

## The Ethics of Representing Athletes in Intelligent Sports Media: Between the Boundaries of Privacy and the Risks of Objectification

أخلاقيات تمثيل الرياضيين في وسائل الإعلام الرياضية الذكية: بين حدود الخصوصية ومخاطر التشيء

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Article info	Abstract :
<p>Received 19/11/2025 Accepted 05/01/2026</p> <p><b>Keywords:</b> - Artificial Intelligence - Media – Sports – Digitalization -Ethics</p>	<p><i>The evolution of intelligent sports media, driven by artificial intelligence technologies and algorithmic data analysis, raises growing ethical challenges related to how athletes are represented in the digital space. While these technologies contribute to enhancing the quality of media coverage and enable the production of personalized and dynamic content, automated classification mechanisms and an overemphasis on performance metrics tend to reduce athletes to mere physical and digital entities. This reductionist approach falls within the broader risks of media commodification, where athletes' bodies are objectified and transformed into consumable products rather than being acknowledged as holistic human beings. -From this perspective, our research paper seeks to critically examine the ethical framework governing the use of AI in sports media, and to explore how responsible media practices can be developed—practices that uphold human</i></p>
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<p>تاريخ الارسال: 2025/11/19 تاريخ القبول: 2026/01/05</p> <p><b>الكلمات المفتاحية:</b> - الذكاء الاصطناعي - الاعلام - الرياضة - الرقمنة - الأخلاق</p>	<p>شكل التطور السريع في الإعلام الرياضي الذكي، المدفوع بتقنيات الذكاء الاصطناعي وتحليل البيانات الخوارزمية، تحديات أخلاقية متزايدة تتعلق بكيفية تمثيل الرياضيين في الفضاء الرقمي. ورغم أن هذه التقنيات تساهم في تحسين جودة التغطية الإعلامية وتمكّن من إنتاج محتوى شخصي وتفاعلي، إلا أن الإفراط في الاعتماد على التصنيفات الآلية ومؤشرات الأداء غالبًا ما يحوّل الرياضيين إلى كيانات رقمية أو جسدية مجردة. هذا التمثيل الاختزالي يندرج ضمن مخاطر أوسع لعملية تسليع الإعلام، حيث يُختزل الرياضيون إلى منتجات قابلة للاستهلاك. ومن هذا المنظور، تسعى هذه الورقة إلى فحص الإطار الأخلاقي المنظم لاستخدام الذكاء الاصطناعي في الإعلام الرياضي، واستكشاف ممارسات مسؤولة تصون الكرامة الإنسانية وتحترم حدود الخصوصية.</p>

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## 1. Introduction

In the age of intelligent media, sports journalism and broadcasting have been profoundly transformed by artificial intelligence (AI), machine learning, and algorithmic data analysis. Athletes today are represented through metrics, visualizations, and automated narratives that reach global audiences in real time. While these technologies enhance engagement, provide unprecedented insights, and offer personalized fan experiences, they also pose significant ethical dilemmas. The two most pressing issues are the protection of athletes' privacy and the risks of objectification in data-driven portrayals. This article explores these ethical concerns and highlights the need for regulatory, professional, and cultural frameworks to balance technological innovation with respect for human dignity.

## 2. The Rise of Intelligent Sports Media

Intelligent sports media refers to platforms and tools that employ AI and big data to produce automated commentary, predict outcomes, analyze athlete performance, and generate immersive content (Billings et al., 2020, p. 51). Automated journalism tools, for instance, can instantly transform match statistics into textual reports, while wearable sensors and biometric trackers provide detailed physiological data. Social media platforms amplify these representations by allowing fans to consume and share athlete content interactively.

However, such technological capabilities raise concerns about consent, accuracy, and fairness. As

Hutchins and Rowe (2012, p. 89) argue, the digital sports environment often prioritizes speed and engagement over ethical deliberation. The rapid evolution of intelligent media makes it essential to reassess the boundaries of athlete representation.

