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World Cup 2026 and Artificial Intelligence: How Algorithms Are Reshaping Public Discussions on Football Across Social Media

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Abstract:

This article provides an original contribution to the field of sports media and digital interaction by exploring the impact of artificial intelligence on football-related discussions on Instagram during the 2026 World Cup. Based on data from an online survey of 1,200 supporters of men's football teams in North African countries, the study analyzes how algorithms reshape fan engagement, direct content exposure, and influence the nature of football discourse. This research stands out as one of the first to apply and extend theoretical models of digital communication in a sports context, offering a new perspective on the role of AI in shaping fan dynamics. Through thematic analysis, the findings reveal Instagram's role in fostering fan interaction while highlighting concerns related to content personalization, the creation of echo chambers, and potential algorithmic biases. This study calls for increased awareness and transparency in the use of AI within digital platforms to ensure more diverse and balanced sports discussions among fans on social media.

Keywords: World Cup 2026; Artificial Intelligence; Algorithms; Discussions; Football; Social Media.

1. INTRODUCTION

Social media has become a fundamental element in shaping sports fan culture, with platforms like Instagram providing an interactive environment that allows fans to engage instantly and stay updated on sports news (Boyd & Ellison, 2020). As reliance on these platforms increases, Instagram has emerged as one of the most significant channels for discussing football, particularly during major events like the World Cup. It enables users to follow news, analyze matches, and interact with players and analysts (Billings, Broussard, & Xu, 2020).

In recent years, social media has experienced remarkable advancements due to artificial intelligence (AI), which plays a crucial role in personalizing content and enhancing user engagement (Kaplan & Haenlein, 2021) This has led to an unprecedented transformation in the sports viewing experience, as Instagram algorithms analyze users' preferences and past behaviors to determine the content they are exposed to, directly influencing their opinions and digital behaviors (Zeng , Chan, & Liu, 2022).

Accordingly, this study aims to explore how AI influences sports fan interactions on Instagram during the 2026 World Cup. It seeks to answer research questions related to the role of algorithms in shaping discussions, the extent of fan awareness regarding their impact, and the effects of content personalization on user experience.

2. Literature Review

2.1 The Role of AI in Sports Media

Sports media has undergone a radical transformation with the advent of AI, which is now used in sports data analysis, advanced statistics, and even automated journalism through machine learning techniques (Gantz, 2020) This impact extends beyond sports coverage to shaping media content based on audience interests, thereby enhancing the dissemination of sports news in a targeted manner that reflects users' previous interactions (Chen, Wu, & Zhang, 2022).

One of the most notable effects of AI in sports media is the role of algorithms in shaping fan opinions. These algorithms analyze user interactions with content and provide recommendations based on individual usage patterns (Napoli, 2021) While these technologies enhance user experience, they may also reinforce media biases by limiting users' exposure to diverse perspectives, a phenomenon known as the "filter bubble effect" (Pariser, 2011).

2.2 AI and Fan Discussions in Sports

With the increasing integration of AI in social media platforms, algorithms now play a major role in directing discussions among fans. Content that generates significant engagement is promoted more widely, leading to the dominance of certain topics over others (Moreno, Navarro, & Towner, 2022). Emotional and controversial content often receives higher engagement, potentially influencing the nature of sports discussions and fostering audience polarization (Vosoughi, Roy, & Aral, 2018).

This trend is linked to the concept of "echo chambers," where users are directed toward content that reinforces their existing views, thereby reducing their exposure to different perspectives (Sunstein, 2017). Recent studies indicate that AI can intensify audience polarization, particularly regarding controversial sports issues such as referee decisions or the performance of major teams (Kaye, Zeng, & Liu, 2023).

2.3 Instagram as a Source of Sports Information

Instagram has evolved into a primary platform for sports discussions, where fans rely on it for news, analysis, and interactions with players and analysts (Williams & Chinn, 2021). The platform's integration of multimedia features, such as short videos and interactive stories, enhances user experience and serves as an effective tool for delivering sports information (Alalwan, Rana, Dwivedi, & Algharabat, 2021).

Instagram increasingly utilizes AI-powered features, such as content personalization based on user interests and big data analysis to provide accurate (Kaplan & Haenlein, 2021) However, this approach may also limit information diversity, as certain sources and content are prioritized over others, reducing users' exposure to a wide range of sports perspectives (Zeng , Chan, & Liu, 2022).

