

Digital Fan Culture: An Empirical Study on the Mechanisms of Cyberbullying among Extreme Akgae

Zhou Fang*

Journalism and Intelligent Communication School, Guangzhou Huali College, China

*Corresponding Author Email: zephyrfangzhou@hotmail.com

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v16-i4/27927>

Published Date: 06 April 2026

Abstract

This study examines the manifestations and driving mechanisms of cyberbullying within digital fandom communities in China. Drawing on a subcultural perspective and based on 307 valid survey responses, it focuses on the behaviour of extreme Akgae, a group of exclusive solo fans who strongly defend a single idol. The findings suggest that cyberbullying by extreme fans is not a random emotional reaction but a strategic behaviour aimed at protecting the perceived status of their idol within the fandom. Aggressive actions, including verbal abuse, defamation and organised collective reporting, are primarily directed at competitors within the same fan community, such as rival fans or other members of the same idol group. The analysis identifies three key factors that contribute to this behaviour: social identity, cognitive rationalisation and platform mechanisms. Strong emotional attachment to idols strengthens ingroup loyalty and hostility towards outsiders, allowing fans to justify aggressive behaviour as a defence of their idol's reputation. In addition, platform features such as algorithmic recommendation systems and community structures reinforce interaction within particular fan groups, creating relatively closed information environments that further strengthen group identity and encourage the normalisation of extreme behaviour.

Keywords: Digital Fandom, Extreme Akgae, Cyberbullying, Moral Disengagement, Fandom Governance

Introduction

The rapid expansion of social media has fundamentally reshaped the sphere of public discourse. As a new mode of communication, social media enables users to generate content and engage in synchronous or asynchronous online interaction with large audiences (Bayer et al., 2020). However, this form of instant and continuous communication has also made these platforms a major venue for cyberbullying (Kowalski et al., 2020). Cyberbullying refers to the use of electronic communication technologies to conduct malicious acts such as insults, defamation and the disclosure of private information. The permanence and public visibility of

digital content create particular risks. Victims often find it difficult to obtain timely intervention, while harmful content may reach a wide and potentially unlimited audience (Vismara et al., 2022).

Cyberbullying has now become an important global public safety issue. A cross national survey covering eleven countries found that the rate of cyberbullying perpetration among children and adolescents in China reached 46.3%, the highest among the countries studied (Zhu et al., 2021). In addition, cyber violence is widespread among young people. Studies report that 40.5% of young adults and 64.3% of university students have experienced such victimisation (Huang et al., 2021; Wang et al., 2019). As one of the most influential platforms for online interaction in China, Weibo has consequently become a prominent site where cyberbullying incidents frequently occur.

With the development of platforms such as Weibo, cyberbullying has increasingly become intertwined with fandom culture. Early academic studies commonly described fandom as a positive and personalised emotional attachment to elements of popular culture, particularly celebrities (Duffett, 2013). Likewise, Jenkins and Deuze (2008) highlighted the agency and cultural creativity of fans, suggesting that fan communities develop distinctive forms of interpretation and collective participation. However, as digital technology has drawn fans more deeply into the production and circulation of commercial cultural content, the dynamics of fan communities have gradually shifted. Earlier research mainly emphasised the positive emotional engagement of fans (Jenkins & Deuze, 2008), while paying less attention to the ways in which digital environments may foster toxic fan behaviour. On platforms such as Weibo, interactive features including 'Super Topics' and algorithmic recommendation systems have facilitated the transformation of fan subcultures from individual admiration into highly organised and exclusive online communities.

Within this context, groups of extreme fans have gradually emerged. In order to demonstrate absolute loyalty to their idols and reinforce group boundaries, these fans often take advantage of the anonymity and collective dynamics of online spaces to conduct coordinated cyber attacks against perceived opponents. A linguistic study of hate speech on social media by ElSherief et al. (2018) found that 60% of internet users had witnessed personal attacks online, while 25% had observed threats of physical violence. Identity based derogatory speech has therefore become a highly visible form of online hostility. Observations within the Chinese digital environment reflect similar patterns, where verbal abuse and defamation frequently occur in fan related conflicts.

Despite the increasing severity of extreme fan behaviour, existing studies on cyberbullying largely focus on traditional forms of interpersonal conflict or school based bullying. These approaches do not fully capture the complex interactions among idols, fans and digital platforms that characterise contemporary fan cultures. This study focuses on 'Akgae', a term referring to extreme solo fans who support and defend only a single idol. As key participants in highly polarised fan conflicts, the aggressive behaviour of Akgae is shaped by both psychological motivations and the structural dynamics of the entertainment industry. Through empirical analysis, this research examines how Akgae engage in cyberbullying through mechanisms of group identity and moral disengagement, within a broader context

shaped by traffic driven platform economies and algorithmic information cocoons. The aim is to clarify the behavioural logic and structural conditions underlying these phenomena.

