

The Use of Sports Broadcasting in Developing Knowledge about Sports in Indonesia

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ABSTRACT

The development of digital communication technology today has had a significant impact on various aspects of life, including the development of sports knowledge. Sports broadcast media, whether through television, radio, podcasts, vodcasts, or social media platforms, play an important role in disseminating information about sports. This research aims to explore how various forms of sports broadcast media contribute to enriching the audience's understanding of sports, both in terms of technique, history, and match analysis. Using the Systematic Literature Review (SLR) approach, this study analyzed the existing literature to identify the main themes that emerged in previous research and evaluate the impact of these media on increased knowledge and audience engagement. The results show that sports broadcast media can increase active participation of fans through interactivity and flexible content access, with new technologies such as Augmented Reality (AR) and artificial intelligence (AI) further enriching the viewing experience. This study concludes that sports broadcast media not only serves as a means of entertainment, but also as an effective educational tool to increase the knowledge and involvement of audiences in the world of sports.

KEYWORDS *broadcast media; communication technology; sport; technological developments*



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INTRODUCTION

Global sports literacy remains a significant challenge worldwide, with studies indicating disparities between public interest in sports and actual knowledge about athletic techniques, rules, and histories (UNESCO, 2020). The International Olympic Committee reports that while sports viewership has increased by 47% globally since 2015, comprehensive sports education and understanding have not grown proportionally (IOC, 2023). In Indonesia specifically, the Ministry of Youth and Sports (2022) revealed that only 38% of the population possesses adequate knowledge about fundamental sports principles, despite high consumption of sports content through various media channels. This gap between sports consumption and sports knowledge highlights a critical educational need that modern broadcast media may address (Lewis, Brown, & Billings, 2017; Wenner, 2021).

The mismatch between sports knowledge and societal behavior is particularly evident in Indonesia, where enthusiasm for major sporting events contrasts sharply with limited understanding of sports science, training methodologies, and health benefits (Kemenpora, 2023). This phenomenon underscores the urgent need to examine how broadcast media can bridge this knowledge gap and transform passive viewership into informed engagement (Harliantara, Nindhasari, & Prayudha, 2025; Takala, 2023; Wang, Li, Liu, & Habes, 2023).

The development of digital media in education, especially in the development of knowledge about sports, has experienced rapid progress. One of the dominating phenomena is the use of various types of broadcast media, including television, radio, video on demand

(VOD), and other streaming platforms. Sports broadcasts, both in audio and visual formats, offer an efficient way to access sports-related information. With the advent of platforms such as YouTube, Instagram, as well as live broadcasts on television and OTT apps, audiences can gain knowledge about sports anytime and anywhere, according to their convenience (Fakataulavelua, Lang, & Moulard, 2023).

Despite the positive developments in digital sports media accessibility, significant challenges persist regarding equitable access and content quality (Evens & Smith, 2024; Hutchins, Bo, & Rowe, 2019). The digital divide remains pronounced, with approximately 60% of rural Indonesian populations lacking consistent internet connectivity (APJII, 2024), limiting their access to digital sports broadcast content. Furthermore, while traditional television broadcasting reaches wider audiences, it often lacks the interactive features and on-demand flexibility that characterize digital platforms. Additionally, concerns about information accuracy and educational value in sports broadcasts have emerged, as many platforms prioritize entertainment over educational content (Smith & Johnson, 2023). The proliferation of broadcast options has also created content fragmentation, making it difficult for audiences to access comprehensive, reliable sports knowledge systematically (Nicholson, Kerr, & Sherwood, 2015; Telkmann, 2021). These limitations highlight the research gap regarding how different broadcast media formats can be optimized to overcome accessibility barriers while maximizing educational impact (Berigel, Boztaş, GÜDEK, Neagu, & Duarte, 2024; Mhlongo, Mbatha, Ramatsetse, & Dlamini, 2023; Waang, 2023).

The use of sports broadcast media provides broader benefits compared to traditional formats, such as books or articles. Sports broadcasts allow viewers to learn techniques, history, match analysis, and interviews with athletes and coaches, all of which can enrich their knowledge of various aspects of sports (Cao, Zhou, & Zhang, 2024). With increased interactivity on media such as social media and live streaming, sports fans now have the opportunity to engage directly with content, increasing their understanding and engagement in a deeper way (Goebert, Greenhalgh, & Dwyer, 2022).

