



## Analyzing network dynamics and dominant hate speech types in Twitter conversations during professional football matches

*Dinámica de red y tipos dominantes de discurso de odio en las conversaciones de Twitter durante los partidos de fútbol profesional*

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### Abstract

**Introduction:** Persib is one of Indonesia's most popular football clubs, and it has a strong fan base. Unfortunately, this does not prevent it from being exposed to negative opinions when it competes.

**Objective:** This study aims to describe the structural features of the networks and identify the dominant types of hate speech while Persib is in a match on Twitter.

**Methodology:** This research employed a two-phase, mixed-method approach of a digital netnography with social network analysis and thematic content analysis of 413,688 tweets during the Liga 1 Sport Event.

**Results:** This study's findings indicate that Persib is very vulnerable to receive hate speech from fans when they are in match. Based on the analysis, the most frequently occurring speech was insulting or cursing, blaming, threatening, satirical, and critical.

**Discussion:** This hate speech is directed at Persib players, coaches, and management. Hate speech directed at Persib was dominated by local languages or Sundanese. The topics of hate speech were primarily related to the course of the match, player performance, ticket system, management, and the broadcast of the match, which was considered lacking.

**Conclusions:** These findings can be used to evaluate Persib management and provide a basis for developing strategies to combat hate speech on Twitter. Hate speech experienced by Persib also occurred because Persib fans believe that Persib as a football club only focuses on social media image building. Thus, Persib must consider the hate speech that befell Persib as urgent and need to be handled immediately because it can potentially threaten Persib's image.

### Keywords

Fan behavior; football club; football fans; hate speech; Twitter.

### Resumen

**Introducción:** El Persib es uno de los clubes de fútbol más populares de Indonesia y cuenta con una sólida afición. Sin embargo, esto no le impide estar expuesto a opiniones negativas durante sus competiciones.

**Objetivo:** Este estudio busca describir las características estructurales de las redes e identificar los tipos dominantes de discurso de odio durante un partido del Persib en Twitter.

**Metodología:** Esta investigación empleó un enfoque bifásico de métodos mixtos: una netnografía digital con análisis de redes sociales y un análisis de contenido temático de 413.688 tuits durante el evento deportivo de la Liga 1.

**Resultados:** Los hallazgos de este estudio indican que el Persib es muy vulnerable al discurso de odio de la afición durante sus competiciones. Según el análisis, los discursos más frecuentes fueron insultantes, groseros, culpabilizadores, amenazantes, satíricos y críticos.

**Discusión:** Este discurso de odio se dirige a los jugadores, entrenadores y directivos del Persib. El discurso de odio dirigido a Persib se expresó predominantemente en idiomas locales o sundanés. Los temas de incitación al odio se relacionaron principalmente con el desarrollo del partido, el rendimiento de los jugadores, el sistema de entradas, la gestión y la retransmisión del partido, que se consideró deficiente.

**Conclusiones:** Estos hallazgos permiten evaluar la gestión de Persib y sentar las bases para desarrollar estrategias contra la incitación al odio en Twitter. Por lo tanto, Persib debe considerar la incitación al odio que sufrió como urgente y debe ser abordada de inmediato, ya que podría amenazar su imagen.

### Palabras clave

Comportamiento de los aficionados; club de fútbol; aficionados al fútbol; discurso de odio; Twitter.

## Introduction

Football is the most popular sport in Indonesia, deeply embedded in the social fabric and enjoyed across various demographics (Daeli et al., 2021; Pradana et al., 2024; Sokoy et al., 2023). Football has changed society's culture, it serves as a major form of community entertainment and has a unifying effect on the diverse population (Daeli et al., 2021; Pradana et al., 2024).

Football clubs and their fans play a crucial role in shaping local identities in Indonesia. For example, the football culture in Solo and Yogyakarta is closely linked to local identity politics and the decentralization policies post-New Order era (Fuller, 2017). Besides, supporter groups like Aremania in Malang have evolved from local cultural identities, reflecting the dynamic interplay between modernity and traditional local culture (Maulida, 2024).

The influence of football is not only on the culture of watching matches. More than that, football influences lifestyle and how to dress. In 2024, about half of the Millennial and Gen Z generations follow local sports influencers for sports inspiration. In addition, 39% of Indonesians are enthusiastic about having sportswear (Statista, 2024). Meanwhile, regarding the culture of watching, Indonesian people have a high interest in football. In 2023, as many as 35.19% of Indonesians watch sports events several times a week, while 25.21% of Indonesians watch once weekly (Siahaan, 2023). Indonesian people's interest in football is very high. In 2029, it is predicted that football fans will continue to grow to reach 3.43 million users (Statista Research Department, 2016).

"Persatuan Sepakbola Indonesia Bandung" (Indonesian Football Association of Bandung) or known as Persib is one of the most popular football clubs in Indonesia. In 2016, it was ranked fourth in the popularity index of football clubs in Indonesia. Thus, it can be said to have a strong fan base in Indonesia (Statista Research Department, 2016). Proven on its official Instagram, Persib has 8.4M followers (Persib, 2025).

The football ecosystem in Indonesia then became unsafe when hate speech by fans began to emerge. Fans show their love for the football club incorrectly, namely hate speech. Hate speech is mainly expressed when the match occurs. This is due to several factors, including emotional intensity (Mills et al., 2018), social media dynamics (Ben-Shalom et al., 2021; Kim et al., 2021), hostile atmospheres (Archer & Robb, 2024), referee bias (Anders & Rotthoff, 2014), and inconsistent expectations about athletes' behavior (Sanderson, 2016).

Hate speech is defined as 'spreading, inciting or promoting hatred, violence and discrimination against individuals or groups based on protected characteristics; which includes "race", ethnicity, religion, gender, sexual orientation, disability, among other social demarcations' (Kilvington, 2021; Kilvington & Price, 2021; Manoli et al., 2024). Castano-Pulgarin et al. (2021) outline a similar definition based on social demarcations but expand on how hate can be communicated through 'the use of the internet and social networks, based on an imbalance of power, which can be carried out repeatedly, regularly and uncontrollably, through digital media and is often motivated by ideology' (Castaño-Pulgarín et al., 2021).

Hate speech in the digital realm in the context of football usually originates from fierce rivalries between football club fans, such as the rivalry between Real Madrid FC and FC Barcelona fans (Khosla et al., 2019). Hate speech carried out by fans must be addressed immediately. Because even though it occurs in the online realm, it has an impact on the psychology of athletes who are victims of hate speech. Previous research has found that athletes face a variety of harsh language that is difficult to detect, which can affect their mental health and performance (Alsagheer et al., 2022; Burch et al., 2024).

There are several forms of hate speech in the digital realm directed at football clubs, namely (1) Rivalry-based hate speech, such as derogatory comments and aggressive language directed at opposing fans and clubs (Khosla et al., 2019); (2) Anti-Semitic hate speech. This speech is in the form of songs and insults directed at clubs considered Jewish, as occurs in the world of professional football in the Netherlands (Seijbel et al., 2022, 2023); (3) Racist hate speech, this speech is usually carried out by football fans towards players (Chovanec, 2023; Glathe & Varga, 2018; Matamoros-Fernández, 2017; Santos et al., 2024); (4) Homophobic hate speech, such as homophobic content in football discussions (Sánchez-Sánchez et al., 2024; Santos et al., 2025); (5) Sexist and misogynistic hate speech. Such as happens to female football players and supporters to undermine achievements and reinforce gender stereotypes (Doehler, 2024; Phipps, 2023); (6) Regional hate speech and xenophobia, namely prejudice based on regional or

national differences. An example is the Portuguese football club (Miranda et al., 2024); (7) Offensive language and hate speech in football news live streaming chat on YouTube in Thailand (Pookpanich & Siriborvornratanakul, 2024); (8) Sexual assault from sports fandom in relation to sexual violence against athletes, including how prioritizing sports fandom intersects with how the interests of football players and/or female victims are prioritized or marginalized (Waterhouse-Watson, 2019).

Negative interactions between athletes and fans can have detrimental psychological impacts on athletes, including increased stress and distraction during the match. This can affect their performance and well-being (Hayes, 2022; Hayes et al., 2023; Ruser, 2023). Furthermore, if athletes or clubs do not handle negative opinions properly, this can increase competition between fans and hostility. The impact is that conditions in the digital realm become unhealthy, creating distance with fans, and damaging fan spirit (Popp et al., 2017).

