

Algorithms and Fandom: Reinforcing Collective Identity and the Emergence of Digital Tribalism in the Social Media Era

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Abstract. The rapid proliferation of social media has profoundly reconfigured the landscape of digital communication, particularly through algorithmic systems that govern the visibility and prioritisation of content. Within this milieu, fandom communities have emerged as a salient social phenomenon that not only reflects shared interests but also operates as a dynamic site for the construction of complex collective identities through sustained interaction, symbolic practices, and the production of distinct discursive formations. Notwithstanding this development, extant literature reveals that scholarly discussions on Social Identity Theory, echo chambers, filter bubbles, and the interplay between algorithms and social behaviour remain largely fragmented, lacking an integrative analytical framework. This fragmentation results in a significant gap in comprehensively understanding the interconnections between algorithms, fandom, and digital tribalism. Accordingly, this study aims to critically examine the role of social media algorithms in shaping and reinforcing digital tribalism within fandom communities. Adopting a qualitative digital methodology, the study employs a case study design involving web scraping of publicly accessible online data, followed by thematic content analysis and digital discourse analysis. The theoretical framework integrates Social Identity Theory with the concepts of echo chambers, filter bubbles, and algorithmic amplification. The findings demonstrate that fandom communities cultivate robust collective identities that subsequently evolve into forms of digital tribalism, characterised by intensified in-group cohesion, the exclusion of out-groups, and the construction of ideologically biased narratives. Social media algorithms further act as active agents in amplifying high-engagement content, thereby facilitating narrative reinforcement, the consolidation of homogeneous informational environments, and the escalation of digital polarisation. In conclusion, algorithms should not be understood merely as neutral technical infrastructures; rather, they function as socio-technical agents that actively shape digital social realities, accelerating the transformation of fandom into increasingly exclusive and polarised social formations in the contemporary social media ecosystem.

Keywords: social media algorithms; digital tribalism; fandom; collective identity; algorithmic amplification

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1 Introduction

The rapid advancement of digital technologies has accelerated the transformation of the global communication landscape, particularly through the emergence and consolidation of social media platforms as the primary medium of contemporary human interaction. In this context, Van Dijck et al. (2021) argue that social media algorithms function as core mechanisms that not only organise and filter content but also determine the prioritisation of information presented to users based on their behavioural patterns and prior preferences. This reliance on algorithmic recommendation systems has given rise to a personalised communication ecosystem, thereby shaping how users construct and interpret social reality. Concurrently, the phenomenon of online fandom has emerged as a significant manifestation of digital communities, characterised by high levels of engagement, loyalty, and social mobilisation within cyberspace (Click & Scott, 2020; Jenkins et al., 2020).

Online fandom extends beyond the mere expression of shared interests; rather, as Booth (2021) contends, it functions as a dynamic site for the construction of complex and multilayered collective identities. Through sustained interaction, symbolic practices, and the production of distinctive discourses, fandom communities develop social structures that resemble exclusive groups with clearly defined boundaries of membership. However, according to Cinelli et al. (2021), these dynamics are also accompanied by an increasing tendency towards polarisation. Fanatic behaviours within fandom communities often demonstrate intensified in-group solidarity alongside the rejection of opposing viewpoints. This phenomenon not only undermines the quality of online public discourse but also reflects a growing tendency towards social fragmentation within digital environments (Sunstein, 2021).

Within this framework, the role of social media algorithms warrants critical examination as a factor capable of systematically influencing interaction structures and the formation of user perceptions (Flew, 2021). Content filtering mechanisms driven by relevance and engagement have the potential to produce homogeneous communication environments, thereby limiting the diversity of perspectives encountered by users. As noted by Shimauchi (2024), such conditions further reinforce group identity and contribute to the solidification of more rigid social boundaries within fandom communities. The implications of these processes are evident in the emergence of digital tribalism, characterised by clear distinctions between in-groups and out-groups, as well as a tendency to defend group narratives in an exclusive manner (Munn, 2020).

Accordingly, this study seeks to examine the role of social media algorithms in shaping and reinforcing digital tribalism within fandom communities. It specifically focuses on the interrelationship between algorithmic mechanisms, the construction of collective identity, and the dynamics of polarisation in digital interactions. This approach is expected to contribute to a more nuanced understanding of algorithmic technologies, which function not merely as tools for information management but also as active agents in shaping social reality and the evolving dynamics of intergroup relations in the contemporary social media era.

1.1 Concepts and Definitions

A clear understanding of key concepts constitutes a fundamental basis for developing a robust analytical framework in scholarly research. In the context of this study, three core concepts underpin the discussion: social media algorithms, fandom, and digital tribalism. These concepts are inherently interconnected in explaining the dynamics of user interaction within contemporary digital environments. Ngai et al. (2015) contend that examining these concepts not only clarifies terminological usage but also establishes the necessary theoretical foundation for analysing increasingly complex social phenomena in social media contexts.