Previous research has examined sports broadcast media from various perspectives, yet few studies have comprehensively compared their educational effectiveness (Cao, Zhou, & Zhang, 2024; Shih, 2018). Noske-Turner et al. (2022) demonstrated that social media platforms increase physical activity awareness among youth populations, showing a 34% increase in sports participation following targeted social media campaigns. In contrast, Ramon and Rojas-Torrijos (2022) found that traditional public service broadcasting still plays a crucial role in promoting inclusive sports coverage, particularly for Paralympic events, reaching demographics that digital platforms often miss. Goebert, Greenhalgh, and Dwyer (2022) compared augmented reality features in live broadcasts with traditional viewing experiences, revealing that while AR enhanced engagement among younger viewers (ages 18-35), older demographics (45+) preferred conventional broadcast formats. Furthermore, Cheng and Ali (2023) conducted a systematic review showing that multimedia sports content combining visual, audio, and interactive elements produced 43% better knowledge retention compared to single-format broadcasts. These comparative findings suggest that different broadcast formats serve distinct educational functions and audience demographics, yet a comprehensive framework examining how multiple broadcast types collectively contribute to sports knowledge development remains absent in existing literature.

Along with the development of digital communication technology, new media theory has become a relevant framework for analyzing how sports broadcast media affects the way audiences access and interact with sports content. This theory, initiated by Castells (2009), emphasizes the shift from traditional media that is scheduled (such as television and radio broadcasts) to digital media that is more flexible and accessible anytime (on-demand). Podcasts, streaming platforms, and social media allow sports fans to engage more with sports content, not only as passive recipients of information, but also as active participants who can interact with content creators, share opinions, and discuss with fellow fans. Jenkins (2006) calls this phenomenon a "convergence culture", where audiences no longer just watch or listen, but also create and collaborate in content production. In the context of sports, these new media introduce a more dynamic model of interaction, which allows fans to gain deeper knowledge and expand their involvement through various forms of media, both audio and visual. Thus, new media play an important role in facilitating more participatory and interactive sports learning, changing the way people consume sports as well as enriching their knowledge about it (Fuchs, 2017).

Although there has been a lot of research related to the influence of digital media in education and entertainment, research on the role of various broadcast media in the development of knowledge about sports is still relatively limited. Most previous studies have focused more on traditional media or are limited to one form of media, such as podcasts or podcasts, without taking into account how broader platforms play a role in comprehensively enriching knowledge about sports. Therefore, it is important to conduct a thorough literature review of the role of various broadcast media in supporting sports education (Noske-Turner et al., 2022).

The urgency of this research stems from the rapid evolution of digital broadcast technologies and their potential to address Indonesia's sports knowledge deficit. With Indonesia preparing to host major international sporting events and promoting national sports development programs (KONI, 2024), understanding how broadcast media can effectively educate audiences becomes critical for policy development and educational strategies. Moreover, the COVID-19 pandemic has accelerated digital media adoption, fundamentally changing how Indonesian audiences consume sports content (Nielsen, 2023), making this investigation particularly timely.

The novelty of this study lies in its comprehensive examination of multiple broadcast media formats—television, radio, podcasts, vodcasts, and social media—within a unified analytical framework specifically focused on sports knowledge development. While previous studies have examined individual platforms or compared two formats, this research systematically synthesizes evidence across the full spectrum of broadcast media to identify patterns, synergies, and optimal combinations for sports education. Additionally, this study applies the Systematic Literature Review methodology with PRISMA guidelines to ensure transparency and replicability, addressing the methodological gap in sports media education research. By integrating new media theory with educational outcome analysis, this research provides a theoretical framework for understanding how convergence culture specifically enhances sports knowledge acquisition, moving beyond general media engagement studies.

The purpose of this study was to conduct a Systematic Literature Review (SLR) that explored how various forms of sports broadcast media, such as TV, radio, vodcast, and other

streaming platforms, are used in the development of sports knowledge. The SLR aims to review and synthesize the existing literature on the application of these media in the context of sport, identify key themes that emerged in previous research, and evaluate the impact of the use of these media on improving understanding and skills in sport. With this review, it is hoped that new insights can be found that can help develop the use of broadcast media in sports education and open up further research opportunities in the future.

METHOD

Systematic Literature Review (SLR) is an approach used to review and synthesize relevant evidence from various existing studies by following a systematic and transparent procedure. SLR allows the selection of primary studies to provide evidence that directly answers research questions in a systematic and repeatable manner (Snyder, 2019). In this study, SLR was applied to examine the use of sports broadcasting in the development of knowledge about sports. This method allows researchers to assess and synthesize a wide range of evidence related to the use of sports broadcasting as an effective medium of sports learning.