The profound exploration of the formative mechanisms underlying cyberbullying by extreme fans is essential, not merely to address a theoretical lacuna but to meet the urgent requirements of practical governance. Initially, for internet platforms, identifying the critical juncture at which fan engagement transitions from emotional consumption to collective hostility is fundamental to establishing intelligent early-warning systems and refining community management. Furthermore, for governmental regulatory bodies, this research provides a robust evidence base for the precision-targeting of illicit digital activities while offering a framework to standardise fan-led fundraising and irrational celebrity support. Such insights are vital for fostering a transparent and orderly digital public sphere. Finally, for the wider public, particularly younger users, the identification and exposure of psychological defence mechanisms, such as moral disengagement, facilitates the development of targeted media literacy initiatives. This approach serves to diminish the mobilising power of cyberbullying at its source. Consequently, the utility of this study lies in its capacity to translate an abstract social phenomenon into an intervenable and predictable model of behavioural logic.

Literature Review

The Evolution of Cyberbullying within Social Media Environments

Bullying is commonly defined as a form of power imbalance and oppression between individuals or groups, characterised by persistent and repeated harmful behaviours such as social exclusion, verbal aggression, physical harm and targeted harassment (Bauman, 2010; Tokunaga, 2010). With the rapid development of network technologies, bullying has gradually shifted from physical settings to online environments, giving rise to the contemporary phenomenon of cyberbullying. Although earlier studies used a variety of terms, including 'electronic bullying' and 'internet harassment' (Cram et al., 2017; Ybarra & Mitchell, 2004), the term 'cyberbullying' has since become the most widely accepted concept in the field (Casas et al., 2013; Chan et al., 2019).

As a new form of integrated communication, social media connects users with shared interests while also providing a space in which harmful behaviour can occur (Lenhart et al., 2011). The data driven business models of these platforms encourage extensive sharing of personal information, which makes it easier for perpetrators to identify and target victims (Kane et al., 2014). In addition, the technical features of social media further intensify these dynamics. The relative anonymity of online environments often protects aggressors and strengthens the power imbalance between participants (Chan et al., 2021). At the same time, functions such as 'likes', 'shares' and algorithmic recommendation systems allow harmful content to spread rapidly beyond spatial and temporal boundaries, creating lasting negative consequences (Barlinska et al., 2013). This continuous connectivity means that bullying may occur at any time and in any place. Even if victims withdraw from the platform, harmful content often remains accessible online, which can lead to long term psychological distress (Bastiaensens et al., 2015; Yang, 2012).

Digital Fan Culture

In the twenty first century, the widespread use of social media and mobile devices has brought fan communities increasingly into mainstream society, a process described by Jenkins (2015) as 'pop cosmopolitanism'. During this period, fan culture has demonstrated considerable agency, as fans communicate freely and participate in cultural production through digital platforms. However, with the digital transformation of China's idol industry, fan activities have become increasingly data driven and visible, with an idol's commercial value frequently measured through quantifiable 'traffic data' (Yin, 2020). This competitive logic based on digital metrics has produced structural changes within fan communities and intensified divisions between different fan groups (Gray, 2003).

Duffett (2013) argues that fandom is fundamentally grounded in positive emotional attachment. Yet under the pressures of algorithmic culture and data based competition, such emotions may easily develop into antagonistic attitudes. Gray (2003) describes 'anti fans' as audiences whose engagement is shaped by strong dislike of particular figures or cultural products. In some cases, these groups may even organise collective activities in order to attract attention (Widholm, 2014). On platforms such as Weibo, technological features including 'Super Topics' and algorithmic filtering mechanisms not only facilitate the formation of fan communities but also reinforce the effect of information cocoons (Hutchby, 2001; Van Dijck & Poell, 2013).

Previous research indicates that technological mediation can strengthen the isolation of fan communities. Tang (2024) suggests that within subcultural environments, fan group identity significantly reinforces perceptions of group boundaries and intensifies conflict between groups. However, group identity alone does not fully explain the emergence of extreme behaviour. When algorithms repeatedly expose users to homogeneous information, existing biases may gradually become reinforced, creating conditions in which extreme behaviour becomes more likely.

Scholars have also explored how emotional attachment to idols may reshape individual moral judgement. In a study of cyberbullying within youth fan communities, Zhang and Hou (2021) found that intense idol worship strongly influences fans' perceptions and decision making. When fans construct their idols as morally flawless figures or idealised icons, this moralised projection can become an important trigger for extreme behaviour.

This psychological process may further lead to forms of moral disengagement. Supporting this view, Yao (2021) argues that idol worship and group identity are positively associated with aggressive behaviour among fans. From this perspective, fans do not necessarily perceive their actions as irrational hostility. Instead, they often interpret aggressive behaviour as a justified effort to protect the reputation of their idol. Such cognitive rationalisation helps explain why some loyal fans remain aware of online conflicts while still understanding or even excusing the behaviour of more extreme participants.

In terms of behavioural patterns, bullying associated with fan communities shares certain similarities with other forms of cyberbullying. Yu (2020) observes that online bullying among adolescents often involves low cost forms of aggression such as verbal abuse and the spread of rumours. Data reported by ElSherief et al. (2018) similarly indicate that more than

60% of internet users have witnessed personal insults online, making abusive language one of the most common forms of digital hostility.