Social media algorithms refer to computational and data-processing systems employed by digital platforms to determine the content presented to users (Cotter, 2023; Kitchin, 2021). These systems typically operate through recommendation mechanisms that analyse user behaviour—such as viewing history, interactions, and content preferences—to suggest information deemed relevant. In addition, algorithms perform content curation processes, automatically organising and filtering content to align with users' interests (Bonini & Gandini, 2020). Through the integration of these mechanisms, algorithms function as primary determinants in shaping personalised digital experiences and influencing patterns of information exposure among users.

Meanwhile, Chin & Morimoto (2022) define fandom as a community of fans formed around shared interests in particular entities, such as celebrities, entertainment products, or sports teams. These communities evolve within digital spaces through sustained interaction, content sharing, and active participation in discussions related to their interests. In this process, Hills (2021) argues that fandom operates as a medium for the construction of collective identity, distinguishing group members from outsiders. This identity is reinforced through the use of symbols, specialised language, and shared narratives that foster a strong sense of belonging and loyalty among members.

Digital tribalism, on the other hand, refers to the tendency of social media users to form exclusive groups based on shared interests, beliefs, or identities (Peters & Allan, 2023). This phenomenon is characterised by clear distinctions between in-groups and out-groups. In such contexts, (Fuchs, 2021) notes that online interactions tend to reinforce internal solidarity while rejecting external perspectives, thereby contributing to digital polarisation. This polarisation manifests in widening divides between groups, which may undermine the quality and cohesion of discourse within social media environments (Törnberg, 2018).

Overall, the concepts of social media algorithms, fandom, and digital tribalism are mutually reinforcing in explaining the formation and evolution of social structures in digital environments. Algorithms function as mechanisms that shape information exposure, fandom acts as a social entity that constructs collective identity, and digital tribalism represents the social implications arising from these interactions. A comprehensive understanding of these interrelated concepts is essential for supporting a more in-depth analysis in the subsequent section, namely the literature review, which will examine prior research findings related to these issues.

1.2 Literature Review

This section critically examines prior studies related to the three core concepts underpinning this research; social media algorithms, fandom, and digital tribalism. These interrelated concepts collectively explain the formation of online interaction patterns that not only shape communication practices but also contribute to the construction of collective identity, the reinforcement of social boundaries, and the intensification of group polarisation. Accordingly, the review is organised into three principal strands to clarify these conceptual linkages. First, studies grounded in Social Identity Theory are examined to elucidate individuals' tendencies to reinforce in-group loyalty and the processes underlying collective identity formation within digital fandom. Second, research on echo chambers and filter bubbles is reviewed to explore the role of algorithms in filtering and structuring information, thereby producing homogeneous communication environments that reinforce existing beliefs. Third, studies on algorithms and social behaviour are analysed to highlight the influence of recommendation systems and content curation on interaction patterns, user engagement, and broader social dynamics within social media. Through this classification, the review not only synthesises existing findings but also establishes a robust theoretical

foundation for understanding digital fandom and the emergence of digital tribalism in this study.

Within the Social Identity Theory framework, existing research demonstrates that individuals' attachment to social groups constitutes a fundamental basis for understanding the dynamics of digital fandom and the tendency towards digital tribalism. Maros & Abdul Basek (2022) show that social identity within K-pop fandom is constructed through processes of self-identification, symbolic interaction, and ongoing social comparison, thereby reinforcing group loyalty. These findings are supported by Q. Jiang et al. (2022) and Chang et al. (2023), who highlight the strength of fandom identity in driving social mobilisation and collective participation, including in public health contexts, underscoring fandom as an influential social community. In the context of sports, studies by Seaton et al. (2022) and Doehler (2026) demonstrate that group identity shapes the evaluation of social issues and online interaction experiences, while reinforcing boundaries between members and non-members. Furthermore, Ncube et al. (2024) and Cheng & Wu (2025) extend this understanding by showing that digital-era sports fandom can generate large-scale emotional aggregation, identity construction, and heightened polarisation, particularly during global sporting events. Collectively, these studies underscore the central role of social identity in driving group attachment, solidarity, and conflict in digital spaces. However, most prior research remains focused on psychosocial dimensions and community interaction, with limited attention to the role of social media algorithms as structural factors that may intensify group identity formation. This gap highlights the need for integrative research that incorporates technological dimensions, particularly the role of algorithms in accelerating and amplifying fandom identity and digital tribalism.