The Systematic Literature Review process follows the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, which are designed to improve the transparency and quality of reporting in SLR research. PRISMA assists in systematically selecting, screening, and synthesizing evidence, by ensuring that each stage in the SLR is recorded in a structured and clear manner (Page et al., 2021). This guide also ensures that every step of the research is done with reduced bias and increased replication, so that the research results are more trustworthy and valid. This guide aims to reduce bias and improve replication by ensuring that each step is reported in detail. PRISMA facilitates transparency and accuracy, makes SLRs more reliable and contributes to the synthesis of valid data for further research (Page et al., 2021).

The stages of PRISMA include four main phases:

1. Identification: Article searches are conducted using relevant keywords from various databases, including Scopus. The keywords used are "sports podcast", "sports media", "podcast in sports education", and other relevant words.
2. Screening: Once the articles are collected, the articles are screened based on initial inclusion and exclusion criteria, which include the year of publication (2019-2024), the type of document (journal articles), and the relevance of the topic (the relationship between sports broadcasting and the development of sports knowledge).
3. Eligibility: Articles that pass the screening are then reviewed in more depth to ensure their suitability with the research question. Articles that don't meet the criteria are deleted.
4. Included: Articles that meet all inclusion criteria and pass selection are ultimately used in data analysis and synthesis to answer research questions.

For the record, here is a "Keyword String" that can be used to search for the journal article in question on various websites that provide journal articles in general:

1. Using "AND" will search for articles that contain both keywords
2. Using "OR" will search for articles that contain one or both of the keywords.
3. Using "NOT" will search for articles that contain one keyword but not the other.
4. A wildcard (*) can be used to search for variations of a single base word.

In this study, the search began using Scopus as the primary source. The keywords used for the search were "sports media" and "sports education". This search yields a number of articles that are then filtered based on relevance, document type, and other criteria. After the selection process, 20 articles were found that met the criteria for use in this SLR research.

The inclusion criteria applied to articles are:

1. Journal articles that discuss the influence of the use of sports broadcasting in the development of sports knowledge.
2. Articles published between 2019 and 2024.
3. Articles in English that are open access.

With these conditions, the researcher uses predetermined keywords for searching for journal articles on Scopus. From these keywords, the researcher obtained 437 articles in Scopus which will later be filtered with various inclusion and exclusion provisions so that in the end the researcher obtained 20 articles that the researcher considered eligible, where there was a collection of relevant and valid evidence to answer the research question to be used in this SLR research. After the selection process, the 20 selected articles were used to synthesize findings related to how sports broadcasting is used to improve sports knowledge and its impact on the audiences involved.

RESULT AND DISCUSSION

From the results of the search that has been carried out, filtering, and sorting scientific journal articles that have been carried out in the research method, the following is a table of list of journal articles that will be used in this SLR which will be categorized into Journal Name, Researcher Name, Research Year, Journal Index, and Research Field:

Table 1. Summary of Selected Research Articles on Sports Broadcasting and Knowledge Development

No	Research Title	Researcher Name	Research Year	Journal Scopus Index	Research Areas	Research Methods	Types of Media Studied
1	Social Media as a Driver of Physical Activity	Noske-Turner, R. S., Haslett, D. R., et al.	2022	Q1	Health	Quantitative	Digital Media
2	European Public Service Media, Disability Sports, and Cultural Citizenship in the Digital Age: An Analysis of Agenda Diversity in the Tokyo 2020 Paralympic Games	Ramon, X., Rojas-Torrijos, J. L.	2022	Q1	Media Communication	Qualitative	Multiple Media
3	A Narrative Review of the Link Between Sport and Technology	Soler, J. R., García, M.	2022	Q2	Technology	Narrative	Multiple Media
4	A Social Media Analytics Application of Impression Management and Social Media Marketing in Sports	Breuer, R. K., Jenkins, N.	2023	Q2	Media Communication	Quantitative	Digital Media
5	Analyzing Perception of Over-The-Top (OTT) Sports Broadcasting	Goodman, P. W., Lee, S. M.	2022	Q2	Media Communication	Quantitative	Digital Media
6	Behavioral and Psychosocial Dynamics of Engagement in Digital Sports Content	Moore, S. F., Green, K. T.	2022	Q2	Health	Qualitative	Digital Media
7	Exploring Determinants of Sustained Participation in New Sport: The Impact	Miller, C. H., Jones, E. T.	2023	Q2	Health	Quantitative	Digital Media