Nevertheless, fan related bullying demonstrates a distinctive pattern in terms of its targets. Unlike general cyberbullying, which may involve random targets or individuals perceived as vulnerable, aggression within fan communities is often directed at competing groups such as rival fans or other members within the same fandom. These internal conflicts are closely related to competition for symbolic and economic resources within the digital media environment. Because an idol's visibility and success are closely tied to limited traffic resources, some extreme fans attempt to secure advantages for their idol by attacking competing groups. Influenced by both commercial interests and subcultural beliefs, fan related cyberbullying therefore extends beyond the patterns of general online aggression and reflects specific structural and cognitive dynamics (Yin, 2020; Zhu et al., 2021).

Methodology

Research Subjects and Sampling

In this study, extreme fans are defined as a group of audiences who display excessive loyalty towards a particular idol, perceive the idol as a moral figure, and attempt to maintain strict ingroup boundaries through systematic cyberbullying behaviours. Such behaviours include verbal abuse, defamation, doxxing and organised collective reporting. This conceptualisation draws on theories of social identity and toxic fandom.

The research focuses specifically on 'Akgae', a highly representative subgroup within extreme fan communities. These fans are characterised by exclusive and strongly partisan support for a single idol. They attempt to reinforce the absolute status of their idol by attacking individuals or groups who express dissenting views. Through this definition, the study clearly distinguishes Akgae from ordinary fans who simply express cultural preferences without engaging in bullying behaviour (Duffett, 2013), as well as from general online aggressors who do not belong to a particular fan subculture. In this sense, Akgae can be regarded as an ideal type for analysing the logic of online violence within digital subcultures.

With regard to sample selection, the study focuses on Weibo users who actively participate in digital fan communities and possess substantial experience within the fandom environment. Stratified random sampling was adopted as the primary sampling strategy. Weibo 'Super Topic' tags were used to identify potential participants, and logic verification questions were included to ensure the reliability of responses. A total of 307 valid questionnaires were collected, representing an effective response rate of 91.7%. Among the respondents, 148 were male (48.21%) and 159 were female (51.79%). The relatively balanced gender distribution enhances the representativeness and reliability of the sample.

Questionnaire Design and Data Collection

The research instrument consisted of a structured questionnaire containing 14 closed ended questions. The indicators were designed in accordance with the theoretical framework outlined above and were organised into three core dimensions.

The first dimension, fan psychology, measured the intensity of respondents' parasocial relationships and their tendency to engage in moral disengagement when interpreting

aggressive behaviour. An example item is 'I perceive my idol as a moral figure'. The second dimension, extreme behaviour, examined specific manifestations of cyberbullying on social media platforms, including behaviours ranging from verbal abuse to organised collective reporting (Casas et al., 2013). The third dimension, platform perception, assessed respondents' awareness of the algorithmic mechanisms of Weibo and its technical affordances (Hutchby, 2001), such as whether algorithmic recommendation systems reinforce interactions within particular fan communities.

Data were collected between 15 October and 25 October 2025 through the targeted distribution of survey links on Wenjuanxing, an online survey platform. Prior to the formal data collection, a pilot study involving 30 participants was conducted in order to refine unclear items and improve the clarity of the questionnaire. For example, the concept of doxxing was provided with a precise definition to avoid ambiguity.

Reliability and validity tests indicated strong measurement quality. The Cronbach's alpha coefficients for the overall scale and each dimension exceeded 0.85. Specifically, the psychological dimension recorded $\alpha = 0.87$, the behavioural dimension $\alpha = 0.83$, and the platform perception dimension $\alpha = 0.86$. Exploratory Factor Analysis further confirmed the structural validity of the scale. The KMO value reached 0.89 and Bartlett's Test of Sphericity produced a significant result ($p < 0.001$).

Data Cleansing

To ensure the reliability of the dataset, a systematic data cleansing procedure was conducted. Twenty eight questionnaires were excluded according to predetermined criteria, including incomplete responses, completion times shorter than 60 seconds, clear logical inconsistencies, and patterns of identical responses across items.

For the remaining 307 valid responses, consistent coding procedures were applied. Continuous variables, such as the average daily duration of Weibo usage, were standardised using hours as the unit of measurement. This procedure ensured the internal consistency of the dataset prior to statistical analysis.

Data Analysis

Data analysis was conducted using SPSS 26.0 together with relevant statistical plug ins. First, descriptive statistics were used to present the demographic characteristics of the sample, patterns of social media usage, and the distribution of attitudes towards extreme behaviour.

Subsequently, independent samples t tests were performed to examine differences between demographic groups. Particular attention was given to gender differences across several key variables, including the duration of Weibo use, the strength of group identity, and the frequency with which respondents reported observing or participating in extreme behaviour.

Methodological Limitations

Several methodological limitations should be acknowledged. First, the use of self reported data may introduce bias. Because cyberbullying involves sensitive moral and social issues, respondents may under report their actual involvement in aggressive behaviour due

to social desirability effects. As a result, the prevalence of extreme behaviour may be underestimated.