Violence in the context of football can be viewed from a Social Psychology perspective. Previous research has successfully identified various forms of violence related to football, such as violence between spectators (ultras and die-hard fans), violence related to stadium security (damage caused by unsafe infrastructure, crowd control, and security protocols), organizational violence (corruption, doping, match-fixing, and internal problems within the organization itself), violence during matches (referees, football players), violence during training (between athletes), violence in personal relationships (harassment, sexual violence, and human trafficking), cultural violence (fatigue in football), and structural violence due to gender discrimination (Aguilar Gómez, 2024).

Hate speech on social media can impact the real world. Previous research found that discourse on social media can build tension between fans before a match that correlates with violence in the stadium in real life. Harsh remarks and aggressive interactions on social media before a match can trigger or express tension and social aggression that leads to violent behavior both online and offline (Ben Shalom et al., 2019). For example, football fans perceive the match result as unfair, and they may perceive that the referee acted unfairly. Discussions on social media reinforce this perception of unfairness, with fans expressing their dissatisfaction and anger in one voice (Van Der Meij et al., 2015). Besides, football fans can also be angry at posts about defeats and poor team performances. Social media channels often allow fans to vent their frustrations, leading to a spike in adverse reactions and aggressive comments towards their team (Weimar et al., 2022). In other words, the relationship between a football club and its fans is a love-hate relationship (Di Fátima et al., 2020).

Previous research has found that the nature of hate speech has evolved rapidly and poses challenges for researchers and policymakers. Therefore, adaptations are needed regarding the methodology to keep up with the development of forms of hate speech (Kearns et al., 2023). Stricter regulations, better detection from platforms, and increased awareness of football fans are needed to combat hate speech against football clubs (Kearns et al., 2023b; Monroy-Trujillo et al., 2021). Furthermore, previous research examined aspects of toxic conversation formation by comparing platforms like Twitter and YouTube during the 2022 Italian elections. Polarization emerged during that period. One topic that emerged was the Italian Football League, which is most closely associated with Italian popular culture (Etta et al., 2024).

This study aims to describe hate speech against the Indonesian football club, Persib, carried out by Persib fans on social media Twitter during Persib's match in Liga 1 2022/2023. Several similar studies have been conducted on the Twitter social media platform, and athletes have been the subject of various studies due to the relevance and importance of athletes. However, not much research in the world of football has been conducted in Asia; research related to hate speech in football is dominated by continents other than Asia. Until 2025, little research has been conducted in Asia, especially in the Indonesian context. Thus, this article is expected to be an evaluation material for football club management to develop strategies to combat hate speech on social media carried out by their fans. The following are the questions that will be answered in this study.

**Main Research Question (Main RQ):** What are the structural characteristics of the networks of users who spread hate speech on Twitter during Persib matches?

**Main Hypothesis (Main H):** Hate speech on Twitter during Persib matches is organised in highly centralised networks and is mainly composed of hate speech related to sporting and regional rivalries.



Research Question 1 (RQ 1): What are the structural characteristics of the networks of users spreading hate speech on Twitter during Persib matches?

Specific Hypothesis 1 (H1). The networks of users disseminating hate speech during Persib matches present centralised structures, with a few users acting as main dissemination nodes.

Research Question 2 (RQ 2): What are the dominant types of hate speech present on Twitter during Persib matches?

Specific Hypothesis 2 (H2): The dominant types of hate speech on Twitter during Persib matches focus on regional insults, disqualifications due to football rivalry and offensive language directed at players or fans of the opposing team.

## Method

This study uses a mixed-method approach using netnography and content analysis. This study focuses on hate speech at the Persib football club throughout Liga 1 2021/2022 (July 2021- March 2022). The Liga 1 sport event was chosen because this league is the first professional league in the football league system in Indonesia. Liga 1 can also be said to be the highest caste football competition in Indonesia (Liga Indonesia Baru, 2025).

Netnography was used in the study to observe accounts through social network analysis to visualize actor networks and identify influential accounts. In other words, netnography was used to answer the first research question (Kozinets, 2015; Scott et al., 2015). Content analysis was used to identify shared tweets, emerging themes, and recognize dominant forms of hate speech. This analysis was conducted to answer the second and third studies (Neuendorf, 2017).

Netnography is a methodology for examining online communication and behavior in a natural environment. The population selected for analysis is related to the hate speech incident that Persib experienced during the Liga 1 event. This population meets the criteria outlined by Kozinets, namely relevance to the study, active communication between perpetrators, substantial samples, heterogeneous participants, and rich data (Kozinets, 2015).

This study was conducted using the Twitter API via ASIGTA in data collection. A search on Twitter was conducted using '@' for tweets mentioning the Persib account (@persib). The period taken was from July 2021 to March 2022. The results of the data crawling then produced a total of 413,688 tweets ( $N = 413,688$ ) for analysis. This study uses Twitter because this platform is the most widely used social media by educated people in Indonesia (We Are Social & Meltwater, 2024).

After conducting a netnographic analysis, content analysis was conducted to determine the emerging hate speech themes. First, quantitative content analysis to determine the typology of hate speech. This stage is guided by a coding protocol and codebook that uses the virtual persecution variable set by Kavanagh et al. (2016).

Three coders carried out coding. Inter-coder reliability was at 10% of the data set ( $n = 41,368$ ) to test for possible agreement between coders. All three coders reviewed the same data set and coded the variables independently, and Fleiss's kappa value for multi-rater agreement was calculated (Fleiss et al., 1981). All variables reached an agreement of 0.81–1.00 as outlined by Landis and Koch (Landis & Koch, 1977).

Table 1 contains all coding variables based on the Kavanagh et al. (2016) framework and individual kappa values (Kavanagh et al., 2016). Following quantitative content analysis, descriptive qualitative coding was conducted to summarize tweet content into single words or phrases that indicated the topic of the content (Lungu, 2022; Saldaña, 2021).

Based on the descriptive coding, two rounds of inductive thematic qualitative coding were used to allow narratives to emerge from the descriptive codes. Repeated descriptors were refined into salient thematic categories using focused coding (Saldaña, 2021). Axial coding further condenses themes into broader conceptual framework categories based on similar properties to reveal culturally specific meaning. In

the inductive coding process, each coder independently determines subsequent themes and frameworks; then investigator triangulation is used (Crozier et al., 1994).

Table 1. Codebook Variables

Variable & Definition	Kappa
V1. Coder Names	1.00
V2. Type of Tweet	1.00
Reply to	
Quote Retweet	
Mention	
V3. Summary of Tweet	0.81
V4. Direct or Indirect Hate Speech	0.93
Direct (With mention, '@' or hashtag)	
Indirect (Without mention '@' or hashtag)	
V5. Type of Hate Speech	0.83
Threatening Speech	
Criticizing Speech	
Blaming Speech	
Insulting or Cursing Speech	
Satirical Speech	
V6. Description	
V7. Theme	

## Results

RQ1 asks about how social networks are formed during Liga 1 matches. Social network analysis is conducted through Gephi, which provides network visualization to identify key actors and information dissemination (Marin & Wellman, 2010; Pappi & Scott, 1993; Scott et al., 2015). In Figure 1, the network identifies several groups formed around Persib. In addition, Gephi also provides measurements that show the main actors and roles in the network, which are called in-degree, out-degree, and betweenness centrality (Bruns, 2022; Cherven, 2015; Grandjean, 2015).

Betweenness centrality measures how often a node (person) connects individuals in the network (Marin & Wellman, 2010; Pappi & Scott, 1993; Scott et al., 2015). During the Liga 1 match, Persib's betweenness centrality was 0.097666. On Twitter, connections are made through directed messages with the '@' symbol. The tweet will use the Persib username (@persib) to form a connection.

Figure 1 shows a graph of interactions during a Twitter conversation. Using the Force Atlas 2 algorithm, a node represents a user, and its size corresponds to the in-degree variable: larger sizes and letters indicate higher values of this centrality measure. The largest node receives the largest number of mentions and retweets. Its edges are weighted according to the number of interactions. Its colors represent the clusters identified by Gephi (Bruns, 2022; Cherven, 2015; Grandjean, 2015). Clusters reflect groupings of users talking about an event linked by close interactions. Peripheral position influences neighboring clusters, while central position reflects reach to more users. Therefore, there may be a node with a high in-degree but linked to several clusters.

As seen in Figure 1, the visualization highlights the formation of groups that comment on Persib throughout Liga 1. The official Persib account greatly influences the network because the account that made hate speech during the match mentioned it. In other words, the Persib account connected the entire actor network during Liga 1.