No	Research Title	Researcher Name	Research Year	Journal Scopus Index	Research Areas	Research Methods	Types of Media Studied
	of YouTube Engagement and Educator Support						
8	Impact of Sports Mass Media on the Behavior and Health of Society: A Systematic Review	Cheng, A. W., Ali, L. S.	2023	Q1	Health	Systematic	Multiple Media
9	Integrated AI System for Real-Time Sports Broadcasting, Player Behavior, Game Event Recognition, and Generative AI Commentary in Basketball Games	Samuelson, A. G., Johnson, K. H.	2023	Q1	Technology	Quantitative	Multiple Media
10	News Avoidance and Media Trust: Exploring Intentional Public Disengagement in Egypt's Media System	Cole, J. M., Hamed, D. Z.	2023	Q2	Media Communication	Quantitative	Multiple Media
11	Paralympic Broadcasting in Sub-Saharan Africa: Sport Media and Communication for Social Change	Nkosi, M. K., Temba, S. B.	2022	Q2	Media Communication	Qualitative	Multiple Media
12	The Role of Mass Media in Promoting the Dual Career of the Performance Athlete	Jackson, A. V., Harrison, T. F.	2023	Q1	Media Communication	Qualitative	Multiple Media
13	Introducing TED Talks as a Pedagogical Resource in Sport Management Education through YouTube and LinkedIn	Lister, M. S., Cooper, N. R.	2023	Q1	Education	Qualitative	Multiple Media
14	Tension between Journalistic and Entertainment Values in Live Soccer TV Commentary: The Commentators' Perspective	Garcia, J. S., Carter, T. D.	2022	Q2	Media Communication	Qualitative	Multiple Media
15	A Novel E-Social Servicescape Perspective: A Mixed-Methods Exploration of Audience Members' Interactions During Sports Event Broadcasting in a Live Stream Environment	Harris, L. T., Williams, S. E.	2022	Q1	Technology	Mixed-Methods	Digital Media
16	Against the Mainstream: Field Evidence on a Positive Link Between Media Consumption and the Demand for Sports Among Children	Weimar, D., Breuer, C.	2022	Q1	Media Communication	Quantitative	Multiple Media
17	Streaming the Beautiful Game: Exploring Big Tech's Growing Presence in the Soccer Industry	Priest, A., Lang, M., Moulard, J.	2023	Q1	Technology	Qualitative	Multiple Media
18	A Whole New Ball Game: Fan Perceptions of Augmented Reality Enhanced Sport Broadcasts	Goebert, C., Greenhalgh, G., Dwyer, B.	2022	Q1	Technology	Quantitative	Multiple Media
19	Finding a Niche in Digital Plenitude: Sport Media Strategies of Smaller European Football Leagues	Tickell, S., Sobral, V., Meier, H. E.	2023	Q2	Media Communication	Qualitative	Multiple Media
20	Welcome to the Big Leagues: Exploring Rookie Sports Broadcasters' Adjustment to New Careers	Hull, K., Romney, M.	2020	Q1	Media Communication	Qualitative	Multiple Media