3. Theoretical Framework

This study relies on various media theories to explain how social media-particularly Instagram-affects sports fan engagement. By analyzing these theories, we can understand the mechanisms through which algorithms and AI shape digital discussions and fan behavior.

3.1 Fan Interaction Theories in the Digital Age

Research in digital media suggests that social media platforms enhance fan engagement through features such as comments, likes, and instant sharing (Billings, Broussard, & Xu, 2020) This interactivity creates a dynamic

environment that influences fans' perceptions and opinions about teams and players.

3.2 Reception and Media Influence Theory

This theory posits that the way content is presented directly affects how the audience perceives it (Gantz, 2020) For example, if Instagram algorithms consistently highlight certain content, it may shape fans' perceptions and attitudes toward teams or sports events.

3.3 The Algorithmic Bias Model

This model describes how algorithms influence user preferences by curating content based on previous interactions, potentially reinforcing media biases and limiting information diversity (Chen, Wu, & Zhang, 2022) In the context of football, a user may find themselves surrounded by content that confirms their preexisting views about a particular team, restricting their exposure to alternative or neutral perspectives.

3.4 Echo Chamber Theory

An extension of the algorithmic bias model, this theory suggests that users are primarily exposed to content that reinforces their existing beliefs, leading to closed loops of similar discussions (Sunstein, 2017) On Instagram, algorithms can intensify this phenomenon by directing fans toward content that aligns with their preexisting opinions about their favorite teams or specific events.

3.5 Agenda-Setting Theory

This theory states that the media does not tell people what to think but rather influences which topics they consider important (McCombs & Shaw, 1972). In our study’s context, Instagram algorithms play a similar role by emphasizing specific sports topics during major tournaments like the World Cup, shaping fan discussions and interests.

3.6 Uses and Gratifications Theory

This theory suggests that individuals use media to fulfill different needs, such as seeking information, social interaction, or entertainment (Katz, Blumler, & Gurevitch, 1973) Study findings indicate that fans utilize Instagram as a primary source for sports news and as a platform for engaging in discussions with a broader audience.

3.7 Media Dependency Theory

This theory highlights that audiences rely on media as a primary source of information, especially during major sports events (Rokeach & DeFleur, 1976) In the AI era, this dependency is linked to the ability of algorithms to personalize

content based on user interests, making Instagram a central platform for fans during sports tournaments.

4. Summary and Research Questions

4.1 Research Questions

Based on the literature review and theoretical framework, this study aims to answer the following research questions:

• RQ1: How do Instagram algorithms influence the nature of fan discussions about the 2026 World Cup?

• RQ2: To what extent are fans aware of AI's role in shaping football content on Instagram?

• RQ3: How does AI-driven content personalization impact fan experience and engagement?

4.2 Methodology

Ethical approval was obtained from the research institution affiliated with the researcher before collecting any data, ensuring adherence to ethical standards and the protection of participants' rights in scientific research between March and July 2025, an online questionnaire was distributed targeting football fans who use Instagram during the 2026 FIFA World Cup. A five-month data collection period was chosen to ensure comprehensive coverage and maximize participant numbers, aligning with previous studies on fan behavior on social media platforms (Pope, Williams, & White, 2022).

The questionnaire focused on the opinions of fans discussing men's football on Instagram. This platform was selected due to its ability to facilitate real-time interaction among users and enhance participation in open discussions, providing a dynamic environment for tracking and analyzing the impact of artificial intelligence in shaping fan discourse (Alalwan, Rana, Dwivedi, & Algharabat, 2021) Instagram allows users to engage in sports discussions through posts, comments, and stories, reinforcing its role as a primary medium for consuming and interacting with sports content compared to other platforms like Facebook or Twitter (Billings, Broussard, & Xu, 2020).

Participants were recruited through social and professional networks to ensure sample diversity. Invitations to participate were shared via platforms such as Facebook, LinkedIn, and Instagram, along with outreach to specialized sports organizations and online fan groups-an approach commonly used in studies relying on social media-based data (Moreno, Navarro, & Towner, 2022) To ensure

broader representation, a snowball sampling technique was encouraged, whereby initial participants were asked to share the survey link with their contacts. This method is widely recognized for its effectiveness in research targeting digitally engaged audiences (Kaplan & Haenlein, 2021).