Figure 1. Social Network Graph with Force Atlas 2

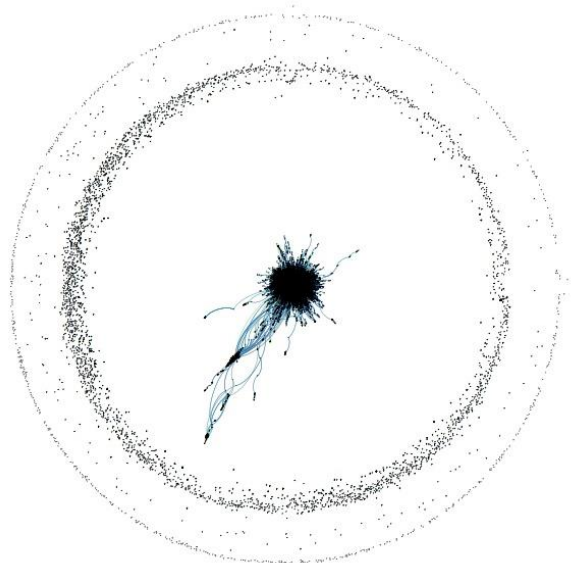


Table 2. Top 15 Influential Users with The Highest Score of Centrality

Closeness centrality		Harmonic centrality		Betweenness centrality	
Actor	Score	Actor	Score	Actor	Score
kelixman	1.0	kelixman	1.0	persib	0.097666
Rakeengentaa	1.0	Rakeengentaa	1.0	Persib33Yudi	0.015931
AzisDadun_	1.0	AzisDadun_	1.0	dinaskaulinanri	0.010596
sbtmskn	1.0	sbtmskn	1.0	me_Atto	0.010192
zomet13	1.0	zomet13	1.0	lemesinajasayy	0.008024
bozzvanc1	1.0	bozzvanc1	1.0	Iyangaprill	0.006764
BlueJeans_Hitam	1.0	BlueJeans_Hitam	1.0	stdsiliwangi	0.006173
_leonSR_	1.0	_leonSR_	1.0	Indra99a	0.005612
yogach_	1.0	yogach_	1.0	cowobangkit	0.005383
OTONK2000	1.0	OTONK2000	1.0	awlucudehkmu	0.005172
erkafootball	1.0	erkafootball	1.0	mayang_1933	0.004971
royalcaniin	1.0	royalcaniin	1.0	devifirdaus93	0.004902
kapkekjelli	1.0	kapkekjelli	1.0	enjoykeun_wa	0.004870
Pratayangsha	1.0	Pratayangsha	1.0	herry_sheva	0.004639
darksunfl	1.0	darksunfl	1.0	RickyNSas	0.004447

Centrality can be understood as being in the middle of things, or potential visibility or activities related to communication (Pappi & Scott, 1993; Scott et al., 2015). In-degree centrality can be understood as the number of links on a node or the number of incoming activities. In the context of this study, centrality is measured by incoming tweets. The analysis results show that the account with the highest in-degree centrality is Persib with a score of 17,305.

Table 3. Top 15 Twitter (X) users by popularity

In-Degree		
Actor	Score	Role
Persib	17,305	Football Club
mayang_1933	2,192	Fans/Supporters of Persib
simamaung	2,159	Media
idxtratime	1,350	Media Related to Football
v_frontline_pc	1,321	Fans/Supporters of Persib
persebayaupdate	1,240	Football Club
SeledingTekel	1,180	Media Related to Football
Persija_Jkt	1,157	Football Club
Persib_world	1,107	Media Related to Football
Sport770fficial	931	Media Related to Football
Liga1Match	908	Match Organizer
stdsiliwangi	881	Media Related to Football
Indostransfer	796	Media Related to Football
VikingBali	718	Fans/Supporters of Persib
intersport_scr	711	Media

In Table 3, the top 15 Twitter (X) users by popularity are shown, or in other words, the top 15 Twitter (X) users with the highest in-degree centrality. In the context of this study, the most popular accounts are dominated by media accounts related to football, followed by fans/supporters of Persib, then football clubs, and finally, media. Besides, out-degree centrality is the number of out-degree ties or out-degree communication in a network. The accounts with the highest out-degree scores are dominated by Persib fans/supporters accounts (Table 4).

Table 4. Top 15 Twitter (X) users by activity

Out-Degree		
Actor	Score	Role
me_Atto	148	Fans/Supporters of Persib
RickyNSas	96	Fans/Supporters of Persib
nurulhaqqy	93	Fans/Supporters of Persib
Rifqizuhdi281	87	Fans/Supporters of Persija
cowobangkit	79	Fans/Supporters of Persib
fahtrxx	77	Fans/Supporters of Persija
MangDanar	72	Fans/Supporters of Persija
Indra99a	68	Fans/Supporters of Persib
epat86_	67	Fans/Supporters of Persib
RahmatFakhranaa	67	Fans/Supporters of Persib
sastradiputra	66	Fans/Supporters of Bali United
Yhura11nov	63	Fans/Supporters of Persib
rickychech	61	Fans/Supporters of Persib
Persib_world	59	Fans/Supporters of Persib
pemaiincadangan	58	Fans/Supporters of Persib

The degree and number of followers determine the popularity of Twitter users. In quantitative analysis, these values are negatively correlated. Our qualitative analysis (Table 3) confirms this fact because only three of the 15 profiles have the highest in-degree. @persib is in first place with a score of 17.305. Conversations about Persib also come from various fans or supporters of other football clubs. Other clubs in the context of this conversation are Persib's opposing clubs when the match takes place. The football clubs include Persija and Bali United.

The account with the highest in-degree centrality will be at the center of the network (Scott et al., 2015). Likewise, the Persib account is at the center of the network. The Persib account links one account to another because it has the highest in-degree and betweenness centrality. The Persib account can also monitor tweets that carry out hate speech or vice versa, and support them. This is because the tweets in this research network are targeting Persib.

Figure 2. Tweets About Persib Throughout the Liga 1 Season



For further analysis, this study collected tweet data about Persib throughout the 2021/2022 Liga 1 season from July 2021 to March 2022). The number of tweets successfully collected with the help of the Twitter API and Asigta was 413,688 tweets with the following details (Figure 2): (1) July 2021: 10,595 tweets; (2) August 2021: 16,623 tweets; (3) September 2021: 49,573 tweets; (4) October 2021: 47,326

tweets; (5) November 2021: 62,452 tweets; (6) December 2021: 44,158 tweets; (7) January 2022: 46,215 tweets; (8) February 2022: 49,637 tweets; (9) March 2022: 87,109 tweets. In order from the highest, tweets about Persib were highest in March 2022, November 2021, and February 2021.

Table 5. Top 15 Twitter (X) Users with Highest Like, Retweet, Reply, and Quote

Like		Retweet		Reply		Quote	
Actor	n	Actor	n	Actor	n	Actor	n
CarltonCole1	5070	CarltonCole1	733	idextratime	1019	jamril_nursehan	378
nickkuipers5	2505	idextratime	638	Sport77Official	404	azkabdillah	313
persebayaupdate	2345	Shamr00g	632	persib	377	persib	181
xwindfighter_	2065	finskk	465	jamril_nursehan	290	jamu1_jamur	173
AFCcup	1564	anwarsanusi137	421	azkabdillah	224	anwarsanusi137	167
hexafatiha	1558	azkabdillah	411	anwarsanusi137	203	finskk	167
persib	1412	DeporFinanzas	313	CarltonCole1	198	hexafatiha	140
DeporFinanzas	1295	Sport77Official	284	arieen88	173	Shamr00g	85
Shamr00g	1118	Persib	270	ridwankamil	137	CarltonCole1	81
azkabdillah	1036	persebayaupdate	267	indosupporter	135	yeahrinbaek	75
davidasilva07	1014	AFCcup	247	PungkasB	124	NoregsVapen	67
muviewtiful	1006	nickkuipers5	224	stdsiliwangi	111	TMidn_news	60
anwarsanusi137	989	RandyNteng	213	finskk	108	zenrs	60
RandyNteng	985	v_frontline_pc	213	v_frontline_pc	107	memitech	59
BOBOTOHFAMIGLIA	964	crazylionzine	205	jamu1_jamur	104	ridwankamil	49

RQ2 asks about the hate speech themes in the content (Table 6). The full sample consisted of 413,688 tweets (N = 413,688). Based on descriptive analysis of tweets containing hate speech against Persib, it can be divided into several themes, namely threatening speech (n = 9,525), criticizing speech (n = 977), blaming speech (n = 14,442), insulting or cursing speech (n = 22,686), and satirical speech (n = 2,959).