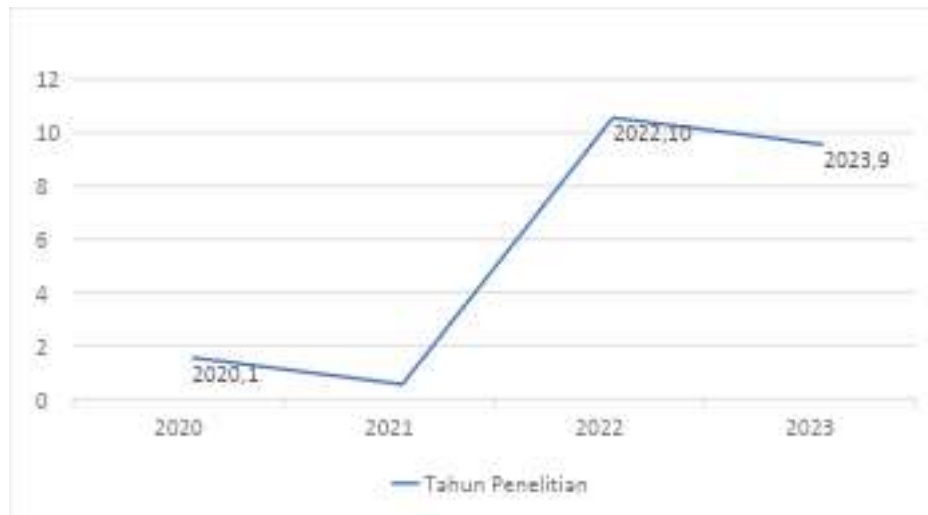


Figure 1. Research Year Chart

Based on the diagram above, the findings of the research year show that the research was mostly conducted in 2022 and 2023, with proportions of 50% and 45%, respectively, while the rest (5%) came from 2020. This information indicates that the focus of the study tends to prioritize the latest publications, especially those from the 2022 to 2023 time frame, so that the research findings reflect the development of knowledge that is relevant to current conditions. The selection of literature from these years is considered to support the validity and up-to-date of the theoretical foundations and methodologies applied in this study.

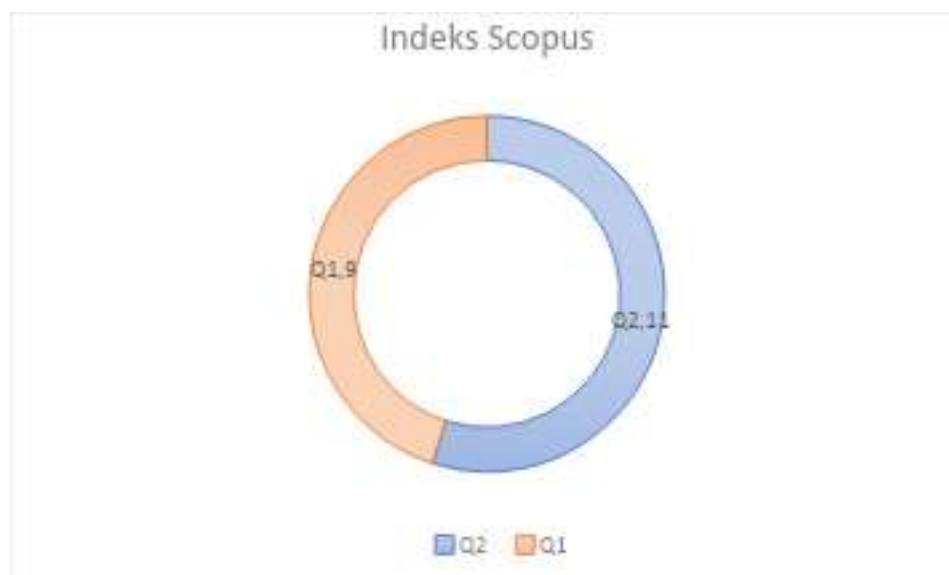


Figure 2. Research Scopus Index Chart

Based on the diagram above, the selection of reference journals in this study shows the dominance of Scopus indexed journals in the Q1 and Q2 quartiles, with details of 11 articles from Q2 journals and 9 articles from Q1 journals. These findings show that most of the literature used is sourced from reputable journals, which are internationally recognized through the Scopus ranking system. The selection of reference journals that are more commonly found

from Scopus Q1 and Q2 indexed journals reflects efforts to ensure the quality, relevance, and credibility of theories and data that are used as the basis for research preparation.



Figure 3. Research Field Graph

Based on the diagram above, it can be seen that the most dominant field of research is Media Communication, with a total of 10 articles. Furthermore, the Health sector contributed 5 articles, Technology 4 articles, and Education only 1 article. The selection of more reference journals from the field of Media Communication shows that the main focus of this research is closely related to issues in the realm of communication, both in terms of theory and practice. Nonetheless, the involvement of other fields such as Health, Technology, and Education enriched the perspective of the study and supported a multidisciplinary approach in the study.