Data collection was conducted through an online questionnaire using Google Forms, following a non-probability sampling approach, which is frequently used in studies examining online user behavior, especially when targeting digitally active groups (Bryman, 2023) Since the survey was open, participants had the freedom to join or withdraw, helping to reduce social desirability bias and leverage online anonymity to collect objective and comprehensive data-an approach recommended in digital research (Joinson, McKenna, Postmes, & Reips, 2021) Furthermore, this method allowed for a wider geographical representation of participants compared to traditional research methods, enhancing the reliability of the findings (Kaye, Zeng, & Liu, 2023).

4.3 Study Sample

A set of preliminary questions was included to assess participants' eligibility to complete the survey, such as gender, age, geographical location, and level of engagement with football on Instagram. This approach is common in digital interaction studies that aim to classify respondents based on their demographic characteristics (Chen, Wu, & Zhang, 2022) To ensure consistency with previous research on fan engagement, the study focused on football fans who participate in discussions about teams and players during the World Cup. However, no strict criteria were imposed regarding fandom intensity, such as attending matches in person or maintaining continuous engagement with the sport, to ensure a broader representation of digital fan perspectives (Gantz, 2020).

A total of 1,200 respondents participated in the survey, with the age distribution as follows:

- 18–25 years: 14.2%
- 26–35 years: 39.7%
- 36–45 years: 31.5%
- 46–55 years: 9.6%
- Above 55 years: 5%

Regarding geographical distribution, the participants were from the following regions:

- Algeria: 42%
- Tunisia: 24%

- Morocco: 18%
- Other countries: 16%

The survey centered on participants' engagement in football discussions on Instagram, analyzing responses to closed-ended questions concerning the platform's algorithmic influence on their opinions and digital behavior. This methodology is commonly used to examine how algorithms shape the content users encounter on social media (Zeng , Chan, & Liu, 2022) The study specifically investigated how AI amplifies trending topics, the impact of excessive content personalization on reducing diversity in sports opinions, and the extent to which fans are aware of the digital dynamics influencing their sports viewing and interaction experience. These factors directly affect how fans consume sports content online (Napoli, 2021).

5. Ethics and Data Analysis

The ethical guidelines for online data collection were followed in accordance with the standards of the Association of Internet Researchers (2019), ensuring the protection of participants' privacy, transparency in data collection, and the prevention of psychological or social harm. Due to the potential sensitivity of some questions related to the impact of personalized content, participants were directed to support resources should they wish to learn more about managing recommended content on Instagram.

Data analysis was conducted using descriptive statistical analysis to identify patterns and recurring responses in closed-ended questions. Additionally, thematic analysis was applied to examine responses related to the impact of Instagram's algorithms on fan engagement. The study followed the Braun and Clarke (2023) methodology, which employs a flexible and iterative approach to data analysis, ensuring the extraction of clear patterns and trends from responses.

The analysis process began with a careful reading of the data, followed by initial coding to identify emerging ideas. These codes were then reorganized into key analytical themes, allowing for a structured examination of the relationship between artificial intelligence and fan behavior in football discussions on Instagram.

Through this methodology, the study aimed to provide a deeper understanding of how algorithms influence the digital experience of fans, their awareness of algorithmic manipulation, and its impact on their sports opinions during the 2026 FIFA World Cup.

6. Results and Discussion

6.1 Motivations for Using Social Media During the World Cup

Analysis of responses from 1,200 participants revealed that 85% of fans used Instagram to follow the tournament. The key motivations included:

- Following live news and results (63%)
- Accessing analysis and entertainment content (58%)
- Interacting with players and celebrities via stories and comments (47%)
- Participating in sports discussions (39%)
- Exploring promotional offers and ads related to the tournament (22%)

These figures highlight Instagram's role as a primary platform for following sports events, as it combines real-time news with social interaction (Boyd & Ellison, 2020) Additionally, 72% of fans reported a significant increase in their Instagram usage during the tournament compared to regular times. The analysis also showed that 48% of fans relied on Instagram as their primary source of information, compared to 32% for television and 20% for sports news websites (Williams & Chinn, 2021).