Research within the echo chamber and filter bubble paradigm indicates that social media algorithms play a significant role in shaping increasingly concentrated and selective information environments. Early work by Sasahara et al. (2021) demonstrates that the interplay between social influence and network-selection practices, such as unfollowing, can produce homogeneous community clustering and accelerate the formation of echo chambers. This finding is reinforced by Rhodes (2022), who shows that repeated exposure to belief-consistent content increases acceptance of information, including misinformation. In the context of global crises, J. Jiang et al. (2021) provide evidence that online communities tend to form closed groups that reinforce their respective narratives, thereby contributing to discursive polarisation. From a technical perspective, Botte et al. (2022) and Del Cerro (2024) emphasise that network clustering and homophily, strengthened by algorithmic filtering mechanisms, accelerate the formation of exclusive information environments. Empirical findings by Park & Park (2024) further reveal that AI-driven recommendation systems consistently promote ideologically aligned content, thereby limiting exposure to diverse perspectives. At a synthesis level, Hartmann et al. (2025), through a systematic review, conclude that echo chambers represent a complex and context-dependent phenomenon influenced by platform design, cultural factors, and methodological approaches, although tendencies towards informational clustering remain evident across studies. While these studies effectively integrate empirical, modelling, and systematic approaches to explain information filtering and homogeneous communication environments, a notable gap persists in incorporating fandom as a cultural dimension within echo chamber analyses, particularly in the context of sports fandom in Southeast Asia. Moreover, research explicitly linking algorithmic mechanisms, fandom discourse dominance, and digital tribalism remains limited, warranting further contextually grounded and integrative investigation.

The body of research on algorithms and social behaviour further demonstrates that social media algorithms extend beyond their technical function as content-organising mechanisms, acting instead as active agents that shape interaction patterns, user choices, and engagement in digital spaces. Studies by Santos et al. (2021) and Arruda et al. (2022) show that

recommendation systems and content distribution strategies influence the formation of social connections and increase tendencies towards polarisation within user networks. In terms of user engagement, Shahbaznezhad et al. (2021) and Lum & Chang (2023) demonstrate that content design and platform features directly affect forms of user interaction, including both passive and active engagement, as well as the construction of social presence. Lin et al. (2024) further reveal that news recommendation algorithms not only enhance engagement among certain users but also risk widening informational disparities between different user groups. From a psychosocial perspective, Ji & Jan (2024) and Poleac & Gherguț-Babii (2024) emphasise that content personalisation, feedback mechanisms, and psychological factors such as platform dependency significantly shape user decision-making and behaviour. Additionally, Habib et al. (2024) demonstrate that users' prior interactions directly influence the content they are subsequently exposed to, indicating that algorithms not only reflect user preferences but actively shape the direction of discourse within platforms. While these studies effectively combine empirical, experimental, and modelling approaches to explain the relationship between algorithms and social behaviour, a critical gap remains in examining the specific interplay between algorithms, fandom discourse dominance, and the formation of digital tribalism, particularly within sports fandom communities in Southeast Asia. This gap calls for more contextually grounded and in-depth research to better understand how algorithms reinforce fandom influence and regulate discursive dynamics in social media environments.

Overall, the literature spanning Social Identity Theory, echo chambers and filter bubbles, and algorithms and social behaviour demonstrates that prior research has successfully examined group identity formation, information filtering processes, and the influence of algorithms on user interaction patterns in digital environments. However, a significant limitation lies in the tendency to treat these dimensions in isolation, without a comprehensive integrative framework capable of explaining the reciprocal relationships between algorithms, fandom community formation, and the emergence of digital tribalism. Furthermore, existing studies have paid insufficient attention to the role of algorithms as structural forces that not only filter content but also reinforce collective identity and solidify social boundaries among users. This gap justifies the present study's focus on examining the role of social media algorithms in shaping and reinforcing digital tribalism within fandom communities in a more integrated and context-sensitive manner. Accordingly, the following section outlines the methodological approach employed to systematically investigate this phenomenon within a clearly defined analytical framework.

2 Method

This study adopts a qualitative digital research approach, as outlined by Salmon (2021), to examine in depth the role of social media algorithms in shaping and reinforcing digital tribalism within fandom communities. This approach is particularly appropriate given that the phenomenon under investigation involves complex and multilayered dimensions of social interaction, identity construction, and discursive dynamics within digital environments. A case study design is employed to enable a contextualised and in-depth analysis of a specific fandom community within social media platforms. As noted by Pink et al. (2021), this approach aligns with established traditions in digital communication research that emphasise the interpretation of meaning, symbolic practices, and interaction patterns within online communities.

Data collection was conducted using web scraping techniques, following the approach proposed by Mitchell (2024), with a focus on publicly accessible content across multiple digital platforms. The dataset includes primary posts, comments, replies, captions, and interaction metadata such as the number of likes, shares, timestamps, and hashtag usage. This

process facilitates the construction of a dataset that reflects authentic communication patterns among users. Data selection was carried out through purposive sampling, employing keywords, lexical variations, and symbolic markers commonly used within fandom communities to ensure the relevance and representativeness of the data Munzert et al. (2020). In addition to mainstream social media platforms, data sources also include comment sections of news portals, online forums, video-sharing platforms, and open digital communities that serve as active sites of fan engagement.