Besides, RQ 2 attempts to examine the topics of the themes in the tweets. Based on descriptive analysis, the researcher conducted data reduction and constant comparison by coding the emerging themes and topics. The first theme, namely threatening speech, consists of "jangan" (don't), "awas" (watch out), and "kalau sampai" (if). Then for the second theme, namely criticizing speech, consisting of "harusnya menang" (should win), "tidak tepat" (not right), "tidak benar" (not right), "kurang pas" (not right), "harusnya" (should not be right). Next, the third theme is blaming speech consisting of "tidak begitu" (not so), "salah manajemen" (mismanagement), "gimana sih" (how come), "parah" (serious), "kacau" (chaotic), "becus" (competent), and "butut" (shabby). Next is insulting or cursing speech namely "tolol" (stupid), "bodoh" (stupid), "goblog" (idiot), "bego" (stupid), "monyet" (monkey), "anjing" (dog), "bajingan" (bastard), "malu" (embarrassed), "bangsat" (bastard), "tai" (shit), "gelo" (crazy). Finally, satirical speech consists of "selamat" (congratulations), "jagoan" (champion), "hebat" (great).

After conducting the search process, the researcher classified the data collected based on the classification of hate speech against Persib. The researcher classified hate speech into the following categories: (1) Threatening Speech; (2) Criticizing Speech; (3) Blaming Speech; (4) Insulting/Cursing Speech; (5) Sarcastic or Satirical Speech.

Based on the analysis, the most frequently occurring Speech was insulting/cursing, 45% or 22,686 tweets. Next was Blaming Speech, 28% or 14,443 tweets. In third place was Threatening Speech, 19% or 9,526 tweets. Next was sarcastic or satirical speech, 6% or 2,969 tweets. The least frequent Speech was Critical Speech, namely 977 tweets or 2% (Figure 3).

In the threatening speech category, Twitter users showed their threats directly and explicitly towards Persib. Table 6 shows that tweets containing threatening Speech with the word "Don't" are related to Persib's game during the Twitter users' show.

As for the word "Watch out" in the threatening show, it is directly and explicitly. The word "Watch out" is used in tweets by Persib fans who do not want Persib to lose the match. In other words, the word "Watch out" is also related to the hopes of Persib fans for Persib, to win but in a negative way, namely expressing their hopes with threatening Speech.

The phrase "If it happens" is also an attempt by Twitter users to show their threats directly and explicitly towards Persib. Especially when Persib is about to compete. One example is the following tweet, "@persib If Persib loses again against PSIS, it means that the coach, management and Persib players are really stupid and have no shame. Correct ..."





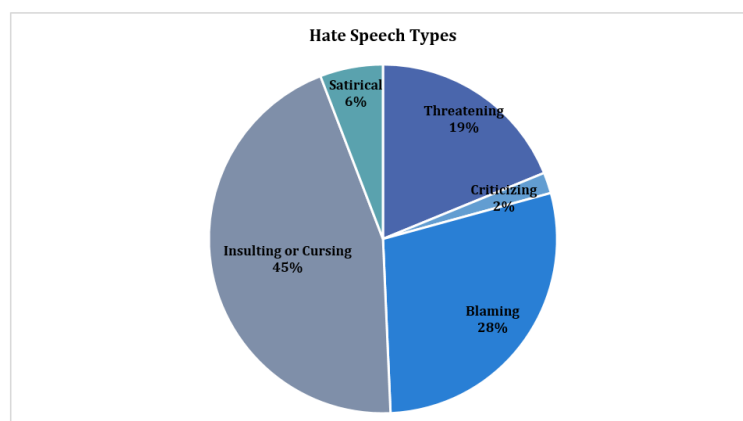
The Twitter user made a threat in the tweet, even though a solution accompanied it. He stated that if Persib lost the match against PSIS, the user would not only blame the Persib players but also the Persib management and coach.

The researcher classified threatening Speech from tweets containing the words "Should have won", "Should have been fixed", "Not right", "Not right", "Not quite right", and "Should have". Threatening Speech was dominated by tweets containing the words "Should have" (94%, 920 tweets), "Should have won" (3%, 28 tweets), and "Not quite right" (1%, 14 tweets).

Based on the findings related to critical Speech, Twitter users made criticisms directly, explicitly, and not implicitly. The phrase "Should have won" was used primarily to criticize Persib's game results during the match. However, the researcher also found criticism directed at Persib's management and coach.

There were also Twitter users who criticized Persib's social media activity by creating certain hashtags to enliven the match, but Persib's game was not as good as the hashtag created by management. The phrase "Not right" in the critical Speech was directed at the game tactics when the match had started. In addition, there was criticism directed at the management regarding tickets, television station broadcasts, and the attitude of the official account admin @persib.

Figure 3. Hate Speech Types



Tweets from Twitter users containing the word "Not right" as a critical speech were not only about the game and management. Twitter users will also criticize if the admin of the official Persib account makes a wrong tweet, either using the wrong word or uploading it at the wrong time.

A Twitter user openly said that the admin of the official Persib account could not read the situation and was pretending to be cool. Twitter users considered the upload time inappropriate for posting Tweets because Persib's game was not good.

The next is the critical Speech containing "Not right". Persib management criticized the researcher's findings related to the wrong choices, resulting in a negative image of Persib. This criticism was conveyed well because a solution accompanied it.

Some tweets criticized the match ticketing system and parties who loved Persib incorrectly. This tweet is accompanied by bad habits and a culture that society has normalized. Some tweets criticize Persib fans until there was a riot during the match.

Researchers classify blaming speech from tweets that contain the words "Not so", "Management's fault", "What's wrong", "Terrible", "Messy", "Proper", and "Lousy". In this blaming speech, most are always accompanied by the word "Persib" and mention the official account @persib. Tweets that fall into the blaming category have emotions of anger and disappointment. This is evidenced by the choice of words, punctuation, typing style, case size used, and emoticons accompanying the tweet. Blaming Speech is dominated by tweets containing the words "Lousy" (92%, 13,334 tweets), "Terrible" (4%, 620 tweets), "Messy" (2%, 299 tweets), "Proper" (1%, 122 tweets), and "What's wrong" (1%, 52 tweets).

Based on the research results, the blaming speech delivered by Twitter users was done directly and had an explicit meaning. The blaming speech made by Twitter users blamed Persib's management more if the tweet contained the words "Not so", "Management's fault", "What's wrong", and "Proper". Meanwhile, the blaming Speech directed at the players was dominated by the words "Terrible", "Messy", "Proper", and "Lousy".

Researcher analyzed that local languages, such as Sundanese, also dominated this blaming speech. Then this blaming speech goes hand in hand with insulting or cursing speech. When Twitter users classify tweets as blaming, the tweets end with insulting or cursing words. Some tweets deliberately continue to add hashtags created by the official Persib account.

Researchers classify insulting or cursing speech from tweets containing the words "Stupid", "Idiot", "Shameless", "Monkey", "Dog", "Bastard", "Shame", "Shit", and "Crazy". Insulting or cursing speech is dominated by tweets containing the words "Stupid" (40%, 8,992 tweets), "Shit" (23%, 5,126 tweets), and "Dog" (16%, 3,633 tweets).

Insulting or cursing speech is the most dominant form of speech among all existing forms. Insulting speech tweeted by Twitter users mainly uses the local language or Sundanese. Researchers found two patterns of insulting or cursing speech: first, insulting or cursing speech without any other speech. Second, insulting or cursing speech precedes or ends with other hate speech.

Researchers classified sarcastic speech from tweets containing the words "Congratulations", "Very good", "Champion", and "Great". Sarcastic speech is dominated by tweets containing the words "Congratulations" (78%, 2,324 tweets), "Great" (14%, 423 tweets), "Champion" (7%, 212 tweets), and "Very good" (1%, 10 tweets).

The satirical remarks towards Persib throughout the 2021/2022 Liga 1 season were delivered implicitly or indirectly. The satirical remarks tweeted by Twitter users have a pattern. After using a word intended to satirize, the tweet is accompanied by something contradictory to the word mentioned by the tweet.