6.2 Algorithmic Influence on Shaping Discussions

A total of 74% of fans stated that the recommended content on Instagram changed based on their previous interactions. The findings revealed that:

- Users who engaged with analytical content received more analytical posts (82%) (Bakshy et al., 2015).
- Fans discussing major teams frequently saw more content supporting the same teams (69%) (Pariser, 2011).
- Interacting with celebrity posts led to increased visibility of their content in recommendations (77%).
- Emotional or controversial content had a wider reach due to high engagement (61%) (Vosoughi, Roy, & Aral, 2018).

These results suggest that Instagram algorithms reinforce personal beliefs and limit exposure to diverse viewpoints (Sunstein, 2017). Additionally, 53% of fans noticed an increase in emotional content in recommendations compared to analytical content, potentially affecting the quality of sports discussions.

6.3 Challenges of Content Personalization and Algorithms

When assessing algorithmic content bias, 61% of fans believed that Instagram's algorithms might favor specific teams or players (Diakopoulos, 2019) Furthermore:

• 54% felt that the variety of opinions was limited due to personalized recommendations.

• 42% found it challenging to access different perspectives.

• 29% reported that controversial news dominated recommendations more than objective analysis.

• 34% had to manually search for diverse content (Napoli, 2021).

Additionally, 38% of participants found that suggested content did not always align with their actual interests, while 45% noticed a significant increase in targeted advertisements, affecting their browsing experience.

6.4 Fan Strategies for Managing Algorithmic Content

To counteract the influence of algorithms, fans adopted various strategies. A total of 68% of participants stated that they manually adjusted their preferences or sought different sources to ensure content diversity. Their strategies included:

• Using specific hashtags to find unfiltered content (53%).

• Following a variety of sources to avoid bias (46%) (Bozdag, 2013).

• Reducing interaction with recommended content and focusing on trusted accounts (39%).

• Using incognito mode or alternative accounts to explore new recommendations (28%).

These behaviors indicate growing awareness among fans regarding algorithmic influence and their efforts to achieve balanced sports content consumption. Additionally, 49% of participants reported that these strategies helped them discover more diverse and analytical content, reflecting a conscious resistance to algorithmic biases (Flaxman, Goel , & Rao , 2016).

6.5 AI Analysis in Light of Theoretical Models

When comparing the findings to media theories, the impact of Instagram's algorithms aligns with the "Echo Chamber Model," where repeated exposure to similar content reinforces personal beliefs (Sunstein, 2017) The study also supports the "Agenda-Setting Theory," as the platform determines the topics that gain audience attention (Mccombs & Shaw, 2017).

Furthermore, the results align with the "Uses and Gratifications Theory," where fans use Instagram to fulfill their needs for following sports content (Katz, Blumler, & Gurevitch, 1973) The media amplification phenomenon observed during the tournament also reflects the "Media Dependency Theory," as fans

increasingly relied on Instagram as their primary source of information ((Rokeach & DeFleur, 1976).

This analysis underscores the need for more neutral and transparent algorithms, along with enhanced user control over content personalization, to improve the user experience and ensure more diverse sports content.

7. Conclusion

This study highlights the profound influence of artificial intelligence and algorithmic design on shaping public discourse surrounding global sports events, with a particular focus on the 2026 FIFA World Cup. Instagram has emerged not only as a key platform for real-time updates and entertainment but also as a central hub for user engagement, where fans actively participate in conversations, share opinions, and construct collective narratives about matches, players, and controversies.

User discussions about the World Cup were found to be highly dynamic, emotionally charged, and heavily shaped by algorithmically recommended content. These interactions ranged from celebratory expressions and national pride to critical debates over team performance and refereeing decisions. However, the study reveals that these conversations are often influenced—if not constrained—by the algorithms that prioritize sensational or confirmatory content, thereby limiting exposure to diverse or opposing viewpoints.

The findings align with theoretical models such as the Echo Chamber and Agenda-Setting theories, emphasizing how algorithmic curation not only reinforces personal biases but also subtly dictates which topics dominate user attention. Despite these limitations, many users demonstrated agency by adopting strategies to diversify their media exposure and access more balanced, analytical content.

Given the growing role of AI in structuring media experiences, there is a pressing need for more transparent algorithmic systems that prioritize diversity and informational depth. Furthermore, digital literacy programs must be expanded to empower users with the critical skills needed to navigate social media ecosystems and meaningfully engage in discussions around major sporting events like the World Cup.

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