To ensure analytical rigour, the collected data were organised into several key layers, including communicative text, interaction metadata, identity markers, and basic network structures (Borgatti et al., 2022). The textual layer encompasses linguistic content such as expressions of support, criticism, hostility, and emotional articulation. Interaction metadata provides indicators of content visibility and diffusion within platforms. Identity markers include the use of specialised terminology, group symbols, and collective language that signify the construction of fandom identity. Meanwhile, basic network structures refer to patterns of user interaction, including reply relationships and discursive repetition, which may indicate the presence of dominant clusters within discussions.

Data analysis was conducted through a combination of thematic content analysis (Braun & Clarke, 2021) and digital discourse analysis (Barton & Lee, 2020) to identify patterns of meaning, narrative structures, and identity construction within fandom communities. Thematic analysis was employed to categorise key themes such as group solidarity, identity defence, out-group rejection, and collective emotional expression. Subsequently, digital discourse analysis was applied to examine how language is used to construct social boundaries and legitimise the position of the in-group relative to others. In addition, patterns of content visibility were assessed by analysing levels of engagement and narrative repetition as indicators of potential algorithmic amplification within social media environments.

To ensure the validity and reliability of the findings, the coding process was conducted systematically with reference to the theoretical framework outlined in the literature review (Saldana, 2021). Data interpretation was undertaken with careful consideration of the social, cultural, and linguistic contexts embedded within digital environments. Furthermore, as emphasised by Charmaz (2021), ethical considerations were rigorously observed by ensuring that all data were derived from publicly accessible sources and did not involve the direct disclosure of users' personal identities. This approach ensures that the study is conducted responsibly and in accordance with established ethical principles in digital research.

Through this methodological framework, the study is able to integrate algorithmic processes, social interaction, and identity formation within a unified analytical perspective. The chosen design not only enables the identification of communication patterns within fandom communities but also provides a robust foundation for examining the role of algorithms in reinforcing social boundaries and the emergence of digital tribalism in the social media era.

3 Results and Discussion

This section presents the findings of the analysis, focusing on the role of social media algorithms in shaping and reinforcing digital tribalism within fandom communities, particularly in relation to the production, dissemination, and amplification of content, as well as their contribution to the formation of social boundaries among user groups. The analysis extends beyond communicative text to incorporate content visibility, narrative repetition, and interaction intensity as key indicators of algorithmic influence in shaping users' digital experiences.

Based on observations of the collected dataset, discussions within fandom communities are characterised by high levels of activity, repetition, and emotionally charged expression.

The analysed content reveals a strong tendency among users to produce and circulate narratives that align with their respective group orientations, accompanied by elevated levels of engagement through comments, replies, and content sharing. Moreover, recurring thematic patterns were identified as dominant within the discourse, including expressions of support, defence of group identity, and criticism of out-groups. These findings are consistent with Terren & Borge-Bravo (2021), who demonstrate that discourse within fandom communities is not random but rather driven by interactional structures that reinforce specific content, allowing it to become dominant within digital spaces.

To further contextualise this phenomenon, the study focuses on a fandom community characterised by intensive and multilayered interactions, namely the supporters of the Persib Bandung football team. This community was selected due to its high level of engagement on social media, the vibrancy of its discussions, and the strong collective identity exhibited among its supporters (Hadi, 2017). Observations of interactions within this community reveal communication patterns that not only reflect loyalty towards the team but also demonstrate the construction of a cohesive group identity and a consistent tendency to defend particular narratives. These characteristics render the community a significant case for examining the relationship between social media algorithms, fandom formation, and the emergence of digital tribalism in contemporary digital environments.

The construction of fandom identity in this study is examined empirically through the use of real-world data obtained via web scraping, as outlined in the methodology section. This process successfully compiled a corpus of 25 online utterances, as presented below, which reflect communication patterns, emotional expressions, and identity construction within the fandom community.