Table 6. Hate Speech Types and Frequency of Occurrence Each Month

Theme and Topic of Hate Speech	Example Tweets	Number of Tweets										Total (n)	%
		July 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022			
Theme 1: Threatening Speech													
"Jangan" (Don't)	"@persib Jangan ngecewain sib, jangan hanya keras di sosmed doang. Buktikan kalian layak juara" (@persib Do not disappoint, bro, do not just be loud on social media. Prove that you deserve to be champions)	87	141	480	616	828	435	515	472	1179	4753	49,90%	
"Awat" (Watch Out)	"Awat ya @persib ku urang dihampura pedah pertandingan 1 lamun ke butut jiga kieu deui moal juara" (Watch out @persib I'm not even in the hampura after 1 match but I'm in a mess, I'm just saying I'm champion)	1	285	787	666	639	390	579	516	894	4757	49,94%	
"Kalau sampai" (If it happens)	"@persib Kalau sampai persib kalah lagi lawan psis berarti memang pelatih,manajemen dan para pemain persib benar2 tolol dan tdk punya malu. Betulkan @teddy_tjahjono @glennsugita @ridwankamil @simamaung @officialvpc @v_frontline_pc @beutik_company @LalajoPersib @yanaumar33" (@persib If Persib loses against PSIS again, it means that Persib's coach, management, and players are foolish and have no shame. Correct me @teddy_tjahjono @glennsugita @ridwankamil @simamaung @officialvpc @v_frontline_pc @beutik_company @LalajoPersib @yanaumar33)	0	0	2	1	2	4	1	3	2	15	0,16%	
TOTAL		88	426	1269	1283	1469	829	1095	991	2075	9525	100%	
Theme 2: Criticizing Speech													
"Harusnya menang" (Should have won)	"@persib Manajemen harus tegas 1. Siapkan pengganti pelatih (karena sdh ga mungkin cari pemain) 2. Kasih Warning level 3. Banyak kesempatan harusnya menang jadi draw atau kalah. Juara HILANG. 1. Kompetisi lalu harusnya 3 poin, jadi draw 2. Lawan main 10 org, tidak bisa cetak gol" (@persib Management must be firm	0	0	7	2	7	1	2	3	6	28	2,87%	

1. Prepare a replacement coach (because it is impossible to find players)
  2. Give a warning level 3.
- Many opportunities should have been won but became a draw or a loss. The champion is LOST.
1. The last competition should have been 3 points, so it was a draw
  2. The opponent played with 10 people and could not score a goal we)

"Tidak tepat" (Not right)	"@persib Penempatan pemain yg tidak tepat bikin pusing.skrma gak jalan coach robert diem aja . Pergantian juga telat bgt.bruno yg off gak diganti."											
	(@persib The wrong placement of players is confusing. The game does not work; Coach Robert keeps quiet. The substitution was also very late. Bruno, who was off, was not replaced.)	0	1	1	3	1	0	0	2	1	9	0,92%
"Tidak benar" (Not right)	"Bobotoh selalu menyanyikan We love you Persib hingga Persib Till I Die ! Namun nyatanya hingga hari ini Persib tidak benar" Mencintai Bobotohnya. Hingga nyanyian itu benar terjadi, seakan" Kalian tak mau disalahkan. Dimana letak rasa empatimu @persib ego mu terlalu besar! ..."											
	(Bobotoh always sing We love you Persib until Persib Till I Die! However, until today, Persib did not really "Love its Bobotoh. "Until the song happened, as if" You do not want to be blamed. Where is your empathy, @persib? Your ego is too big! ...)	1	1	0	1	1	1	0	0	1	6	0,61%
"Kurang pas" (Not right)	@persib Teuing naon nu salah. Masalah control, passing, dribbling masih keneh siga nu diajar. Entah mental juara na anu leungit. Dan satu lagi, seperti tidak ada visi dan misi maraen teh. Taktikna oge kurang pas. Euweuh gelandang serang anu mumpuni, minimal siga konate lah.											
	(@persib I don't know what's wrong. Problems with control, passing, and dribbling are still being taught. I do not know what champion mentality is. Moreover, one more thing: The team has no vision or mission. The tactics are not quite right. Euweuh, the attacking midfielder, is capable; at least he is a good player.)	0	0	3	2	2	1	3	1	2	14	1,43%
"Harusnya" (Should be)	"@persib Punya suporter besar kok tidak di organisir dengan baik, cara penjualan tiket lemah, akses masuk stadion masih kurang pas, komunitasnya cuman di buat untuk cari untung gak di edukasi dengan baik, harusnya manajemen dan Panpel malu sih ini."											
	(@persib should have a big fan base, but it is not organized well, the ticket sales method is weak, and access to the stadium is still not proper. The community is only made to seek profit and not be well-educated. The management and the committee should be ashamed of this.)	23	26	102	3	159	3	126	164	314	920	94,17%
TOTAL		24	28	113	11	170	6	131	170	324	977	100%
Theme 3: Blaming Speech												
"Tidak begitu" (Not so)	"Permainan Persib belum maksimal. Sisi kanan masih menjadi PR, Sato sebagai pemain asia lagi-lagi bermain tidak begitu istimewa layaknya bintang asing. Kembalinya made dan jupe patut di apresiasi, sebagai pemain senior kedua pemain ini punya peran penting untuk rekan satu tim."											
	(Persib's game is not yet optimal. The right side is still homework. Sato, again, as an Asian player, did not play as special as a foreign star. The return of Made and Jupe deserves appreciation. As senior players, these two have important roles for their teammates)	0	0	0	2	1	4	0	0	2	9	0,06%
"Salah manajemen" (Management's fault)	"ini jelas salah manajemen, yg masih kolot. gak ada progres buat maju. kasian fansnya di php in bahkan sampek ada korban jiwa demi persib"											
	(This is the management's fault, which is still old-fashioned. There is no progress to move forward. Poor fans are being led astray, and even though there were casualties for Persib)	0	0	1	0	0	2	0	0	3	6	0,04%
"Gimana sih" (What's wrong)	"@persib Ini gak diajarin passing apa gimana sih? Ancur banget passing kalian, gausah mikirin juara musim ini, berkaca aja permainan kalian dibanding bali atau persebaya jauh bgt, terlalu meng anak emaskan pemain blasteran, kalau mentok pemain lokal dibebani buat ngejar kmngan"											
		5	2	5	2	5	5	9	11	8	52	0,36%

[illegible]

ARE INCOMPETENT RIGHT?? SHAMEFUL SKLIII NOT  
COMPETENT TIMES)

<p>“@persib PERMAINAN LO BANGSAT PEMAIN LO MENTALNYA LEMAH ANJING... LAWANNYA AJA BEGO COBA LAWAN YG DIBATAS. ABIS LO DI BANTAL.. UDAH KELIATAN PEMAIN YG GOBLOK GOBLOK”</p>													
“Bangsat” (Bastard)	(@persib YOUR GAME IS FUCKING PLAYERS ARE MENTALLY WEAK LIKE DOGS... YOUR OPPONENTS ARE STUPID. TRY FIGHTING A LIMITED OPPONENT. AFTER YOU GET SLAUGHTERED.. YOU CAN ALREADY SEE THE STUPID PLAYERS)	3	2	29	34	101	41	51	60	83	404	1,78%	
<p>“@persib Bacot sib maen butut ge tong loba ceta lah, matak mun latihan tong loba teuing ngonten jeung yutub giliran maen ripuh. Eweuh kemajuan siah evaluasi tai pedut. NUHUN”</p>													
“Tai” (Shit)	(@persib You talk too much, bro, your game is bad, do not be too showy when you're practicing, do not make too much YouTube content, when it's your turn to play, you're noisy. There's no progress in evaluating your farts. NUHUN)	90	136	468	518	983	653	532	705	1.041	5126	22,60%	
<p>“cukup nonton emyu aja ges nyieun lieur, urang memutuskan meh teu nonton persib. selain persib keur butut, operator liga dan wasit2 nya sieun nyieun urang jadi gelo...”</p>													
“Gelo” (Crazy)	(Just watching MU guys that makes me dizzy, I decided not to watch Persib. Besides Persib playing badly, the league operator and the referee are afraid of making me crazy...)	28	27	63	50	105	71	70	48	128	590	2,60%	
TOTAL		185	214	2247	1855	5224	2732	2387	3312	4530	22,686	100%	
Theme 5: Satirical Speech													
“Selamat” (Conratulations)	“@persib Selamat malam, selamat menikmati bulan 0 1!” (@persib Good evening, enjoy the month of 0 1!) @persib Tetap keukeuh dengan formasi dan pemain jagoannya #ReneOut	85	82	166	203	273	158	277	131	949	2324	78,54%	
“Jagoan” (Champion)	(@persib Still insisting on their formation and their favorite players #ReneOut)	1	14	27	18	38	15	45	26	28	212	7,16%	
<p>“@persib HEBAT KAN PEMAIN BELAKANG PERSIB. BABAK PERTAMA 3-1. MAIN KITU WAE BISA 5-1 ATAU 6-1 MALAH.” (PERSIB'S DEFENDERS ARE GREAT, RIGHT? FIRST HALF 3-1. PLAYING LIKE THAT COULD HAVE BEEN 5-1 OR EVEN 6-1.)</p>													
“Hebat” (Great)		1	28	39	52	52	37	44	65	105	423	14,30%	
TOTAL		87	124	232	273	363	210	366	222	1082	2,959	100%	

## Discussion

This study's findings indicate that Persib is very vulnerable to receive hate speech from fans when they are in matches. This hate speech is directed at Persib players, coaches, and management. Based on the analysis, the most frequently occurring speech was insulting or cursing, blaming, threatening, satirical, and critical. Hate speech directed at Persib was dominated by local languages or Sundanese. This study finds that the topics of hate speech were primarily related to the course of the match, player performance, ticket system, management, and the broadcast of the match, which was considered lacking.