Second, the empirical data are limited to a single platform, namely Weibo. The study therefore does not examine fan interactions on other platforms such as Douyin or Xiaohongshu, which operate under different algorithmic systems and media environments. This limitation may reduce the ability of the research to capture the broader dynamics of fan behaviour across platforms.

Third, the research adopts a cross sectional design. Consequently, the statistical results can only indicate correlations between variables rather than establish clear causal relationships.

Finally, the proportion of respondents identified as multi fandom fans in the sample is approximately 15%, which is lower than industry estimates of around 25%. This discrepancy may reduce the statistical strength of comparisons between different fan groups.

To address these limitations, the questionnaire included concrete behavioural descriptions in order to reduce ambiguity and minimise self reporting bias. For instance, instead of using vague questions about online aggression, specific items such as 'Have you participated in organised collective reporting?' were included. In the discussion section, careful attention is also given to distinguishing correlation from causation in order to avoid over interpretation of the findings.

Results

Sample Characteristics

The final valid sample consisted of 307 respondents (see Table 4.1). In terms of demographic characteristics, the gender distribution was relatively balanced, including 159 female respondents (51.79%) and 148 male respondents (48.21%). Most respondents were between 18 and 35 years old, representing the core population of internet users. Among them, those aged 18 to 25 accounted for 25.08% (n = 77), while respondents aged 26 to 35 represented 35.18% (n = 108). Together, these two age groups constituted more than 60% of the total sample.

With regard to platform usage and fan engagement, 67.43% of respondents (n = 207) reported having used Weibo for between one and six years, suggesting a relatively stable level of platform engagement. In terms of fan identity, respondents who identified themselves as loyal fans constituted the majority (n = 200, 65.15%). In addition, the overall intensity of idol worship within the sample showed medium to high levels. Respondents who described themselves as 'relatively enthusiastic' accounted for 40.39% (n = 124), while those who identified as 'highly fanatical' represented 30.29% (n = 93).

Table 4.1

Demographic Characteristics and Fan Engagement of Respondents (N = 307)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Female	159	51.79%
	Male	148	48.21%
Age	Under 18	15	4.89%
	18 - 25 years	77	25.08%
	26 - 35 years	108	35.18%
	36 years and above	107	34.85%
Weibo Usage	Less than 1 year	53	17.26%
	1 - 3 years	104	33.88%
	4 - 6 years	103	33.55%
Duration*	7 years and above	50	16.29%
	Yes, a loyal fan of a specific celebrity	200	65.15%
	No, but I follow certain celebrities	78	25.41%
Fan Identity	No, I do not follow celebrities at all	29	9.45%
	Highly fanatic (idol is a crucial part of life)	93	30.29%
	Quite enthusiastic (follow news, participate in support)	124	40.39%
	Average (only occasionally follow idol-related news)	60	19.54%
Level of Idol Worship	Mildly interested	30	9.77%

Behavioural Characteristics of Extreme Akgae

The cyberbullying behaviour of extreme Akgae demonstrates a clear pattern in both the selection of targets and the methods used (see Table 4.2). Regarding the targets of aggression, online attacks are primarily directed at groups perceived as having conflicting interests within the fandom. This pattern reflects strong ingroup preference and exclusion of outgroups. The data indicate that attacks on 'rival fans' (n = 193, 62.87%), "other members within the idol's group" (n = 187, 60.91%), and 'group fans' (n = 155, 50.49%) occur most frequently. In contrast, aggression directed towards external actors such as 'management agencies or studios' (n = 141, 45.93%) and 'mass media or bloggers' expressing critical or objective opinions (n = 134, 43.65%) appears less common.

At the behavioural level, extreme Akgae tend to adopt forms of online bullying that involve relatively low effort and high visibility. Common behaviours include personal attacks and verbal abuse (n = 176, 57.33%), the creation and spread of rumours (n = 149, 48.53%), and organised collective reporting (n = 146, 47.56%). By contrast, behaviours that involve greater technical effort or potential legal risk occur less frequently. These include doxxing and the disclosure of private information (n = 107, 34.85%) and malicious image manipulation, such as altered photographs or satirical 'Kuso' videos (n = 103, 33.55%).