- 1) “Dasar aremania, mental koboi aja, gak ada harga diri! PERSIB BANDUNG LUH, BIRU BIRU BIRU!!! Gak ada yang bisa lawan kekuatan Viking, lawan PERSIB kalau berani! Mati kau! 😊”
- 2) “Halah aremania, lu semua cuma bisa ngeyel doang! BOBOTOH PERSIB JUARA, gak ada tandingan! Viking itu kuat, gak kayak lu semua yang cuma jadi penonton aja! Nonton terus aja deh, gak bakal ngerti apa-apa! Jauh-jauh dari Malang, jangan ganggu PERSIB!”
- 3) “lawan Persib tuh gak cuma lawan tim, tapi juga lawan tekanan dari Bobotoh, makanya banyak yang gak kuat main di Bandung”
- 4) “banyak yg bilang tim lain lebih hebat, tapi kalo soal loyalitas supporter, Persib sama Bobotoh jelas beda levelnya”
- 5) “Persib main dimana aja pasti rame, Bobotoh selalu ada, itu yang bikin Persib gak pernah sendirian di lapangan”
- 6) “Yang suka remehkan Persib biasanya belum ngerasain langsung atmosfernya, sekali nonton pasti ngerti kenapa Persib beda”
- 7) “PERSIB MAUNG BANDUNG, JUARA LAGI! Gak ada yang bisa lawan kekuatan Bobotoh! Kami selalu mendukung, PERSIB selalu di hati! Biru adalah kekuatan, biru adalah kebanggaan! Skuad Garuda Jaya takluk di Bandung!”
- 8) “Arema? Haha, itu tim seumuran jagung! PERSIB BANDUNG THE REAL CHAMPION! Gak ada sejarahnya PERSIB kalah, kami tim besar dengan supporter sejati! Singo Ngawi? Ha! Singo Bandung aja!”
- 9) “aremania boleh aja ngomong apa, tapi kalo ketemu Persib di lapangan juga hasilnya kelihatan, gak usah banyak alasan lah 🤔”

- 10) “Persib kalah dikit langsung diramein, tapi tetep aja Persib yang paling sering dibahas, itu udah nunjukin siapa yang paling besar”
- 11) “bobotoh mah dari dulu udah solid, Persib menang atau kalah tetep didukung, beda sama yg lain yang cuma muncul pas lagi bagus aja”
- 12) “BOBOTOH UNITED, kita tidak akan kalah! PERSIB selalu di hati, kami berjuang sampai akhir! Gak ada yang bisa hentikan kami, PERSIB akan jadi juara! VIVA PERSIB! Jakarta gak ada apa-apanya, Bandung kota juara!”
- 13) “PERSIB, kami takkan pernah kalah! Bobotoh siap tempur, lawan siapapun! Gak peduli JDT, gak peduli Johor, PERSIB MAUNG BANDUNG tak terkalahkan! 😊”
- 14) “Dasar Bonek, sok keras di Surabaya, tapi di Bandung? Cuma tamu! PERSIB BIRU, JUARA LAGI! Gak ada yang bisa lawan kekuatan Viking!”
- 15) “PERSIB, kekuatan Bandung, kebanggaan Jawa Barat! Gak ada yang bisa lawan, kami Bobotoh sejati! Arema? Cuma tim medioker, gak ada kelas!”
- 16) “Jakarta gak ada apa-apanya, PERSIB BANDUNG JUARA! Bobotoh siap beraksi, lawan siapapun! Gak ada yang bisa lawan kekuatan Maung Bandung!”
- 17) “PERSIB MAUNG BANDUNG, RAKETAS! Gak ada yang bisa lawan, kami tim besar! Arema, PSM, Sriwijaya? Cuma anak kecil, gak ada apa-apanya di depan PERSIB!”
- 18) “wkwk tiap kali Persib menang pasti aja ada yg panas, padahal dari dulu juga Persib emang punya kualitas, Bobotoh juga selalu ada gak pernah sepi ❤️”
- 19) “jujur aja ya, Persib tuh beda sama tim lain, bukan cuma soal main tapi soal kebanggaan, makanya Bobotoh selalu all out dukung”
- 20) “kadang lucu liat yg benci Persib, tiap hari ngepost soal PERSIB juga, berarti sadar gak sadar Persib tetap jadi pusat perhatian 😊”
- 21) “Persib itu bukan sekadar klub bola sih, buat orang Bandung Persib itu identitas, jadi wajar kalo Bobotoh segitunya”
- 22) “setiap musim pasti aja PERSIB jadi topik utama, mau menang atau kalah tetap dibahas, itu tanda Persib punya pengaruh besar”
- 23) “Persib itu selalu jadi standar perbandingan, tim lain kalau mau dianggap hebat pasti dibandingin sama PERSIB dulu”
- 24) “kadang heran sama yg suka ngejek PERSIB, tapi giliran timnya ketemu Persib malah tegang sendiri, kelihatan banget bedanya 😊”
- 25) “Persib sama Bobotoh itu udah satu paket, gak bisa dipisahin, makanya wajar kalau Persib selalu punya kekuatan lebih dari sisi mental”

The examples in sentences 1 to 25 above demonstrate a diversity of utterance forms, ranging from aggressive and confrontational expressions to more casual yet identity-laden discourse. These data serve as a critical empirical basis for systematically analysing the construction of fandom identity through the lens of Social Identity Theory, particularly in explaining the relationship between fandom, collective identity formation, and the reinforcement of group loyalty. From the perspective of group identity construction, the data reveal the consistent use of lexical markers such as “Persib”, “Bobotoh”, “Maung Bandung”, and “Viking” as clear indicators of collective identity. The use of pronouns such as “kami” and “kita” further reinforces a sense of belonging among group members, as illustrated in example (7) “kami selalu mendukung, PERSIB selalu di hati” and example (12) “kami berjuang sampai akhir”. In addition, expressions such as in example (21) “Persib itu identitas” indicate that fandom has transcended the level of ordinary support and has become

embedded within individual self-construction. This aligns with the principle of social identification in Social Identity Theory, which emphasises the alignment of individual identity with a particular social group.