The existence of hate speech carried out by football club fans is also influenced by football fandom culture, such as local identity, fanaticism, evangelism, and the impact of match results on fans' emotions. Persib fans' support for Persib is influenced by local identity, which is important in developing support for local clubs (Jiang & Bairner, 2024).

The aggressiveness of Persib fans is also amplified by social media. Social media platforms such as Twitter allow fans to express emotions instantly and anonymously, which can increase aggressiveness and violent behavior (Kavanagh et al., 2016; Sanderson et al., 2020). Previous research has also found



that exposure to abusive content on social media can affect football fans' behavior. This study found that the intention to support the team decreased due to abusive content (Huang & Grizzard, 2022).

Hate speech shown by Persib supporters also reflects fan fanaticism towards the football club. Previous research has found that fan fanaticism is positively correlated with cyberbullying behavior. Influencing factors include how fans watch matches, their involvement in fan associations, and their use of social media significantly affect the level of cyberbullying. The more intense the involvement and identification of fans with the team, the higher the likelihood of fans being involved in online bullying behavior (Simsek & Ozturk, 2024).

The hate speech carried out by Persib fans towards the Persib football club did not immediately make them move to another club. The existence of hate speech against Persib on social media does not necessarily make its fans give up their intention to watch Persib. Previous research has found that even though there is negative sentiment on social media towards a football club, it does not necessarily change fan behavior towards the team (Ong & Leng, 2022; Stamm & Boatwright, 2021).

In addition, there is no significant difference in the perception of player and coach quality or intention to watch future matches based on exposure to negative comments on social media (Ong & Leng, 2022). In the context of football fans, hate speech can occur at more specific match events. Important matches watched by many fans can trigger fans to engage in hate speech (Ferdinand et al., 2025).

The hate speech carried out by Persib supporters is also a representation of their anxiety about the players' performance during the match. This is proven by previous research that social media can also facilitate social interactions among fans, which are strong predictors of bonding with a football club. Previous research has found that these interactions can foster unity or division depending on the nature of the exchange (Krzyżowski & Strzelecki, 2023). Football club managers need to understand fans' emotional and behavioral patterns on social media, as understanding this can help reduce polarization and foster a more inclusive fan base (Sóti et al., 2020). Analyzing data on fan interactions and behaviors can help identify trends and areas for intervention. This can provide information for developing appropriate strategies to address specific issues (Pereira et al., 2022).

Persib management needs to address and prevent hate speech directed at Persib by detecting and analysing the behaviour of Persib fans (Alsagheer et al., 2022; Khosla et al., 2019). Persib should encourage fans to engage positively by rewarding constructive and supportive fan interactions. This can be achieved through campaigns to encourage fans to share positive experiences and content to internalize a culture of mutual respect (Parganas et al., 2017; RĂZVAN et al., 2019; Urhan & Koç, 2021).

Persib management needs to know the behaviour of Persib fans on social media, mainly when the match occurs, identify the accounts that are the main instigators of hate speech and understand the patterns and motives of these accounts (Khosla et al., 2019). Management can also create a campaign to make the climate of football in cyberspace healthier by making fans aware of the negative impacts of hate speech in the world of football and cultivating mutual respect on social media (Hayday et al., 2024; Müller et al., 2024).

Persib management can also implement a counter-speech strategy based on empathy and involving fans. An empathy-based counter-speech strategy can be carried out by involving accounts that upload hate speech. Previous research has found that this approach will lead to removing hateful content and reducing future incidents (Hangartner et al., 2021). In addition, management can invite fans to report content that includes hate speech (Hangartner et al., 2021). Management needs to invite fans to share positive stories and experiences related to the club to create a more inclusive football climate (Miranda et al., 2024).

Persib management must also be careful with posts related to sponsors because sometimes this can trigger adverse reactions (Weimar et al., 2022). Management also needs to upload on match days actively, not just release sponsor-related content. This effort is hoped to help reduce negative responses on social media while maximising fan engagement with the football club when the match occurs (Weimar et al., 2022). Finally, Persib management needs to learn by benchmarking with football clubs that have experienced the same thing (Romero-Jara et al., 2024).

## Conclusions

Persib is very vulnerable to receive hate speech from their fans when they are in match. This hate speech is directed at Persib players, coaches, and management. The most frequently occurring speech was insulting or cursing, blaming, threatening, satirical, and critical. Hate speech directed at Persib was dominated by local languages or Sundanese. The topics of hate speech were primarily related to the course of the match, player performance, ticket system, management, and the broadcast of the match, which was considered lacking.

These findings can be used to evaluate Persib management and provide a basis for developing strategies to combat hate speech on Twitter. Hate speech experienced by Persib also occurred because Persib fans believe that Persib as a football club only focuses on social media image building. Thus, Persib must consider the hate speech that befell Persib as urgent and need to be handled immediately because it can potentially threaten Persib's image.

Persib management needs to address and prevent hate speech directed at Persib by detecting and analysing the behaviour of Persib fans. Persib management needs to know the behaviour of Persib fans on social media, mainly when the match occurs, identify the accounts that are the main instigators of hate speech and understand the patterns and motives of these accounts. Besides, Persib management can also implement a counter-speech strategy based on empathy and involving fans. An empathy-based counter-speech strategy can be carried out by involving accounts that upload hate speech.

This study has several limitations, such as, the data used in this study focuses on hate speech which addressed to Persib football club throughout Liga 1 sport events (July 2021- March 2022). Besides, the results are specific to this single network, which is it limits the generalizability of the results to other football events. Future research should extend to another football events.

## References

- Aguilar Gómez, A. (2024). Aproximación conceptual de las violencias en el fútbol (Conceptual approach to violence in football). *Retos*, 56, 449-464. <https://doi.org/10.47197/retos.v56.104015>
- Alsagheer, D., Mansourifar, H., Dehshibi, M. M., & Shi, W. (2022). Detecting Hate Speech Against Athletes in Social Media. *2022 International Conference on Intelligent Data Science Technologies and Applications, IDSTA 2022*, 75–81. <https://doi.org/10.1109/IDSTA55301.2022.9923132>
- Anders, A., & Rotthoff, K. W. (2014). Is home-field advantage driven by the fans? Evidence from across the ocean. *Applied Economics Letters*, 21(16), 1165–1168. <https://doi.org/10.1080/13504851.2014.914139>
- Archer, A., & Robb, C. (2024). Away from Home: The Ethics of Hostile Affective Scaffolding. *Topoi*, 1–12.
- Ben Shalom, U., Dvir, A., Levy, M., Zwilling, M., Orkibi, E., Gabay, N., & Pele, O. (2019). From internet swear words to stadium violence in football (soccer) games – An Israeli case study. *International Review for the Sociology of Sport*, 54(3), 348–360. <https://doi.org/10.1177/1012690217715298>
- Ben-Shalom, U., Dvir, A., Gabay, N., Zwilling, M., Levy, M., & Orkibi, E. (2021). Can fans' social media activity before the game predict players' aggression during the game? Evidence from Israeli Basketball Premier League. *Sport in Society*, 24(2), 268–276.
- Bruns, A. (2022). *How to visually analyse networks using Gephi*. SAGE Publications Ltd.
- Burch, L. M., Hayday, E. J., Geurin, A. N., Smith, A. C. T., & Hushon, B. (2024). Discriminatory Virtual Maltreatment and Online Abuse in Digital Sporting Spaces: An Examination of the Experiences of Six Olympic Athletes. *International Journal of Sport and Society*, 15(3), 69–90. <https://doi.org/10.18848/2152-7857/CGP/v15i03/69-90>
- Castaño-Pulgarín, S. A., Suárez-Betancur, N., Vega, L. M. T., & López, H. M. H. (2021). Internet, social media and online hate speech. Systematic review. *Aggression and Violent Behavior*, 58, 101608. <https://doi.org/10.1016/j.avb.2021.101608>
- Cherven, K. (2015). *Mastering Gephi network visualization*. Packt Publishing Ltd.
- Chovanec, J. (2023). 'Bigger than football': racist talk on and off the soccer pitch. *Soccer and Society*, 24(7), 942–957. <https://doi.org/10.1080/14660970.2023.2250660>