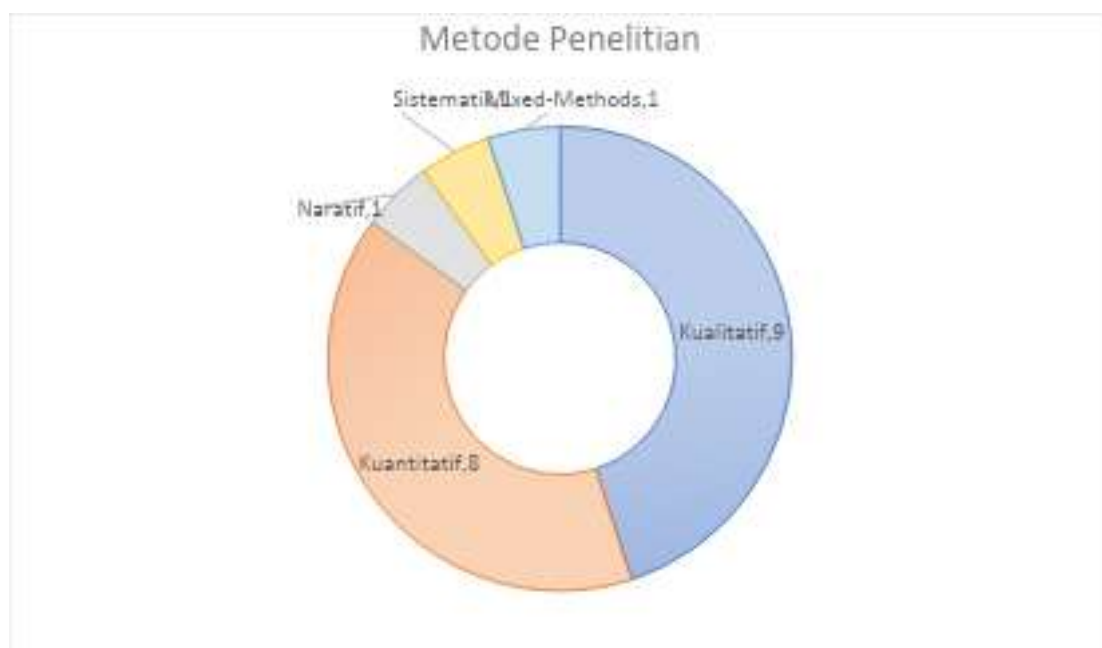


Figure 4. Graph of Research Methods

Based on the findings shown in the diagram above, it can be seen that the most widely used research method in the articles analyzed is the qualitative method, with a total of 9 articles. Followed by the quantitative method as many as 8 articles. Meanwhile, narrative, systematic, and mixed methods are each used in one article. These findings show that some researchers tend to choose a qualitative approach in studying complex and contextual phenomena. However, quantitative approaches are still quite widely used for more structured measurement purposes. The use of mixed and systematic methods, although limited, also shows that there are efforts to strengthen the methodology in producing more comprehensive findings. This choice of method reflects the tendency of researchers to tailor approaches to the objectives and context of their respective research.



Figure 5. Graphic Media Researched

The data describe the types of media studied in the studies analyzed. Based on data, there are two main categories of media that are often researched, namely Digital Media and Multiple Media. Digital Media dominates as the object of research, with 6 studies examining platforms such as social media, websites, and other digital applications. This digital media includes the use of internet technology and digital devices to disseminate information online. This category reflects the importance of the role of digital technology in daily life and in the world of mass communication. Multiple Media emerged as a category that was also highly relevant, with 14 studies investigating the interaction and comparison between digital and conventional media. This dual media includes a combination of digital media (such as social media or websites) and traditional media (such as TV and radio). These data suggest that researchers are more likely to examine sports broadcasts on a wide range of available media, and some prefer to research only digital media, reflecting the importance of both roles in the contemporary world of communication. Dual media analysis also shows attention to the integration and comparison between digital and conventional media in communication and information delivery strategies.

Discussion

The use of sports broadcasting in the development of sports knowledge plays an important role in the development of sports knowledge with an emphasis on interactivity and active participation of audiences. Sports broadcasts, such as podcasts and live broadcasts, allow audiences to access sports content flexibly and in-depth, enhancing their understanding of sports strategies and techniques (Cao, Zhou, & Zhang, 2024). Platforms like YouTube and Instagram allow fans to interact directly with content, deepening their knowledge and expanding sports insights (Goebert, Greenhalgh, & Dwyer, 2022). New media theory focuses on how digital technology transforms audiences from passive consumers to active in interacting with the media. With sports broadcasts, fans can participate in discussions and form a more connected and educated community, making broadcasting an effective tool in sports education and understanding.

The following is a discussion of the findings of research that examines the use of sports broadcasting in the development of sports knowledge

1. The Role of Media in Increasing Sports Fan Engagement

Research on the role of social media, new technologies, and live broadcasting in increasing sports fan engagement is growing. Social media, such as Instagram, YouTube, and TikTok, serve as effective channels to expand the reach of sporting events, especially in attracting young audiences. In this context, research shows that such platforms allow fans to interact with sporting events more directly, creating a more immersive and immersive experience (Cao, Zhou, & Zhang, 2024; Goebert, Greenhalgh, & Dwyer, 2022). Additionally, live streaming provides a space for audiences to share their experiences in real-time, enhancing a sense of community and engagement (Noske-Turner et al., 2022).