Furthermore, the marking of out-groups is clearly evident through the use of terms referring to opposing parties such as “aremania”, “Bonek”, “Jakarta”, and “tim lain”. For instance, in sentence (1) “Dasar aremania...”, sentence (14) “Dasar Bonek...”, and sentence (8), which refers to opponents as “tim seumurang jagung”. These markers function to construct social boundaries that differentiate between the in-group and out-group, thereby reinforcing internal group identity within the fandom community. Within the framework of Social Identity Theory, this process is referred to as social categorisation, which constitutes a fundamental basis for group identity formation. From the perspective of social comparison, nearly all data exhibit a tendency to position the in-group as superior to others. This is evident in example (2) “gak ada tandingan”, example (15) “gak ada yang bisa lawan”, and example (23), which describes Persib as the “standar perbandingan” for other teams. More extreme forms of comparison are also present, such as in example (17), which derogates the opposing side as “cuma anak kecil”. These patterns reflect in-group favouritism and out-group derogation, whereby the in-group is elevated while the out-group is diminished in order to maintain a positive group image.

In addition, emotional intensity and elements of militancy emerge as key features in the construction of fandom identity. The data demonstrate the use of emotionally charged language, including expressions of pride, loyalty, and aggression, as seen in sentence (1) “mati kau!”, sentence (13) “Bobotoh siap tempur”, and sentence (5) “kami berjuang sampai akhir”. At the same time, expressions in examples (18) and (19) reflect more subtle emotional tones while still indicating a deep attachment to the group. These elements suggest that fandom identity is not merely cognitive but also deeply affective, thereby encouraging more assertive forms of behaviour in defending the group. Overall, the findings from this analysis indicate that fandom in this context has evolved into a strong form of collective identity, marked by the use of shared symbols, language, and narratives, consistent with the findings of Chen et al. (2024). Through processes of social identification, categorisation, social comparison, and emotional reinforcement, fandom communities not only cultivate a strong sense of belonging but also establish a solid foundation for the emergence of digital tribalism within social media environments.

The development of fandom identity, as discussed above, further demonstrates a clear transition towards the formation of digital tribalism, particularly through the reinforcement of in-group cohesion and the rejection of out-groups within digital discourse. Analysis of examples 26 to 50 below indicates that supporter communities not only construct internal solidarity but also actively defend their in-group while rejecting external groups through various forms of expression.

- 26) “#VikingCyberArmy siap turun kalau Persib dihina, jangan cuma berani di komentar aja, di lapangan beda cerita! 🗡️ #PERSIBDay”
- 27) “Heran sama yg masih remehkan Persib, tiap musim selalu aja dibungkam, tapi tetep aja gak kapok ngomong 😏 #BobotohMilitan”
- 28) “PERSIB BANDUNG bukan cuma klub, ini harga diri, makanya Bobotoh gak pernah diam kalau ada yg ganggu #BobotohUnited”
- 29) “#PERSIBNation vs Persija itu bukan sekadar pertandingan, tapi soal gengsi, dan sejauh ini Persib masih lebih unggul 🏆”
- 30) “Gak usah banyak gaya kalau belum pernah ngerasain tekanan Bobotoh di stadion, Persib itu beda levelnya #MaungBandung”