The evolution of digital technologies has profoundly transformed the sports media landscape. In recent years, the integration of artificial intelligence (AI), machine learning, big data analytics, and immersive technologies such as augmented reality (AR) and virtual reality (VR) has given rise to what scholars and practitioners refer to as intelligent sports media. This new paradigm shifts the way sports are produced, disseminated, and consumed, enhancing fan engagement, optimizing performance analysis, and enabling hyper-personalized content. However, this rise also brings forward challenges, particularly in terms of ethics, privacy, and the commercialization of athletes. This article examines the technological, social, and ethical dimensions of intelligent sports media while assessing its future prospects.

### 2.1. Technological Foundations of Intelligent Sports Media

The foundation of intelligent sports media lies in advanced data processing and algorithmic innovation. AI-driven systems allow for real-time player tracking, predictive analytics, and automated commentary. According to Boyle and Haynes (2020, p. 112), sports journalism has increasingly adopted data-driven practices to provide deeper insights and enhance the storytelling experience. Similarly, Hutchins and Rowe

(2012, p. 98) highlight how the “digital turn” in sports communication has altered the traditional gatekeeping role of journalists, as algorithms now curate and filter content for audiences.

Furthermore, immersive technologies reshape how fans interact with sports. Through AR and VR, viewers can experience games as if they were physically present, creating a new level of audience engagement (Filo, Lock, & Karg, 2015, p. 120). These developments highlight how intelligent sports media is not only about information delivery but also about constructing novel experiential environments.

## 2.2. Transformations in Sports Journalism and Fan Engagement

Intelligent sports media has redefined journalistic practices in sports. Automated journalism, or “robot journalism,” employs AI to generate real-time match reports and statistical summaries. This allows media outlets to provide immediate coverage while human journalists focus on interpretive and investigative reporting (Carlson, 2015, p. 20).

Fan engagement has also been transformed. Through big data, sports organizations can analyze consumer behavior and preferences, enabling personalized content delivery (Billings, Butterworth, & Turman, 2017, p. 143). Social media platforms further amplify these effects by allowing fans to interact directly with athletes, commentators, and teams, creating participatory cultures around sports (Hutchins & Rowe, 2012, p. 140). This interactivity reflects a shift from passive consumption to active co-creation of media narratives.

## 2.3. Ethical and Social Dimensions

Despite its benefits, intelligent sports media raises significant ethical questions. Privacy concerns emerge as biometric data and tracking systems collect sensitive information about athletes (Andrejevic, 2020, p. 55).

The commodification of athletes’ bodies through constant surveillance and datafication risks reducing them to mere performance metrics (Boyle, 2017, p. 85). This process can lead to objectification, undermining the human dimension of sports.

Moreover, algorithmic personalization may reinforce inequalities, as wealthier clubs and organizations gain access to advanced technologies while smaller institutions lag behind (Rowe, 2020, p. 33). This digital divide exacerbates disparities in exposure and opportunities within the sports ecosystem.

## 2.4. Challenges and Future Prospects

The future of intelligent sports media depends on balancing technological innovation with ethical responsibility. Regulation and governance are essential to ensure fair use of AI and data in sports (Billings et al., 2017, p. 201). Human oversight remains crucial to preserve journalistic integrity and safeguard against algorithmic bias. Additionally, inclusive access to intelligent media technologies must be prioritized to prevent deepening inequalities.

Looking ahead, intelligent sports media is likely to expand through predictive modeling, immersive fan experiences, and the integration of wearable technologies. These innovations promise to further blur the boundaries between sports, entertainment, and digital culture. The rise of intelligent sports media marks a significant shift in the global sports landscape. Through AI, data analytics, and immersive technologies, media industries have redefined how sports are produced, consumed, and monetized. While these advancements bring opportunities for richer storytelling and deeper engagement, they also raise pressing ethical and social concerns regarding privacy, fairness, and athlete representation. Addressing these

challenges will be crucial in shaping a sustainable and equitable future for intelligent sports media.