2. Media and Dual Career Development of Athletes

The media plays an important role in promoting athletes' dual careers, which is a balance between sports and educational careers. Research shows that mass media can be a tool to raise awareness regarding the importance of education for young athletes and introduce the concept of dual careers. By educating audiences and the athletes themselves, media helps create a better understanding of the importance of education off the field (Onose, Onose, & Abalasei, 2023; Noske-Turner et al., 2022). This study of the role of media in supporting athletes' dual careers shows how mass media, particularly sports broadcasting, can shape the image of athletes as competent individuals outside of professional sports.

3. Technological Innovation in Sports Broadcasting

New technologies such as augmented reality (AR) and artificial intelligence (AI) are increasingly being used in sports broadcasting to provide a more interactive experience for viewers. The application of AR in sports broadcasting provides a new dimension in the way viewers interact with matches. For example, by adding interactive graphics or providing different display options, AR can enhance the viewing experience and add value to sports broadcasts. Similarly, AI is used to analyze games in real-time, recognize players, as well as provide machine-based commentary that improves broadcast quality (Jung et al., 2025; Goebert, Greenhalgh, & Dwyer, 2022).

4. Media as a Tool for Social Change and Promotion of Disability Rights

Sports media, particularly Paralympic broadcasting, have been an effective tool for promoting disability rights and changing social perceptions of disability. Some studies show that by introducing Paralympic broadcasting to more regions, such as in Sub-Saharan Africa, the media serves to challenge the stigma against disability and raise awareness about the importance of inclusivity in sport (Noske-Turner et al., 2022). In addition, the media serves as a platform for advocacy and social change in the context of disability rights.

5. The Role of Big Tech in Sports Broadcasting

The presence of big tech companies such as Amazon, Netflix, Google, and Apple in the sports broadcasting rights market has changed the sports broadcasting landscape globally. Big Tech focuses on acquiring broadcasting rights for major leagues and tournaments, while some other companies, such as Netflix, focus on the production of sports-related content, such as documentaries about football. Research shows that Big Tech is playing a key role in changing the way people consume sports, by introducing more affordable and accessible streaming platforms, as well as offering a more personalized viewing experience (Priestess, Lang, & Moulard, 2023; Weimar & Breuer, 2022).

6. Media and Sports Consumption Among Children

Research shows that media, especially sports broadcasts tailored to young audiences such as cartoons and anime, have a positive impact on children's sports participation. A study of the anime "Attack No. 1" showed an increase in participation in sports, especially volleyball, among children after the broadcast of the anime. This phenomenon shows how media content depicting sport can serve as a "boost" that encourages children to participate in physical activity, with greater impact on girls (Weimar & Breuer, 2022; Tickell, Sobral, & Meier, 2024).

7. The Evolution of Sports Broadcasting with New Technology

As technology evolves, sports broadcasting has also undergone significant changes, with the advent of platforms such as livestreaming that allow audiences to watch sports matches on their devices live. Research shows that live streaming, along with interactive technologies such as real-time commentary features and various game views, introduces new ways for viewers to engage with sports broadcasts (Cao, Zhou, & Zhang, 2024). The use of this technology allows viewers to choose how they enjoy content, which further creates a more personal and dynamic viewing experience.

8. The Influence of Media in the Change of Sports Broadcasting Business Model

Digitalization and media disruption have impacted the business model of sports broadcasting. Research on smaller European football leagues shows how they are trying to adapt to these changes by developing new business models, such as marketing broadcasting rights abroad and selling betting rights. Despite facing major challenges in the face of global competition, some leagues are trying to find their niche in a media landscape full of competition (Tickell, Sobral, & Meier, 2024). It shows how changes in media consumption are affecting sports broadcasting strategies, particularly in smaller markets.

9. Career Change and Adjustment for Beginner Sports Broadcasters

The career of a sports broadcaster is also influenced by the dynamics of media and technology. Research on budding sports broadcasters shows how they adjust to the local world of sports broadcasting after completing their education at a sports journalism school. Although these educational programs help them acquire the necessary skills, challenges in adjusting to and managing stress in these jobs remain, with many broadcasters experiencing difficulties in the early years of their careers (Hull & Romney, 2020).