- 31) “#VikingCyberArmy gak pernah cari masalah, tapi kalau Persib diserang, kami pasti balas, itu sudah pasti 💖”
- 32) “PERSIB itu selalu jadi target, semua tim pengen kalahin, tapi kenyataannya gak semudah itu #BobotohCyber”
- 33) “#PERSIB vs Arema selalu panas, tapi yang jelas Persib tetap berdiri dengan dukungan Bobotoh yang gak pernah mundur”
- 34) “Gak ada yang bisa hentikan semangat Bobotoh kalau soal Persib, mau lawan siapa juga tetap all out #PERSIBForever”
- 35) “PERSIB itu bukan cuma main bola, tapi soal nama besar, jadi wajar kalau banyak yg iri dan terus nyerang di medsos #VikingArmy”
- 36) “#BobotohMilitan siap bela Persib kapanpun, jangan kira kami cuma ramai di online, dukungan itu nyata 🇮🇩”
- 37) “Gak ngerti kenapa Persib selalu jadi bahan ejekan, padahal tiap ketemu di lapangan hasilnya beda cerita 🤔 #MaungBandung”
- 38) “PERSIB BANDUNG tetap nomor satu di hati Bobotoh, tim lain boleh datang silih berganti tapi gak akan bisa gantikan 💖”
- 39) “#PERSIBNation vs Sriwijaya? Gak usah panjang lebar, kualitas Persib sudah cukup bicara di lapangan #VikingSuporter”
- 40) “Kalau bukan Persib yang dibahas, rasanya timeline sepi, itu bukti Persib punya pengaruh besar 😊 #BobotohUnited”
- 41) “#VikingCyberArmy selalu solid, gak peduli menang atau kalah, tapi kalau soal harga diri Persib kami gak mundur”
- 42) “PERSIB itu udah jadi standar, tim lain kalau mau dianggap hebat pasti dibandingkan sama Persib dulu #MaungBandung”
- 43) “#PERSIB vs Persija selalu jadi perhatian, tapi tekanan dari Bobotoh jelas bikin lawan gak nyaman main di Bandung”
- 44) “Gak perlu banyak omong, Bobotoh selalu buktikan loyalitas ke Persib, beda sama yg lain yang cuma ramai sesaat #BobotohCyber”
- 45) “PERSIB BANDUNG punya sejarah dan basis kuat, jadi wajar kalau Bobotoh selalu paling depan bela timnya 💖”
- 46) “#BobotohMilitan gak akan diam kalau Persib direndahkan, ini bukan sekadar bola, tapi soal kebanggaan daerah”
- 47) “Gak ada yang bisa gantikan Persib di hati Bobotoh, makanya tiap ada yg nyerang langsung ramai dibela 💧”
- 48) “PERSIB selalu jadi pusat perhatian, mau dibenci atau dipuji tetap aja paling banyak dibahas #PERSIBDay”
- 49) “#PERSIBNation vs Persija itu udah kayak tradisi panas, tapi yang jelas Persib gak pernah kehilangan dukungan 🇮🇩”
- 50) “Gak peduli siapa lawannya, selama ada Bobotoh di belakang, Persib akan tetap kuat dan sulit dikalahkan #VikingArmy”

From the perspective of in-group reinforcement, there is a strong tendency to assert unity and loyalty towards the group, as reflected in example (28) “PERSIB BANDUNG bukan cuma klub, ini harga diri”, example (41) “kalau soal harga diri Persib kami gak mundur”, and

example (50) “selama ada Bobotoh di belakang, Persib akan tetap kuat”. These expressions indicate that support for the team has evolved into a symbol of dignity and collective identity that must be defended, thereby strengthening internal solidarity among fandom members. At the same time, the rejection and antagonism directed towards out-groups constitute a defining feature of digital tribalism. This is evident in the form of sarcasm, challenges, and delegitimisation of opposing groups, as illustrated in example (26) “jangan cuma berani di komentar aja”, example (27) “dibungkam tapi tetap gak kapok ngomong”, and example (30), which emphasises that opposing groups fail to understand the real pressures of confronting the supporter community. In addition, comparative narratives such as in example (29) “Persib masih lebih unggul” and example (42) “Persib itu udah jadi standar” demonstrate a tendency to position the in-group as the primary reference point while diminishing the status of other groups. These forms of expression reflect a clear social division between in-groups and out-groups, which constitutes a central characteristic of digital tribalism in social media environments.

Furthermore, the analysis reveals the presence of biased narratives and in-group legitimisation, which are frequently employed to validate the position of the fandom within digital environments. For instance, in example (32) “PERSIB itu selalu jadi target” and example (35) “banyak yg iri dan terus nyerang di medsos”, there is a tendency to construct a narrative in which the in-group is portrayed as a frequent target of injustice or external hostility. Such narratives not only reinforce internal cohesion but also strengthen the perception that the group occupies a position that must be actively defended. Additionally, examples (40) and (48), which emphasise that Persib consistently remains the centre of attention, reflect efforts to justify the group’s dominance in digital discourse as both legitimate and natural. Overall, these findings support prior work by Cinelli et al. (2021), demonstrating that digital tribalism within fandom communities is not merely formed through shared identity but is continuously reinforced through processes involving internal solidarity, out-group rejection, and the construction of in-group-favouring narratives. Through repeated interaction and discursive reinforcement in digital spaces, fandom communities evolve into increasingly exclusive and defensive social entities, thereby solidifying group boundaries and contributing to polarisation in social media.

The analysis of fandom identity formation and digital tribalism, based on 50 sampled utterances obtained through web scraping of publicly available online sources, further indicates that discursive patterns within fandom communities are not random but are shaped by the visibility structures embedded within social media platforms. Content supporting Persib appears consistently and repeatedly, particularly through the use of hashtags and collective expressions, as observed in examples (28), (34), and (45), which emphasise unity and group strength. Moreover, emotionally charged content, such as expressions of struggle and identity defence, as seen in examples (36) and (46), demonstrates a higher likelihood of generating engagement. This suggests that social media algorithms are not neutral mechanisms; rather, they tend to amplify content with high levels of interaction, thereby reinforcing particular narratives within digital environments. The implication of this process is the formation of a homogeneous communication environment in which content aligned with group perspectives is repeatedly amplified, while alternative viewpoints become increasingly marginalised. This phenomenon explains the emergence of echo chambers and filter bubbles, which contribute to the construction of increasingly closed digital social realities.