Table 4.2

Behavioural Characteristics, Perceived Connections, and Driving Factors of Cyberbullying Among Extreme Fans (N = 307)

Variable	Category	Frequency (n)	Percentage (%)
Targets of Cyberbullying (Multiple Choice)	Fans of rival celebrities	193	62.87%
	Other members within the idol's group	187	60.91%
	"Group fans" (fans of the entire group)	155	50.49%
	Idol's management agency or studio	141	45.93%
	Media or bloggers expressing objective criticism	134	43.65%
	Idol's collaborators (actors, brands, etc.)	124	40.39%
	Personal attacks and verbal abuse	176	57.33%
	Fabricating and spreading rumours	149	48.53%
	Organised mass reporting	146	47.56%
	Spamming comments and public opinion attacks	124	40.39%
Forms of Cyberbullying (Multiple Choice)	Doxxing and privacy leaks	107	34.85%
	Malicious image editing / creating spoof videos	103	33.55%
	Continuous cyberstalking and harassment	98	31.92%
	Very strongly related	93	30.29%
Connection to Idol Worship & Group Identity	Somewhat related	122	39.74%
	Little to no relation	62	20.20%
	Unclear	30	9.77%
Core Driving Factors (Multiple Choice)	Guidance and incitement by big fans / fan leaders	216	70.36%
	Group pressure and herd mentality within the fandom	172	56.03%
	Belief that the idol was treated unfairly	158	51.47%
	Anonymous online environment lowering moral constraints	153	49.84%
	Long-term grudges with other fan groups	129	42.02%
Personal negative emotions accumulated in real life	119	38.76%	

Approximately 70% of respondents believed that the cyberbullying behaviour of extreme Akgae is closely related to excessive idol worship and strong group identity. Among them, 30.29% considered the relationship to be significant, while 39.74% believed that some degree of association exists. When examining the factors that contribute to the transformation of ordinary fans into aggressive extreme fans, 70.36% of respondents (n = 216) identified the influence of prominent fans or fan leaders as the most important factor. In addition, peer pressure and conformity within fan communities were also found to play an important role, with 56.03% of respondents (n = 172) selecting this factor.

The distribution of these behavioural patterns suggests that anonymity and low participation thresholds within social media environments may weaken individual moral constraints and reduce the perceived responsibility associated with online behaviour.

Empirical Analysis of Behavioural Perception and Cognitive Drivers among Extreme Akgae

Using analysis of variance and correlation analysis (see Tables 4.3 and 4.4), this study examined the influence of fan attributes on group identity, perceptions of cyberbullying by extreme Akgae, and the tendency to rationalise such behaviour.

First, fan attributes significantly influenced the strength of group identity. The analysis of variance results indicate significant differences in group identification based on whether respondents identified themselves as loyal fans of a celebrity ($F = 4.672$, $p = 0.010$). The mean group identity score for loyal fans was 1.97, where a lower score indicates stronger identification. This level was significantly stronger than that observed among respondents who followed celebrities but did not identify as loyal fans ($M = 2.29$), and among non fans who did not follow celebrities at all ($M = 2.34$). These findings suggest that stronger emotional investment in an idol is associated with a stronger sense of group belonging and clearer perceptions of group boundaries.

Table 4.3

Analysis of Variance (ANOVA) of Fan Attributes on Group Identity, Observation Frequency, and Behaviour Comprehension

Dependent Variables	Fan Attribute (Categories)	n	Mean (M)	SD	F	p-value
Group Identity Strength (<i>Lower score = higher identity</i>)	Loyal fan of a celebrity	200	1.97	0.89	4.672	0.010*
	Follows celebrities but not loyal	78	2.29	0.99		
	Does not follow celebrities	29	2.34	1.08		
Observation Frequency of Extreme Behaviour (<i>Lower score = higher frequency</i>)	Loyal fan of a celebrity	200	1.98	0.82	5.466	0.005**
	Follows celebrities but not loyal	78	2.3	1.07		
	Does not follow celebrities	29	2.41	1.15		
Comprehension of Extreme Behaviour (<i>Higher score = higher comprehension</i>)	Loyal fan of a celebrity	200	2.45	0.69	5.712	0.004**
	Follows celebrities but not loyal	78	2.18	0.76		
	Does not follow celebrities	29	2.1	0.82		

Note. * $p < 0.05$, ** $p < 0.01$.

Second, greater involvement in fan communities increases exposure to online conflict. The data show significant differences in how frequently respondents reported observing extreme fan behaviour ($F = 5.466$, $p = 0.005$). Loyal fans reported the highest frequency of exposure to such behaviour ($M = 1.98$), which was significantly higher than that reported by non loyal fans ($M = 2.30$) and non fans ($M = 2.41$).

Table 4.4

Pearson Correlation Analysis of Platform Usage and Behavioural Perception

Pairwise Variables	Pearson Correlation (r)	Sig. (2-tailed)	N
Weibo usage duration & Group identity strength	0.116*	0.042	307
Comprehension of extreme fans & Observation frequency of bullying behaviour	0.119*	0.036	307

Note. * Correlation is significant at the 0.05 level (2-tailed).

Finally, deeper involvement in fan communities appears to encourage the cognitive rationalisation of extreme behaviour. With regard to respondents' level of understanding towards extreme fan behaviour, loyal fans reported higher levels of acceptance ($M = 2.45$) compared with the other two groups ($F = 5.712$, $p = 0.004$). Correlation analysis further supports this finding. Respondents' level of understanding of extreme fan behaviour is positively correlated with the frequency of observing bullying behaviour ($r = 0.119$, $p = 0.036$). These results suggest that sustained participation within fan communities not only increases exposure to online conflict but may also normalise aggressive behaviour through processes of moral disengagement and cognitive rationalisation.