- Crozier, G., Denzin, N., & Lincoln, Y. (1994). Handbook of Qualitative Research. *British Journal of Educational Studies*. <https://doi.org/10.2307/3121684>
- Daeli, R., Pare, S., & Sudarwani, M. M. (2021). Design study with modern architectural approach to football academy building in Jakarta. *IOP Conference Series: Earth and Environmental Science*, 878(1). <https://doi.org/10.1088/1755-1315/878/1/012022>
- Di Fátima, B., Gouveia, C., & Lapa, T. (2020). Porto vs Benfica. Uma cartografia entre o amor e o ódio no Twitter. *Porto vs Benfica. Uma Cartografia Entre o Amor e o Ódio No Twitter*, 30, 147–175.
- Doehler, S. (2024). 'Your Analysis Is as Useless as Your Ovaries': Women Football Fans' Experiences on Social Media. *Communication and Sport*. <https://doi.org/10.1177/21674795241292718>
- Etta, G., Cinelli, M., Di Marco, N., Avale, M., Panconesi, A., & Quattrocioni, W. (2024). A topology-based approach for predicting toxic outcomes on twitter and youtube. *IEEE Transactions on Network Science and Engineering*, 11(5), 4875–4885.
- Ferdinand, N., Williams, N. L., & Bustard, J. (2025). Events and Social Media The #Euro2020 online firestorm. In *Events and Society: Bridging Theory and Practice* (pp. 168–174). <https://doi.org/10.4324/9781003488729-26>
- Fleiss, J. L., Levin, B., & Paik, M. C. (1981). The measurement of interrater agreement. *Statistical Methods for Rates and Proportions*, 2(212–236), 22–23.
- Fuller, A. (2017). Soccer and the city: the game and its fans in Solo and Yogyakarta. *Sport in Society*, 20(5–6), 675–688. <https://doi.org/10.1080/17430437.2016.1158470>
- Glathe, J., & Varga, M. (2018). Far-right fan culture in Russia: The politicisation of football hooligans on Russian social media. *Journal Fur Entwicklungspolitik*, 34(2), 20–49.
- Grandjean, M. (2015). *Gephi: Introduction to network analysis and visualisation*.
- Hangartner, D., Gennaro, G., Alasiri, S., Bahrach, N., Bornhoft, A., Boucher, J., Demirci, B. B., Derksen, L., Hall, A., Jochum, M., Munoz, M. M., Richter, M., Vogel, F., Wittwer, S., Wüthrich, F., Gilardi, F., & Donnay, K. (2021). Empathy-based counterspeech can reduce racist hate speech in a social media field experiment. *Proceedings of the National Academy of Sciences of the United States of America*, 118(50). <https://doi.org/10.1073/pnas.2116310118>
- Hayday, E. J., Burch, L. M., & Geurin, A. N. (2024). Online Abuse in Sport. In *Communication in Sport Management* (pp. 163–177). <https://doi.org/10.4324/9781003520405-19>
- Hayes, M. (2022). Social media and athlete mental health and well-being. In *Sport, social media, and digital technology: Sociological approaches* (pp. 223–240). Emerald Publishing Limited.
- Hayes, M., Filo, K., Riot, C., & Geurin, A. (2023). Addressing athlete social media distractions during events: Examining effective and ineffective approaches. *Event Management*, 27(5), 763–780.
- Huang, J., & Grizzard, M. (2022). Beyond Content: Exploring the Effects of Narrative Structure on Entertainment Experience. *Journal of Media Psychology*, 34(6), 348–360. <https://doi.org/10.1027/1864-1105/a000331>
- Jiang, K., & Bairner, A. (2024). Becoming a Chinese football fan: an examination of the influence of national and local identities on the development of Chinese football fandom. *Soccer and Society*, 25(4–6), 487–504. <https://doi.org/10.1080/14660970.2024.2332102>
- Kavanagh, E., Jones, I., & Sheppard-Marks, L. (2016). Towards typologies of virtual maltreatment: sport, digital cultures & dark leisure. *Leisure Studies*, 35(6), 783–796. <https://doi.org/10.1080/02614367.2016.1216581>
- Kearns, C., Sinclair, G., Black, J., Doidge, M., Fletcher, T., Kilvington, D., Liston, K., Lynn, T., & Rosati, P. (2023). A Scoping Review of Research on Online Hate and Sport. *Communication and Sport*, 11(2), 402–430. <https://doi.org/10.1177/21674795221132728>
- Khosla, S., Arora, S., Nandy, A., Saxena, A., & Anandhavelu, N. (2019). Understanding community rivalry on social media: A case study of two footballing giants. *CEUR Workshop Proceedings*, 2327. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85063190730&partnerID=40&md5=d6869a9bb8f7748042f32de5e2f69334>
- Kilvington, D. (2021). The virtual stages of hate: Using Goffman's work to conceptualise the motivations for online hate. *Media, Culture and Society*, 43(2). <https://doi.org/10.1177/0163443720972318>
- Kilvington, D., & Price, J. (2021). The 'beautiful game' in a world of hate: Sports journalism, football and social media abuse. In *Insights on reporting sports in the digital age* (pp. 104–119). Routledge.
- Kim, H. S., Cho, K. M., & Kim, M. (2021). Information-sharing behaviors among sports fans using hashtags. *Communication & Sport*, 9(4), 646–669.

- Kozinets, R. V. (2015). Netnography. In *The International Encyclopedia of Digital Communication and Society*. <https://doi.org/10.1002/9781118767771.wbiedcs067>
- Krzyżowski, F., & Strzelecki, A. (2023). Creating a fan bond with a football club on social media: a case of Polish fans. *Soccer and Society*, 24(5), 668–681. <https://doi.org/10.1080/14660970.2022.2095619>
- Landis, J. R., & Koch, G. G. (1977). An application of hierarchical kappa-type statistics in the assessment of majority agreement among multiple observers. *Biometrics*, 363–374.
- Liga Indonesia Baru. (2025). *Liga Indonesia Baru*. <https://Ligaindonesiabaruaru.Com>.
- Lungu, M. (2022). The coding manual for qualitative researchers. *American Journal of Qualitative Research*, 6(1), 232–237.
- Manoli, A. E., Dixon, K., Hie, J., Middleton, A., & Hague, N. (2024). Virtual football violence: exploring the resurgence of football's deviant leisure cultures in England. *Leisure Studies*, 1–16.
- Marin, A., & Wellman, B. (2010). Handbook of Social Network Analysis: an introduction. In *Handbook of Social Network Analysis*.
- Matamoros-Fernández, A. (2017). Platformed racism: The mediation and circulation of an Australian race-based controversy on Twitter, Facebook and YouTube. *Information, Communication & Society*, 20(6), 930–946.
- Maulida, F. H. (2024). Gangsters, music, and aremania: Modernity and the dynamics of arek malang to defend their existence (1970-2000). In *Collective Memory, Marginality, and Spatial Politics in Urban Indonesia* (pp. 55–68). [https://doi.org/10.1007/978-981-97-4304-9\\_4](https://doi.org/10.1007/978-981-97-4304-9_4)
- Mills, B. M., Tainsky, S., Green, B. C., & Leopkey, B. (2018). The ultimatum game in the college football rivalry context. *Journal of Sport Management*, 32(1), 11–23.
- Miranda, S., Gouveia, C., Di Fátima, B., & Antunes, A. C. (2024). Hate speech on social media: behaviour of Portuguese football fans on Facebook. *Soccer and Society*, 25(1), 76–91. <https://doi.org/10.1080/14660970.2023.2230452>
- Monroy-Trujillo, A., Padilla-Castillo, G., & Cabezuelo-Lorenzo, F. (2021). Sports and hate speech messages on Instagram: The case of Seville FC in the Spanish league. In *Hate Speech and Polarization in Participatory Society* (pp. 237–250). <https://doi.org/10.4324/9781003109891-19>
- Müller, L., Haut, J., & Heim, C. (2024). How German football clubs address antisemitism: organisational structures and communication. *International Journal of Sport Policy and Politics*. <https://doi.org/10.1080/19406940.2024.2442917>
- Neuendorf, K. A. (2017). *The content analysis guidebook*. Sage.
- Ong, W. H., & Leng, H. K. (2022). Social Media Marketing Strategies of Football Clubs: Limitations of Social Influence. *International Journal of Technology and Human Interaction*, 18(1). <https://doi.org/10.4018/IJTHI.297618>
- Pappi, F. U., & Scott, J. (1993). Social Network Analysis: A Handbook. *Contemporary Sociology*. <https://doi.org/10.2307/2075047>
- Parganas, P., Anagnostopoulos, C., & Chadwick, S. (2017). Effects of social media interactions on brand associations: A comparative study of soccer fan clubs. *International Journal of Sports Marketing and Sponsorship*, 18(2), 149–165.
- Pereira, J., Rodrigues, R. G., Duarte, P., & Gouveia, A. (2022). Social Media Marketing of Football Clubs: A Study with Portuguese Football Clubs—SL Benfica, FC Porto, and Sporting CP. *Smart Innovation, Systems and Technologies*, 280, 555–568. [https://doi.org/10.1007/978-981-16-9272-7\\_45](https://doi.org/10.1007/978-981-16-9272-7_45)
- Persib. (2025, May). *Persib Instagram*. <https://www.instagram.com/Persib/>.
- Phipps, C. (2023). “You belong in the kitchen”: social media, virtual manhood acts, and women strength sport athletes’ experiences of gender-based violence online. *Feminist Media Studies*, 23(8), 4221–4237. <https://doi.org/10.1080/14680777.2022.2158898>
- Pookpanich, P., & Siriborvornratanakul, T. (2024). Offensive language and hate speech detection using deep learning in football news live streaming chat on YouTube in Thailand. *Social Network Analysis and Mining*, 14(1), 18.
- Popp, B., Horbel, C., & Germelmann, C. C. (2017). Nature and Consequences of Social Media-Based Anti-brand Activism Against Sponsors and Investors of Sport Teams: An Abstract. In *Developments in Marketing Science: Proceedings of the Academy of Marketing Science* (pp. 901–902). [https://doi.org/10.1007/978-3-319-47331-4\\_182](https://doi.org/10.1007/978-3-319-47331-4_182)