### 3. Privacy Concerns in Athlete Representation

Privacy is one of the most critical issues in intelligent sports media. Wearable technologies, health trackers, and biometric devices generate enormous amounts of personal data, including heart rates, stress levels, and injury histories. While such data enhances performance analysis and fan engagement, it also risks infringing upon athletes' rights to privacy and bodily integrity.

According to Andrejevic and Selwyn (2020, p. 12), datafication creates asymmetries of power where institutions clubs, leagues, or media companies control the collection and dissemination of personal information. Athletes may feel pressured to surrender intimate data to remain competitive or marketable. For example, during international tournaments, governing bodies sometimes require constant health monitoring, raising questions about whether such practices are genuinely consensual (McNamee, 2019, p. 33).

Furthermore, leaks or misuse of sensitive health information can harm athletes' careers and reputations. Ethical sports media must therefore establish transparent frameworks for data collection, usage, and storage, ensuring athletes retain autonomy over their private information.

#### 3.1. Athlete Surveillance and Biometric Data

One of the most critical privacy issues arises from the collection and use of biometric data. Wearable technologies and tracking systems are now standard in elite sports, measuring heart rate, oxygen intake, speed, and recovery patterns. While these metrics are valuable for performance enhancement, they also generate sensitive personal information that can be exploited commercially or strategically (Andrejevic, 2020, p. 55).

the reduction of athletes to "data bodies" risks objectifying them and undermining their autonomy.

Such surveillance extends beyond training grounds. Intelligent sports media platforms use real-time data to provide audiences with advanced analytics, often without athletes' explicit consent. This raises questions about data ownership and control, as athletes may have limited influence over how their personal information is packaged and distributed for entertainment and profit.

#### 3.2. Social Media and the Erosion of Private Life

The rise of social media has blurred the boundaries between athletes' public and private lives. Platforms like Instagram and Twitter provide athletes with opportunities for personal branding and direct engagement with fans. However, this constant visibility makes them vulnerable to privacy intrusions. As Hutchins and Rowe (2012, p. 140) argue, the participatory nature of digital sports media encourages a culture of surveillance, where fans and media outlets alike monitor athletes' everyday activities.

The commercialization of athletes' social media presence also raises ethical concerns. Sponsorship deals often require continuous visibility, pressuring athletes to expose aspects of their personal lives. This commodification transforms private moments into marketable content, intensifying the tension between personal identity and media representation (Billings, Butterworth, & Turman, 2017, p. 143).

#### 3.3. Algorithmic Profiling and Media Representation

In addition to surveillance and social media pressures, algorithmic profiling contributes to privacy risks. Intelligent media systems analyze athletes' online activities and public perceptions to generate predictive models of marketability and performance (Carlson,

2015, p. 20). While useful for sponsors and clubs, such profiling can lead to misrepresentation or unfair stereotyping, reinforcing biases related to gender, race, or nationality.

Moreover, athletes' digital traces are increasingly used to construct narratives that extend beyond the sporting arena. Boyle and Haynes (2020, p. 112) observe that algorithmic curation prioritizes sensational content, often amplifying controversies and scandals while disregarding contextual nuance. This practice compromises athletes' right to privacy and distorts their public image.

### 3.4. Ethical Responsibility and Regulation

Addressing privacy concerns in athlete representation requires ethical accountability from media institutions, sports organizations, and governing bodies. Transparency regarding the collection and use of athlete data is essential. Athletes must be granted agency in determining how their biometric and personal information is shared with audiences. Regulatory frameworks should also enforce data protection policies to prevent exploitation.

As Rowe (2020, p. 33) suggests, the future of sports media depends on balancing technological innovation with respect for human dignity. Protecting athlete privacy is not merely a legal issue but also a moral imperative to preserve the integrity of sports as a cultural and social practice.

