

Editorial: Innovation, technology and sustainability in sport management and education

VAN DEN BERG, Liandi, KNOTT, Brendon, TOMAR, Rakesh, DANYLCHUK, Karen and CRABTREE, Ruth

Available from Sheffield Hallam University Research Archive (SHURA) at:

<https://shura.shu.ac.uk/37598/>

This document is the Published Version [VoR]

Citation:

VAN DEN BERG, Liandi, KNOTT, Brendon, TOMAR, Rakesh, DANYLCHUK, Karen and CRABTREE, Ruth (2026). Editorial: Innovation, technology and sustainability in sport management and education. *Frontiers in Sports and Active Living*, 8: 1880677. [Article]

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>



OPEN ACCESS

EDITED AND REVIEWED BY
Joerg Koenigstorfer,
Technical University of Munich, Germany

*CORRESPONDENCE
Liandi Van Den Berg
✉ liandi.vandenberg@nwu.ac.za

RECEIVED 13 May 2026
ACCEPTED 14 May 2026
PUBLISHED 05 June 2026

CITATION
Van Den Berg L, Knott B, Tomar R,
Danylchuk K and Crabtree R (2026)
Editorial: Innovation, technology and
sustainability in sport management and
education.
Front. Sports Act. Living 8:1880677.
doi: 10.3389/fspor.2026.1880677

COPYRIGHT
© 2026 Van Den Berg, Knott, Tomar,
Danylchuk and Crabtree. This is an
open-access article distributed under
the terms of the [Creative Commons
Attribution License \(CC BY\)](#). The use,
distribution or reproduction in other
forums is permitted, provided the
original author(s) and the copyright
owner(s) are credited and that the
original publication in this journal is
cited, in accordance with accepted
academic practice. No use, distribution
or reproduction is permitted which does
not comply with these terms.

Editorial: Innovation, technology and sustainability in sport management and education

Liandi Van Den Berg^{1*}, Brendon Knott², Rakesh Tomar³,
Karen Danylchuk⁴ and Ruth Crabtree⁵

¹School of Management Sciences, Faculty of Economic and Management Sciences, North-West University, Potchefstroom, South Africa, ²Sport Management Department, Cape Peninsula University of Technology, Cape Town, South Africa, ³Department of Physical Education, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia, ⁴School of Kinesiology, Faculty of Health Sciences, Western University, London, ON, Canada, ⁵School of Sport & Physical Activity, Sheffield Hallam University, Sheffield, United Kingdom

KEYWORDS

education, innovation, management, sport, sustainability, technology

Editorial on the Research Topic

[Innovation, technology and sustainability in sport management and education](#)

The contemporary sport ecosystem is undergoing a profound transformation driven by rapid technological innovation, rising societal expectations for sustainability, and evolving educational paradigms. Across professional sport, grassroots participation, school sport, esports, and sport management education, stakeholders are increasingly required to navigate the intersections between digital advancement, ethical responsibility, institutional sustainability, and human development.

The collection of papers in this Research Topic reflects the multidimensional and interdisciplinary nature of contemporary sport management and education research. Collectively, the contributions span diverse geographical contexts, including South Africa, China, Türkiye, Indonesia, and Central and Eastern Europe, while addressing issues ranging from digital transformation and esports governance to school sport policy, competitive advantage theory, and social equity in sport education. Together, these studies illustrate how innovation and sustainability are no longer isolated concepts but interconnected drivers shaping the future of sport participation, governance, education, and organisational development.

A central theme emerging from this collection is the role of technology as both an enabler and a disruptor within sport systems. The article by Wang, *Exploration of the Path of Digital Technology Empowering the Sustainable Development of Alumni Football*, demonstrates how digital technologies support the sustainable development of grassroots and amateur sport structures. Using ordinal logistic regression, this study analysed survey data from university football alumni to examine 10 digital factors influencing development. The findings show that digital business models and digital team culture play a significant role in sustainability, whereas virtual coaching and match data management have a lesser impact. The study offers practical insights for policymakers, educators, and industry stakeholders seeking to enhance participation, digital inclusion, and sustainable growth in sport.