- Pradana, M., Elisa, H. P., & Putra, A. (2024). Indonesian Football: A Bibliometric Analysis and Perspectives. *Open Sports Sciences Journal*, 17. <https://doi.org/10.2174/011875399X279156240102115151>
- Răzvan, B. M. C., Sorin, P. S., & Cătălin, P. M. (2019). Sport clubs interaction with the fans using social media communications. Case study at SCM Craiova. *Educatio Artis Gymnasticae*, 31.
- Romero-Jara, E., Solanellas, F., López-Carril, S., Kolyperas, D., & Anagnostopoulos, C. (2024). The more we post, the better? A comparative analysis of fan engagement on social media profiles of football leagues. *International Journal of Sports Marketing and Sponsorship*, 25(3), 578–599. <https://doi.org/10.1108/IJSMS-12-2023-0252>
- Ruser, J. B. (2023). *Exploring Social Media Use in Sport: Psychological, Emotional, and Social Considerations for Athlete Well-Being and Performance*. Indiana University.
- Saldaña, J. (2021). Coding techniques for quantitative and mixed data. *The Routledge Reviewer's Guide to Mixed Methods Analysis*, 151–160.
- Sánchez-Sánchez, A. M., Ruiz-Muñoz, D., & Sánchez-Sánchez, F. J. (2024). Mapping homophobia and transphobia on social media. *Sexuality Research and Social Policy*, 21(1), 210–226.
- Sanderson, J. (2016). Elite quarterbacks do not laugh when they are losing: Exploring fan responses to athletes' emotional displays. *International Journal of Sport and Exercise Psychology*, 14(3), 281–294.
- Sanderson, J., Stokowski, S., Zimmerman, M., & Fridley, A. (2020). "You had one job!" A case study of maladaptive parasocial interaction and athlete maltreatment in virtual spaces. *International Journal of Sport Communication*, 13(2), 221–238. <https://doi.org/10.1123/ijsc.2019-0129>
- Santos, G. L., dos Santos, V. G., Kearns, C., Sinclair, G., Black, J., Doidge, M., Fletcher, T., Kilvington, D., Endo, P. T., & Liston, K. (2024). Kicking prejudice: large language models for racism classification in soccer discourse on social media. *International Conference on Advanced Information Systems Engineering*, 547–562.
- Santos, G. L., dos Santos, V. G., Kearns, C., Sinclair, G., Black, J., Doidge, M., Fletcher, T., Kilvington, D., Liston, K., Endo, P. T., & Lynn, T. (2025). Detecting Homophobic Speech in Soccer Tweets Using Large Language Models and Explainable AI. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 15211 LNCS, 489–504. [https://doi.org/10.1007/978-3-031-78541-2\\_30](https://doi.org/10.1007/978-3-031-78541-2_30)
- Scott, J., Carrington, P., Marin, A., & Wellman, B. (2015). Social Network Analysis: An Introduction. In *The SAGE Handbook of Social Network Analysis*. <https://doi.org/10.4135/9781446294413.n2>
- Seijbel, J., van Sterkenburg, J., & Oonk, G. (2022). Expressing rivalry online: antisemitic rhetoric among Dutch football supporters on Twitter. *Soccer and Society*, 23(8), 834–848. <https://doi.org/10.1080/14660970.2022.2109800>
- Seijbel, J., van Sterkenburg, J., & Spaaij, R. (2023). Online Football-Related Antisemitism in the Context of the COVID-19 Pandemic: A Multi-Method Analysis of the Dutch Twittersphere. *American Behavioral Scientist*, 67(11), 1304–1321. <https://doi.org/10.1177/00027642221118286>
- Siahaan, M. (2023, June 16). *Indonesia: frequency of watching sports events 2023*. Statista. <https://www-statista-com.unpad.idm.oclc.org/statistics/1383515/indonesia-frequency-of-watching-sports-events/>
- Simsek, E., & Ozturk, M. B. (2024). Cyberbullying and fanatic behaviours of football fans in Turkey: The role of dark personality traits, team loyalty and demographics. *Journal of Community and Applied Social Psychology*, 34(4). <https://doi.org/10.1002/casp.2857>
- Sokoy, F., Qomarrullah, R., Lestari, W. S., & Muhammad, R. N. (2023). Kanjuruhan Indonesia Football Tragedy (Culture, Management, Governance, and Justice). *International Journal of Human Movement and Sports Sciences*, 11(4), 753–761. <https://doi.org/10.13189/saj.2023.110408>
- Sóti, A., Ancarani, A., Stéger, J., & Vattay, G. (2020). Influence of Twitter activity on the stock price of soccer clubs. *Social Network Analysis and Mining*, 10(1). <https://doi.org/10.1007/s13278-020-00691-2>
- Stamm, J., & Boatwright, B. (2021). We love you, we hate you: Fan twitter response to top college football recruits' decisions. *International Journal of Sport Communication*, 14(4), 530–553.
- Statista. (2024). *Most common interests in Indonesia 2024*. <https://www-statista-com.unpad.idm.oclc.org/forecasts/1389049/most-common-interests-in-indonesia>





- Statista Research Department. (2016, February). *Most popular soccer clubs in Indonesia 2016*. Statista. <https://www-statista-com.unpad.idm.oclc.org/statistics/860055/most-popular-soccer-clubs-in-indonesia/>
- Urhan, O. B., & Koç, B. (2021). Metamorphosis of the narrative: A study on the conversion of the fan story to Hooligan aggression. In *Handbook of Research on Narrative Interactions* (pp. 181–197). <https://doi.org/10.4018/978-1-7998-4903-2.ch011>
- Van Der Meij, L., Klauke, F., Moore, H. L., Ludwig, Y., Almela, M., & Van Lange, P. A. M. (2015). Football fan aggression: The importance of low basal cortisol and a fair referee. *PLoS ONE*, 10(4). <https://doi.org/10.1371/journal.pone.0120103>
- Waterhouse-Watson, D. (2019). "I would hate to see our good name tarnished": Twitter users respond to sexual assault in football. *Journal of Australian Studies*, 43(1), 22–38.
- We Are Social, & Meltwater. (2024). *Digital 2024 Indonesia*.
- Weimar, D., Holthoff, L. C., & Biscaia, R. (2022). When sponsorship causes anger: understanding negative fan reactions to postings on sports clubs' online social media channels. *European Sport Management Quarterly*, 22(3), 335–357. <https://doi.org/10.1080/16184742.2020.1786593>

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