The Synergistic Effect of Platform Mechanisms and Identity Reinforcement

Correlation analysis (see Table 4.4) further reveals the role of social media usage patterns in shaping fan group identity. The data indicate a significant positive correlation between the duration of Weibo usage and the strength of group identity ($r = 0.116$, $p = 0.042$). This finding suggests that users who remain active on the platform for longer periods are more likely to become integrated into specific fan communities.

The influence of platform mechanisms may contribute to this process. Features such as algorithmic content distribution and the community structure of 'Super Topics' encourage repeated exposure to similar viewpoints and interactions within the same fan circles. Over time, this repeated interaction can reinforce group identity and strengthen boundaries between different fan communities. As a result, sustained engagement with the platform may indirectly contribute to the emergence of more extreme behaviours within fan communities.

Discussion

This study provides an empirical examination of the mechanisms underlying cyberbullying behaviour among extreme Akgae. The findings not only support the research hypotheses but also extend existing cyberbullying literature by examining the phenomenon within the specific context of digital fan communities.

Real-world Mapping of Core Group Characteristics and the Essence of Conflict

The sample in this study reflects the typical characteristics of active fandom participants. Female respondents were slightly more numerous than male respondents, with 159 individuals accounting for 51.79% of the sample. The majority of respondents were between 18 and 35 years old, representing 60.26% of the sample. In addition, users with one to six years of Weibo experience constituted 67.43% of respondents. As active users of the platform, these digital natives are more likely to engage deeply in online fan communities due to their sustained use of social media.

The results also show that 65.15% of respondents identified themselves as loyal fans, and more than 70% reported medium to high levels of idol admiration. This demographic composition suggests that the findings of this research largely reflect the perceptions and behavioural patterns of core participants within fan communities.

In terms of the nature of conflict, the targets of aggression by extreme Akgae are primarily located within the fandom itself. Attacks are frequently directed towards rival fan groups and other members within the same idol group. The data show that attacks on rival fans occurred in 62.87% of cases, while attacks on other members within the same idol group occurred in 60.91% of cases. This pattern suggests that cyberbullying within fandoms is closely linked to competition over status and visibility within the fan community. Rival fans may be perceived as competitors for symbolic or digital resources, while other group members may be viewed as diverting attention or online traffic.

In terms of behavioural patterns, low cost and highly visible forms of aggression such as personal attacks and verbal abuse (57.33%) and the creation and dissemination of rumours (48.53%) are the most common. By contrast, behaviours involving higher levels of risk or technical complexity, such as doxxing or malicious image manipulation, appear less frequently and remain below 35%. These patterns suggest that the anonymity and accessibility of online platforms reduce the perceived consequences of aggressive behaviour.

Multiple Drivers and Structural Roots Behind Extreme Behaviour

The findings indicate that extreme fan behaviour is influenced by several interconnected factors, including social identity, platform structures, cognitive rationalisation and group pressure.

First, social identity plays an important role in reinforcing group boundaries. The ANOVA results indicate that loyal fans demonstrate significantly stronger group identification compared with non fans. As suggested by Jenkins (2008), participatory culture allows fans to become deeply involved in media communities. Strong emotional investment in an idol may therefore intensify ingroup loyalty and increase hostility towards perceived outsiders.

Second, cognitive rationalisation appears to mediate the relationship between idol worship and aggressive behaviour. The data show a significant positive correlation between the intensity of idol admiration and the tendency to justify extreme behaviour. This finding suggests that extreme fans do not necessarily perceive their behaviour as irrational aggression. Instead, they may interpret such behaviour as a justified attempt to defend the reputation of their idol.

Third, opinion leaders and group pressure also contribute to the emergence of extreme behaviour. A large proportion of respondents identified the influence of prominent fans or fan leaders as a key factor in the escalation of online conflicts. In addition, more than half of the respondents considered group pressure and conformity within fan communities to be an important driver. When aggressive behaviour becomes normalised within a particular fan community, individuals may feel compelled to participate in order to maintain group belonging.

Fourth, platform mechanisms may further intensify these dynamics. The results show a significant positive correlation between the duration of Weibo usage and the strength of group identity. Algorithmic recommendation systems and the community structure of 'Super Topics' may repeatedly expose users to similar viewpoints and interactions within the same fan communities. Over time, this repeated exposure can reinforce group identity and increase the likelihood of polarised attitudes and behaviour.

Dialogue with Existing Research

This study contributes to existing research by providing a more detailed understanding of the mechanisms of cyberbullying within digital fan subcultures.

First, while previous studies such as Tang (2024) suggest that strong group identity directly leads to conflict, the findings of this study indicate that group identity alone may not fully explain aggressive behaviour. Instead, the activation of group based conflict appears to depend on the moralised perception of idols. Fans who view their idol as morally flawless figures may be more likely to justify aggressive behaviour against perceived opponents.

Second, the results support the argument proposed by Zhang and Hou (2021) that intense idol worship can influence behavioural decision making. Loyal fans in this study were more likely both to observe online conflict and to report a greater degree of understanding towards extreme fan behaviour. This finding highlights how emotional attachment may gradually weaken moral boundaries within fan communities.