Privacy concerns in athlete representation highlight the complex interplay between technological innovation, commercialization, and ethical responsibility. From biometric surveillance to social media exposure and algorithmic profiling, athletes face unprecedented intrusions into their personal lives. While intelligent sports media enhances engagement and storytelling, it also risks commodifying athletes as data points and marketable identities. Ensuring privacy

protection will require collective efforts to establish transparent, ethical, and fair practices that safeguard athletes' rights in an increasingly digitalized sporting environment.

### 4. The Risk of Objectification in Digital Sports Narratives

Alongside privacy concerns, intelligent sports media risks reducing athletes to mere objects of consumption. The overemphasis on statistics, rankings, and algorithmic comparisons can strip away the human dimensions of sport. As Fuchs (2021, p. 66) explains, algorithmic systems often "flatten" individuality by categorizing athletes within predefined performance metrics.

This objectification manifests in multiple ways:

- **Quantification of identity:** Athletes are increasingly judged through numbers rather than narratives, diminishing recognition of personal struggles, cultural contexts, and achievements beyond performance.
- **Commercial commodification:** AI-driven personalization tailors advertisements and highlights to fans, framing athletes primarily as marketable assets.
- **Media bias and stereotyping:** Algorithms may reproduce existing social biases, amplifying stereotypes related to gender, race, or nationality (Cooky & Messner, 2018, p. 25).

For instance, female athletes often receive disproportionate focus on appearance or physicality rather than skill, an issue intensified by automated content that mirrors biased datasets (Bruce, 2016, p. 365). This creates ethical risks of reinforcing objectification rather than challenging it.

#### 4.1. Performance Metrics and Datafication

One of the most prominent forms of objectification occurs through the *datafication* of

athletes. Wearables, sensors, and performance analytics provide valuable insights for training and broadcasting, but they simultaneously reduce athletes to quantifiable outputs such as speed, accuracy, and stamina (Andrejevic, 2020, p. 59). argues that this process risks erasing the athlete's personal identity, replacing human narratives with mechanical indicators. For audiences, the constant display of statistics may foster an image of athletes as "data bodies" rather than complete individuals (Boyle ,2017, p. 85).

#### **4.2. Commercialization and Branding Pressures**

The commercialization of digital sports narratives further amplifies the risk of objectification. Sponsorship deals and branding strategies often highlight athletes as marketable icons rather than autonomous individuals. As Billings, Butterworth, and Turman (2017, p. 143) observe, athletes' identities are increasingly shaped by commercial imperatives that privilege visibility and profit over authenticity. Social media platforms intensify this trend, encouraging athletes to curate their public image in line with sponsorship demands. The blurring of personal and professional boundaries transforms athletes into commodities whose value depends on their commercial appeal.

#### **4.3. Media Sensationalism and Algorithmic Amplification**

Digital sports narratives are also shaped by algorithmic amplification, where platforms prioritize sensational and visually engaging content. Boyle and Haynes (2020, p. 115) note that controversies, injuries, and emotional breakdowns often receive disproportionate attention, turning athletes into objects of spectacle. This selective visibility reinforces stereotypes and undermines athletes' complexity as human beings. Hutchins and Rowe (2012, p. 140) emphasize that participatory media cultures can

exacerbate this process, as fans co-create narratives that often focus on scandal rather than substance.

#### **4.4. Gendered Dimensions of Objectification**

The risk of objectification is particularly acute for female athletes, who are frequently portrayed through the lens of appearance and desirability rather than athletic skill. Messner, Duncan, demonstrate that women in sports media are often framed in ways that emphasize femininity over performance, reinforcing gendered inequalities. In digital environments, this objectification can spread more rapidly through viral imagery, memes, and algorithmically boosted content. Such practices not only distort representation but also perpetuate harmful cultural norms (Cooky,2003, p. 41).

#### **4.5. Ethical and Social Implications**

The objectification of athletes in digital sports narratives raises important ethical concerns. It undermines athletes' autonomy, commodifies their identities, and reinforces social inequalities. points out, sports media must strike a balance between technological innovation and respect for human dignity. Ethical frameworks are needed to ensure that athletes are represented holistically, not just as performers or marketable icons. Journalists, media producers, and sports organizations bear responsibility for creating narratives that preserve individuality and resist reductive portrayals (Rowe ,2020, p. 36).

