatives, drivers and limiting factors within NSF. It also extends institutional theory in leisure research, reporting on how leisure organisations endorse a bottom-up approach towards environmental issues, as previously suggested (Konstantopoulos & Manoli, 2024).

Despite its contributions, the study has limitations. The research is based on a small, purposefully selected sample of NSFs, chosen for their strong connection to the natural environment, all from one geographical region and collected at a single point in time.

Future research could explore HRM's role in advancing sustainability within leisure organisations in diverse contexts, including activities less connected to the natural environment, such as indoor sports. Longitudinal studies using varied methodologies could help identify whether similar patterns in leadership, training and supportive regulatory environments emerge as critical for implementing sustainability through HRM.

Such research could also examine whether sustainability progresses in leisure without institutional pressures, as seen in this study, where proactive bottom-up approaches drove progress. Understanding these dynamics across broader contexts would enhance our knowledge of HRM's role in fostering sustainability in the leisure industry.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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