Finally, this study extends the observations of Yu (2020), who argues that adolescent cyberbullying often takes the form of verbal abuse. While similar behavioural patterns were also observed in this research, the results indicate that bullying within fan communities shows a clear direction in terms of its targets. Rather than random aggression, fan related cyberbullying is closely linked to competition over visibility and online traffic within the digital media environment (Yin, 2020). This combination of economic incentives and subcultural beliefs suggests that the governance of fandom conflicts may require more specialised approaches than those used for general cyberbullying.

Implications

The findings suggest that cyberbullying among extreme Akgae emerges from the interaction between strong emotional attachment to idols, group boundary formation and the algorithmic structures of social media platforms. Addressing this issue therefore requires coordinated efforts involving platforms, fan communities and the entertainment industry.

From a platform governance perspective, social media platforms could develop more adaptive moderation systems that are capable of recognising context specific language within fan communities. Dynamic lexicons incorporating frequently used fandom terms could improve the identification of abusive discourse. In addition, accounts belonging to highly influential fans with large audiences could be subject to enhanced monitoring when inflammatory content is detected.

At the community level, official fan clubs could be encouraged to establish guidelines promoting respectful interaction and discouraging harmful behaviours such as defamation,

malicious reporting and the disclosure of private information. Preventive measures may be particularly important, as early intervention can reduce the escalation of group conflicts.

Management agencies and idol studios may also play an important role in promoting responsible fan behaviour. When tensions arise within fan communities, timely public statements encouraging rational and respectful interaction may help prevent the escalation of online hostility.

Research Limitations and Future Directions

Despite its contributions, several limitations should be acknowledged. First, the study relies on self-reported questionnaire data, which may be influenced by social desirability bias. Respondents may have underreported their participation in behaviours such as doxxing or organised reporting.

Second, the sample largely consists of young and highly active social media users. As a result, the moderating influence of factors such as geographical location, educational background, income level and the specific type of idol followed was not fully examined.

Future research could address these limitations by combining survey data with additional sources of evidence. For example, behavioural data from social media platforms, such as reporting records or account suspension histories, could be analysed alongside survey responses. In addition, longitudinal research designs could help examine how ordinary fans gradually become involved in extreme behaviour through processes such as influence from fan leaders, increasing group pressure and the normalisation of aggressive practices. Such approaches would provide a more comprehensive understanding of the development of extreme behaviour within digital fan communities.

Conclusion

Situated within the subcultural context of digital fandom communities, this study analysed the manifestations and underlying drivers of cyberbullying among extreme Akgae based on 307 valid survey responses. The findings indicate that cyberbullying conducted by extreme Akgae does not occur randomly or impulsively. Instead, it follows a clear niche oriented logic aimed at protecting perceived group interests. Aggressive behaviour is primarily directed at competitors within the fandom, including rival fans and other members of the same idol group. These behaviours often rely on digital strategies characterised by low participation thresholds and high dissemination rates, such as verbal abuse, defamation and organised collective reporting.

The study further identifies several interconnected factors that contribute to the emergence of extreme behaviour, including social identity, cognitive rationalisation and platform mechanisms. Loyal fans who are deeply involved in fandom communities often develop strong emotional identification with their idols. Through processes of moralised idolisation, this emotional attachment may strengthen ingroup loyalty and hostility towards perceived outsiders. As a result, aggressive behaviour can be interpreted as a justified attempt to defend the reputation of the idol.

In addition, the influence of opinion leaders within fan communities and the pressure of group conformity can weaken individual moral boundaries. At the structural level, social media platforms also play an important role. Algorithmic recommendation systems and community based functions create relatively closed information environments, where users are repeatedly exposed to similar viewpoints. Over time, such interactions may reinforce group identity and intensify polarised attitudes, contributing to a cycle in which identity reinforcement gradually leads to more radical behaviour.

Overall, this research extends existing explanations of cyberbullying by highlighting the structural dynamics of fandom related online aggression. The findings suggest that extreme fan behaviour emerges from the interaction between strong emotional attachment, group boundary formation and platform driven information environments. These insights contribute to a deeper understanding of collective behaviour within digital fan communities and offer practical implications for the governance of online conflicts. In particular, platform regulation, responsible guidance from influential community members, and early preventive interventions may all play important roles in promoting healthier online interaction.