The risk of objectification in digital sports narratives reflects broader tensions in the relationship between technology, media, and human representation. Datafication, commercialization, and algorithmic amplification have created new opportunities for engagement but also threaten to reduce athletes to mere commodities. This challenge is particularly evident in the representation of female athletes, whose visibility is often tied to gendered

stereotypes. Addressing these risks requires ethical reflection, regulatory oversight, and media practices that prioritize human dignity over commercial spectacle.

### 5. Balancing Ethics, Technology, and Responsibility

The challenge lies in balancing the technological affordances of intelligent sports media with ethical responsibility. Stakeholders—including journalists, technologists, leagues, and policymakers—must collaborate to define guidelines that safeguard dignity and integrity. Ethical frameworks should prioritize:

1. **Informed Consent:** Athletes must explicitly agree to the collection and use of their biometric and personal data, with clear limitations on secondary use.
2. **Transparency and Accountability:** Media organizations should disclose how algorithms function and how data is analyzed to generate sports content.
3. **Equity and Inclusion:** Efforts must be made to counteract gendered and racialized stereotypes perpetuated by algorithmic systems.
4. **Contextual Integrity:** Media coverage should acknowledge athletes as multidimensional human beings, not just performers.

suggest, integrating ethical reasoning into sports technology policies is vital to prevent harm while allowing innovation to flourish (McNamee and Parry, 2019, p. 114).

The rapid integration of digital technologies, artificial intelligence (AI), and big data into sports media has created unprecedented opportunities for innovation and engagement. Intelligent sports media offers real-time analytics, personalized content, and immersive experiences that reshape how athletes and fans interact with sports. Yet, these advancements raise

pressing ethical questions regarding privacy, fairness, and responsibility. Striking a balance between technological innovation and ethical responsibility is critical for ensuring sustainable and equitable sports media practices. This article explores how ethics, technology, and responsibility intersect in sports media, with attention to privacy, fairness, and regulatory oversight.

#### 5.1. The Promise and Peril of Technology in Sports Media

Technological innovations have enhanced the efficiency, accessibility, and appeal of sports media. AI-driven systems allow for automated reporting, predictive analytics, and immersive fan experiences (Carlson, 2015, p. 20). Data analytics provide valuable insights into performance, while augmented and virtual reality enhance storytelling (Filo, Lock, & Karg, 2015, p. 120).

However, these technologies also pose risks. As Andrejevic (2020, p. 55) notes, the automation of media practices increases surveillance and reduces transparency. Athletes become subjects of constant monitoring, raising questions about autonomy and consent. Thus, technological innovation cannot be evaluated solely on efficiency but must be considered within ethical frameworks.

#### 5.2. Privacy and Data Ownership

Privacy remains one of the most critical ethical challenges in sports media. The proliferation of wearables and performance-tracking devices has generated vast amounts of sensitive biometric data (Boyle, 2017, p. 85). This data is valuable for training and entertainment, yet its commercial use raises concerns about ownership and misuse.

Athletes often have limited control over how their personal data is collected, stored, and disseminated.

Boyle and Haynes (2020, p. 112) emphasize that athletes risk being reduced to “data bodies,” whose value is determined by performance metrics. Balancing innovation with privacy protection requires strong regulatory frameworks and contractual safeguards that empower athletes to manage their data.

### 5.3. Fairness, Representation, and Objectification

Technological tools also influence how athletes are represented. Algorithmic systems prioritize certain types of content, often sensational or marketable, over nuanced narratives (Hutchins & Rowe, 2012, p. 140). Female athletes, in particular, face disproportionate risks of objectification, as media often emphasizes appearance over skill (Messner, Duncan, & Cooky, 2003, p. 41).

Ethical responsibility requires resisting reductive portrayals and ensuring fair representation across gender, race, and nationality. argues that digital media must move beyond profit-driven logics to preserve the dignity and complexity of athletes (Rowe, 2020, p. 36).