This development further illustrates a clear transformation from shared interest in a sports team to the formation of a more complex and structured form of digital tribalism. Fandom, which initially emerges from shared interest, evolves into a strong collective identity that fosters high levels of solidarity among its members. This solidarity subsequently leads to increasing exclusivity and social segmentation, whereby certain groups begin to control

dominant narratives and shape the direction of discourse within digital spaces. This is evident in the repeated narratives emphasising Persib's dominance as a central point of reference, as seen in examples (40), (42), and (48). In this context, content that generates high engagement is continuously amplified by algorithms, thereby shaping the discursive power structure within digital communities. The interaction between user engagement and algorithmic logic produces a communication ecosystem in which certain groups are able to dominate discussions and sustain their influence over time.

The findings of this study can be further elucidated through the integration of the theoretical frameworks discussed earlier. From the perspective of Social Identity Theory, the reinforcement of group identity observed in the data supports processes of social identification and social comparison, which contribute to the formation of clear intergroup boundaries. At the same time, the concepts of echo chambers and filter bubbles explain the mechanisms of information filtering that repeatedly expose users to content aligned with their group perspectives. In addition, the concept of algorithmic amplification highlights the role of social media algorithms in elevating high-engagement content, thereby accelerating the reinforcement of group narratives. From a social implications perspective, this phenomenon exhibits a dual dimension. On the one hand, it contributes positively to the formation of strong communities, high levels of solidarity, and a sense of belonging among fandom members. On the other hand, it also drives polarisation, digital conflict, and the potential spread of biased information, which may undermine the quality of public discourse in digital environments.

Overall, this analysis demonstrates that social media algorithms play a significant role in shaping and reinforcing digital tribalism within fandom communities (Helberger et al., 2018). Through the amplification of high-engagement content, algorithms contribute to the repetition of narratives, the reinforcement of collective identity, and the increasing separation between groups. This process indicates that fandom no longer functions merely as a space of shared interest but has evolved into an exclusive and polarised social structure within digital environments. Accordingly, the findings of this study underscore the active role of algorithms in shaping digital social reality, thereby supporting the study's objective of providing a more comprehensive understanding of the relationship between social media algorithms, fandom communities, and the formation of digital tribalism.

4 Conclusion

The discussion presented in this study demonstrates that fandom within social media environments can no longer be understood merely as a neutral or recreational form of collective interest. Rather, it has evolved into a complex social structure, constructed through sustained interaction, symbolic practices, and the production of structured discourse within digital spaces. The analysis of the utterance data reveals that fandom communities develop strong collective identities through the use of specialised lexical markers, shared narratives, and consistent emotional expressions. This process not only reinforces a sense of belonging among members but also positions fandom as an active mechanism of social identity construction within users' digital lives.

The development of this collective identity subsequently contributes to the formation of increasingly distinct social boundaries between in-groups and out-groups. In this context, digital tribalism emerges as a direct consequence of the intensification of fandom identity, which shifts from inclusivity towards exclusivity and social segmentation. The findings indicate that online interactions extend beyond expressions of support for the in-group, encompassing the rejection of others and the construction of narratives that favour one's own community. This suggests that digital spaces have become arenas for the formation of new social hierarchies, where group positioning is determined by discursive dominance, levels of

engagement, and the capacity to sustain collective identity within a competitive communicative environment.

In examining the factors that accelerate and reinforce these dynamics, this study demonstrates that social media algorithms play a far more significant role than merely serving as technical mechanisms for content organisation. Instead, algorithms function as structural agents that shape content visibility, repetition, and amplification based on user engagement. Content characterised by emotional intensity, conflict, or identity reinforcement tends to generate higher levels of interaction and is consequently amplified repeatedly within digital spaces. This process produces a selective and homogeneous communication environment that fosters the emergence of echo chambers and filter bubbles. Under such conditions, users are increasingly exposed to narratives that align with their group perspectives, thereby further reinforcing social boundaries and intensifying tendencies towards digital polarisation.

Accordingly, this study argues that the relationship between social media algorithms, fandom identity formation, and the emergence of digital tribalism should be understood as an interconnected and recursive process. Fandom is not solely formed through shared interests but is continuously reinforced through algorithmic structures that regulate the flow of information and user interaction. The implications of these findings underscore the need to critically reassess the role of technology in shaping digital social realities, particularly in relation to the sustainability of public discourse and intergroup relations. Consequently, this study opens avenues for further research that is more critical and contextually grounded, while also calling for greater awareness of the implications of algorithmic systems in shaping the contemporary digital communication landscape.

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