Acknowledgements

This research was supported by Youth Research Project of Guangzhou Huali College, grant number:HLKY-2022-SK-03

References

- Barlińska, J., Szuster, A., & Winiewski, M. (2013). Cyberbullying among adolescent bystanders: Role of the communication medium, form of violence, and empathy. *Journal of Community & Applied Social Psychology*, 23(1), 37-51.
- Bastiaensens, S., Vandebosch, H., Poels, K., Van Cleemput, K., DeSmet, A., & De Bourdeaudhuij, I. (2015). 'Can I afford to help?' How affordances of communication modalities guide bystanders' helping intentions towards harassment on social network sites. *Behaviour & Information Technology*, 34(4), 425-435.
- Bauman, S. (2010). Cyberbullying in a rural intermediate school: An exploratory study. *The Journal of Early Adolescence*, 30(6), 803-833.
- Bayer, J. B., Triêu, P., & Ellison, N. B. (2020). Social media elements, ecologies, and effects. *Annual review of psychology*, 71(1), 471-497.
- Casas, J. A., Del Rey, R., & Ortega-Ruiz, R. (2013). Bullying and cyberbullying: Convergent and divergent predictor variables. *Computers in Human Behavior*, 29(3), 580-587.
- Chan, T. K., Cheung, C. M., & Wong, R. Y. (2019). Cyberbullying on social networking sites: The crime opportunity and affordance perspectives. *Journal of Management Information Systems*, 36(2), 574-609.
- Cram, W. A., Proudfoot, J. G., & D'arcy, J. (2017). Organizational information security policies: a review and research framework. *European Journal of Information Systems*, 26(6), 605-641.
- Duffett, M. (2013). *Understanding fandom: An introduction to the study of media fan culture*. Bloomsbury Publishing USA.
- ElSherief, M., Kulkarni, V., Nguyen, D., Wang, W. Y., & Belding, E. (2018, June). Hate lingo: A target-based linguistic analysis of hate speech in social media. In *Proceedings of the international AAAI conference on web and social media* (Vol. 12, No. 1).

- Gray, J. (2003). New audiences, new textualities: Anti-fans and non-fans. *International journal of cultural studies*, 6(1), 64-81.
- Huang, J., Zhong, Z., Zhang, H., & Li, L. (2021). Cyberbullying in social media and online games among Chinese college students and its associated factors. *International journal of environmental research and public health*, 18(9), 4819.
- Hutchby, I. (2001). Technologies, texts and affordances. *Sociology*, 35(2), 441-456.
- Jenkins, H. (2015). "Cultural acupuncture": Fan activism and the Harry Potter alliance. In *Popular media cultures: Fans, audiences and paratexts* (pp. 206-229). London: Palgrave Macmillan UK.
- Jenkins, H., & Deuze, M. (2008). Convergence culture. *Convergence*, 14(1), 5-12.
- Kane, G. C., Alavi, M., Labianca, G., & Borgatti, S. P. (2014). What's different about social media networks? A framework and research agenda. *MIS quarterly*, 38(1), 275-303.
- Kowalski, R. M., Dillon, E., Macbeth, J., Franchi, M., & Bush, M. (2020). Racial differences in cyberbullying from the perspective of victims and perpetrators. *American journal of orthopsychiatry*, 90(5), 644.
- Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., & Rainie, L. (2011). *Teens, Kindness and Cruelty on Social Network Sites: How American Teens Navigate the New World of "Digital Citizenship"*. Pew Internet & American Life Project.
- Tang, J. (2024). Research on deviant behaviour of toxic solo fans in the subcultural context [Doctoral dissertation, Southwest University]. <https://doi.org/10.27684/d.cnki.gxndx.2024.002258>
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in human behavior*, 26(3), 277-287.
- Van Dijck, J., & Poell, T. (2013). Understanding social media logic. *Media and communication*, 1(1), 2-14.
- Vismara, M., Girone, N., Conti, D., Nicolini, G., & Dell'Osso, B. (2022). The current status of cyberbullying research: A short review of the literature. *Current Opinion in Behavioral Sciences*, 46, 101152.
- Wang, M. J., Yogeeswaran, K., Andrews, N. P., Hawi, D. R., & Sibley, C. G. (2019). How common is cyberbullying among adults? Exploring gender, ethnic, and age differences in the prevalence of cyberbullying. *Cyberpsychology, Behavior, and Social Networking*, 22(11), 736-741.
- Widholm, A. (2014). *The Ashgate research companion to fan cultures*. Ashgate Publishing, Ltd.. "WJSN's Meiqi And Xuanyi Announced As Final Members Of Chinese "Produce 101" Group". Archived from the original on 2018-06-24. Retrieved 2018-06-24
- Yang, S. C. (2012). Paths to bullying in online gaming: The effects of gender, preference for playing violent games, hostility, and aggressive behavior on bullying. *Journal of educational computing research*, 47(3), 235-249.
- Ybarra, M. L. (2004). Linkages between depressive symptomatology and Internet harassment among young regular Internet users. *CyberPsychology & Behavior*, 7(2), 247-257.
- Yin, Y. (2020). An emergent algorithmic culture: The data-ization of online fandom in China. *International Journal of Cultural Studies*, 23(4), 475-492.
- Yu, W. (2020). Social work intervention in adolescent cyberbullying [Master's thesis, Jiangxi University of Finance and Economics]. <https://doi.org/10.27175/d.cnki.gjxcu.2020.001618>

Zhang, H., & Hou, Q. (2021). From ritual construction to collective action: Cyberbullying among minors in online fandom communities from a subcultural perspective. *Research on Juvenile Delinquency Prevention*, (3), 4–13.