Similarly, the growing influence of digitalisation is evident in the contribution by Hospodková et al., *Searching Synergy Between Esports and Academia: The Role of Sport*

Faculties and Departments in CEE Countries. Through a qualitative approach, the research found that universities can play a significant role in the development and professionalisation of esports through collaboration, education, and research. Findings indicated that universities can support esports teams and players by conducting research on player health and performance, offering specialised courses and certifications for coaches and managers, and facilitating access to experts in nutrition and sleep. The study also found that universities can help establish industry standards and licensing requirements in partnership with esports associations. Overall, the research emphasised the importance of collaboration between universities and esports organisations, as well as the need for innovation, formal training programmes, and stronger promotion of esports within the university environment.

Innovation in sport management is also examined from a theoretical and strategic perspective in the article by [Riegler and Daumann](#), “*Transferability of the First-Mover Advantage to Individual Sports: A Conceptual and Theoretical Analysis.*” The authors extend the concept of first-mover advantage, traditionally associated with business and economics, to the context of national sports associations in individual sports. Through comparative analysis, theoretical modelling, and case logic, the study demonstrates the applicability of strategic management theories to sport organisations. This contribution is significant because it highlights the growing sophistication of sport management research and the increasing relevance of strategic innovation within competitive sport governance. By conceptualising how national associations may benefit from pioneering strategies, the article provides a foundation for future empirical work exploring innovation-led competitive advantage in sport systems.

Sustainability and social responsibility emerge as another critical dimension. In *The Goals and Selection Criteria of Sports Scholarships: Mutual Benefits Perceived by South African Schools*, [Ekron et al.](#) investigate sports scholarship systems within South African elite schools through the lens of Social Exchange Theory. The study reveals the complex balance between institutional competitiveness, athlete development, diversity, and equitable access within scholarship allocation processes. The findings demonstrate that sustainability in sport management encompasses social sustainability, inclusion, and ethical governance. Particularly within the South African context, where historical inequalities continue to shape educational opportunities, the article provides important insights into how sport systems may simultaneously reproduce and challenge social disparities.

Educational sustainability and policy development are further explored in [Ma'mun et al.](#)'s study, *Physical Education and School Sport in Emerging Nations: A Comparison of Indonesia and Türkiye.* The study compares physical education curricula, school sport structures, extracurricular provision, and institutional resources across the two countries. The findings reveal shared challenges relating to infrastructure, staffing, and integration of schools and clubs. However, the study also highlights opportunities to strengthen school sport systems by investing in facilities, enhancing extracurricular programming, and strengthening community partnerships. The article reinforces the notion that sustainable sport development

begins within educational systems and requires coordinated policy support, institutional commitment, and long-term strategic planning.

Collectively, these contributions feature several broader trends shaping the future of sport management and education. Digital transformation is central to all levels of sport, from grassroots participation and esports to organisational strategy and educational delivery. In addition, the research indicates that sustainability must be understood holistically, encompassing environmental responsibility, social inclusion, institutional resilience, and ethical governance. In this regard, sport education institutions are critical actors in facilitating innovation, developing future leaders, and promoting interdisciplinary collaboration. The collection also highlights the importance of contextual diversity in sport management research. The studies highlight how innovation and sustainability manifest differently across cultural, economic, and institutional environments, demonstrating that localised challenges require context-sensitive solutions. From a methodological perspective, the Research Topic showcases a diversity of approaches, including qualitative inquiry, conceptual analysis, comparative research, and quantitative modelling. Such methodological plurality is essential for addressing the complexity of contemporary sport systems and reflects the interdisciplinary character of sport management and education research.

As Guest Editors, this collection contributes meaningfully to ongoing scholarly conversations regarding the future of sport in a rapidly changing world. We hope that the contributions presented here stimulate further interdisciplinary research, encourage international collaboration, and inspire both scholars and practitioners to continue exploring how sport can contribute positively to social, educational, technological, and sustainable development.

Author contributions

LV: Writing – original draft. BK: Writing – review & editing. RT: Writing – review & editing. KD: Writing – review & editing. RC: Writing – review & editing.

Conflict of interest

The author(s) declared that this work was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Generative AI statement

The author(s) declared that generative AI was used in the creation of this manuscript. GenAI was used to structure the editorial, substantiate summaries of the article collection, and perform language editing, using a licensed Grammarly version.

Any alternative text (alt text) provided alongside figures in this article has been generated by Frontiers with the support of artificial intelligence and reasonable efforts have been made to ensure accuracy, including review by the authors wherever possible. If you identify any issues, please contact us.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated

organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.