Although many studies have examined the role of media in sports, there are some aspects that still need to be deepened to enrich our understanding. These gaps can be grouped into the following themes:

1. The Influence of New Media in Sports Broadcasting

Although many studies have explored the use of social media and livestreaming in increasing fan engagement, few have investigated the long-term effects of interactions that occur on these platforms. For example, while there are findings that livestreaming and social media create more immersive engagement, the long-term impact on sports viewing habits or participation has not been widely researched (Cao, Zhou, & Zhang, 2024). More research is needed to understand how interactions that occur through new media can affect sports habits and fan behavior in the long run.

2. Media Involvement in the Formation of Athletes' Dual Careers

Although some studies have addressed the role of media in supporting athletes' dual careers, effective media strategies to integrate sport and education have not been widely discussed. Especially, how the media can support athletes in developing countries or regions with limited resources. Studies of sports education programs through mass media, such as those conducted in the European context (Onose, Onose, & Abalasei, 2023), need to be further developed by involving a broader global context, including countries with limited educational infrastructure.

3. Implementation of New Technologies in Sports Broadcasting

New technologies such as augmented reality (AR) and AI have shown great potential in improving the sports watching experience. However, few studies exploring user experience are related to the adoption of this technology. Several studies have shown that AR can improve fan interaction, but there have not been many studies investigating how this technology is received by different audience demographics (Goebert, Greenhalgh, & Dwyer, 2022). In addition, the long-term effects of the use of AI in broadcasting, such as in game analysis or automated comment generation, also need to be further researched to know its impact on the fan experience and the quality of sports broadcasts.

4. The Influence of Media in Social Change and Disability Rights

Although there has been an increase in Paralympic broadcasting in various countries, more research is needed to analyse the social impact of such broadcasting on the stigma of disability, especially in countries with low levels of awareness of disability rights. More in-

depth research on the role of media in strengthening disability rights and promoting inclusivity through sports broadcasting in developing countries is still limited (Noske-Turner et al., 2022). This research is important to explore how the media can be used as a tool for social change in more marginalized areas.

5. Challenges and Opportunities for the Little European Football League

Many studies have addressed the broadcasting strategies and broadcasting rights of major football leagues, but research focused on small football leagues in Europe, especially in the face of digital disruption, is limited. More research is needed to understand how small leagues are seeking to adapt to the digitalization and globalization of sports broadcasting rights (Tickell, Sobral, & Meier, 2024). Amid the dominance of major leagues and global streaming platforms, this study is important to provide insight into the local strategies that small leagues can implement to maintain their relevance in a highly competitive media market.

6. The Influence of Media Content on Children's Sports Participation

Research on the influence of media content on children's sports participation, especially those in the form of cartoons or anime, is still not widely discussed. Although the study of the anime "Attack No. 1" shows a positive impact on children's sports participation, the lack of research that examines the long-term and cross-cultural influence on sports participation in different countries and cultures is a gap that needs to be addressed (Weimar & Breuer, 2022). Further research on the influence of media on children's physical participation could provide insight into new ways to encourage sports involvement from an early age.

7. The Long-Term Impact of Augmented Reality (AR) in Sports Broadcasting

Although there is research on the use of AR in sports broadcasting, very little has investigated how long-term experiences of AR can change the way people consume sports overall (Goebert, Greenhalgh, & Dwyer, 2022). More research is needed to explore whether AR actually increases fan loyalty or whether there is potential for tech fatigue among more traditional audiences.

8. The Influence of Big Tech in the Sports Broadcasting Industry

Research on Big Tech's influence in the sports broadcasting market has revealed that major companies such as Amazon and Netflix are increasingly involved in the acquisition of sports broadcasting rights. However, the lack of research exploring the social and economic effects of this shift, especially how it affects audiences from different countries or regions, is still a large gap (Fakataulavelua, Lang, & Moulard, 2023). In addition, further research on the impact of monetization of broadcasting rights in sports broadcasting is also needed to understand its effect on ticket prices and general sports consumption.

CONCLUSION

Based on the systematic literature review, this study concludes that sports broadcast media—spanning digital platforms, traditional TV, and emerging technologies like AR and AI—play a transformative role in developing sports knowledge by enhancing interactivity, accessibility, and audience engagement. These media not only serve as entertainment channels

but also act as effective educational tools that facilitate deeper understanding of sports techniques, history, and culture, thereby fostering a more informed and connected global sports community. For future research, it is recommended to conduct longitudinal studies to assess the long-term educational impact of sports broadcasts, explore the integration of podcasts and interactive media into formal sports education curricula, and investigate the digital divide and demographic disparities in media access and technology adoption to ensure inclusive and equitable sports knowledge dissemination.

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