### 5.4. Responsibility and Governance

Balancing ethics and technology ultimately depends on shared responsibility among stakeholders—media organizations, sports institutions, policymakers, and audiences. Regulation must address issues of data protection, algorithmic accountability, and equitable access to technology (Billings, Butterworth, & Turman, 2017, p. 201).

At the same time, ethical responsibility extends beyond legal compliance. Journalists and producers must commit to practices that respect athlete privacy, resist sensationalism, and promote inclusivity. Audiences, too, play a role by demanding responsible storytelling and resisting exploitative narratives.

## 6. Case Studies and Real-World Examples

Several high-profile examples demonstrate the ethical tensions of intelligent sports media. During the Tokyo 2020 Olympics, advanced tracking systems measured athletes’ movements and generated automated highlights in near real-time. While these tools improved fan engagement, concerns emerged about whether athletes had consented to the use of their biometric data (Osborne & Weed, 2021, p. 212).

Similarly, professional football leagues in Europe have adopted wearable trackers to monitor players during training and matches. While coaches benefit from detailed analytics, players have expressed concerns about overexposure and loss of privacy (Rossi et al., 2018, p. 127).

Social media platforms add another layer: athletes are often subject to automated image recognition and recommendation systems that highlight certain aspects of their identity such as physical appearance over achievements. Such practices risk reinforcing objectification, particularly for women and minority athletes (Lebel & Danylchuk, 2014, p. 154).

### 6.1. FIFA and the VAR System

The introduction of the Video Assistant Referee (VAR) system during the 2018 FIFA World Cup illustrates the integration of AI-assisted technologies into sports decision-making. While VAR improved refereeing accuracy and reduced human error, it also generated debates about fairness, transparency, and the extent to which technology should influence the human flow of the game (Rowe, 2020, p. 45).

### 6.2. NBA and Wearable Technology

In the National Basketball Association (NBA), athletes use wearable sensors that track biometric data such as fatigue levels, speed, and recovery time. Although beneficial for performance optimization, concerns emerged over the ownership and commercial

use of this sensitive data. Players' unions in the United States have negotiated agreements to regulate how much of this information can be shared publicly (Andrejevic, 2020, p. 60).

### 6.3. Serena Williams and Media Representation

The coverage of Serena Williams highlights the intersection of gender, race, and media objectification. Analyses of her portrayal reveal a tendency in sports journalism and social media to emphasize controversies or appearance rather than athletic achievements (Messner, Duncan, & Cooky, 2003, p. 41). This case underscores the risk of bias and objectification in digital sports narratives.

### 6.4. Tokyo 2020 Olympics and Social Media Engagement

The Tokyo 2020 Olympic Games demonstrated how social media platforms amplify global fan engagement. Athletes such as Simone Biles used Twitter and Instagram to share personal struggles, raising awareness about mental health in sports. This direct communication bypassed traditional media filters but also exposed athletes to intensified public scrutiny (Boyle & Haynes, 2020, p. 118).

### 7. Conclusion

Intelligent sports media represents a double-edged sword: it revolutionizes fan experiences, democratizes access to sports content, and enhances analytical accuracy. Yet it also introduces pressing ethical challenges. The privacy of athletes is threatened by constant datafication, while the risk of objectification undermines the recognition of athletes as complex human beings.

A future-oriented approach requires proactive ethical frameworks that protect privacy, resist objectification, and ensure fairness in representation. Athletes, as central figures in the sports ecosystem, must be seen not only as performers or data points but

as individuals whose dignity deserves protection in the digital age.

The rise of intelligent sports media demonstrates the transformative potential of technology in shaping contemporary sports culture. Yet, unchecked innovation risks undermining ethical principles and social responsibility. Balancing ethics, technology, and responsibility requires a holistic approach that values privacy, fairness, and dignity as much as efficiency and profit. As the sports media ecosystem continues to evolve, fostering ethical practices will be essential for sustaining trust and integrity in the digital age.

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