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The Influence of the Digital Environment and Social Networks on the Transformation of Hooliganism Forms

Samir Gadirov

PhD Candidate at the Forensic Centre the Ministry of Justice of the Republic of Azerbaijan, Baku, Azerbaijan, <https://orcid.org/0009-0000-8621-9502>

Corresponding author: *Samir Gadirov.*

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Abstract: The rapid expansion of digital space and social networks has transformed communication whilst fostering new forms of deviant behaviour. User anonymity, shifting boundaries of publicity, and algorithmic content reinforcement create conditions conducive to virtual aggression, provocation, and hooliganism. This study provides theoretical and methodological justification for hooliganism's transformation in digital environments, identifying key social, psychological, and cultural factors determining new forms of deviant behaviour and proposing prevention strategies for the modern information society. The study employs an interdisciplinary approach combining content analysis of scholarly publications, comparative analysis of international and domestic research, and socio-psychological interpretation of digital user aggression mechanisms. The methodological framework draws upon social deviance theory, behavioural psychology, and digital communication studies. Digital hooliganism results from complex

interactions between psychological, social, and technological factors that influence behavioural patterns. Social networks not only broadcast deviant actions but actively reinforce them through algorithmic popularity rewards. Moral disengagement, emotional contagion, and group identification effects create cyclical mechanisms that normalise aggression in online communities. Effective counteraction to digital bullying requires systematic integration of educational, legal, and technological tools aimed at enhancing digital ethics and developing robust user self-regulation mechanisms. The scientific novelty lies in identifying a comprehensive system of interrelated socio-psychological and algorithmic factors enabling the transition from individual aggression to collective digital bullying, and in formulating the concept of safe digital interaction as the foundation for preventing deviant practices. The practical significance resides in applying these findings to develop educational programmes on digital ethics, institutional digital security policies, and algorithms for detecting toxic content. The proposed four-principle model – education, algorithmic responsibility, institutional coordination, and social visibility of ethical behaviour – provides a framework for shaping cultures of safe communication on social networks.

Keywords: aggressive behaviour, deviance, digital ethics, emotional contagion, group identity, moral disengagement, online disinhibition, aggression prevention, social algorithms, digital culture.

Introduction

The rapid development of digital environments and social networks has precipitated new forms of social behaviour that integrate communicative, emotional, and symbolic dimensions of human interaction. Simultaneously, digitalisation has created conditions for the transformation of antisocial behaviour, particularly hooliganism, which is migrating into virtual spaces and acquiring characteristics of anonymity, publicity, and mass reach. Unlike traditional hooliganism, digital manifestations employ novel channels of influence through offensive comments, memes, provocative posts, and destructive flash mobs that disseminate rapidly across online platforms.

This issue's relevance stems from contemporary society's lack of established response mechanisms to such phenomena. Social networks frequently function as catalysts for aggression, where hooliganism receives algorithmic validation through "likes" and "shares". This dynamic engenders a gradual erosion of boundaries between acceptable freedom of expression and socially detrimental manifestations. Digital hooliganism represents not merely an ethical concern but a multifaceted socio-psychological and legal challenge, as it undermines users' sense of security whilst fostering tolerance for aggression within the information space.

Research Problem

Despite extensive research in internet communications and digital culture, the transformation of hooliganism under the influence of digital environments remains inadequately investigated. There exists no unified terminology, no clear distinction between forms of hooliganism in offline and online

spaces, and no comprehensive model of the causal relationships underlying this phenomenon. The psychological mechanisms that drive individuals towards aggressive behaviour under conditions of anonymity and the social factors contributing to the legitimisation of hooligan practices within digital communities warrant further systematic investigation. The scientific challenge lies in identifying patterns through which traditional forms of hooliganism transform under digital environmental influences, delineating new types of deviant behaviour on social networks, and developing a methodological framework for their analysis. This necessitates an interdisciplinary approach that integrates sociological, psychological, cultural, and legal dimensions.

Research Focus

The subject of this study comprises the characteristics of hooliganism's transformation within digital environments and social networks, alongside the socio-cultural mechanisms facilitating its dissemination and consolidation within mass consciousness. The focus encompasses specific forms of virtual aggression: trolling, cyberbullying, provocative commentary, destructive flash mobs, and other manifestations exhibiting public demonstrativeness yet not always conforming to legal definitions. The study aims to determine how digital technologies are reconfiguring the social nature of hooliganism, shaping novel models of deviant behaviour, and influencing users' moral and axiological orientations. Particular attention is devoted to analysing factors determining tolerance for aggression in online spaces and identifying potential preventive approaches to digital hooliganism through educational, informational, and ethical instruments.

Research Aim and Questions

The aim of the article is to provide a theoretical and methodological justification for the processes underlying the transformation of hooliganism within the digital environment and across social networks, to identify the key social, psychological, and cultural factors that contribute to the emergence of new forms of deviant behaviour, and to outline approaches to their prevention in the contemporary information society.

1. How has the digital environment transformed traditional forms of hooliganism into new digital manifestations?
2. What role do social networks play in organising and amplifying hooligan behaviour?
3. What are the key differences between offline and online forms of hooliganism in terms of legal qualification and social impact?

Literature review / Theoretical Overview

An analysis of contemporary scientific works allows four interrelated areas to be distinguished, within which researchers explore the evolutionary, psychological, technological, and socio-normative aspects of this phenomenon.

The first direction covers evolutionary and behavioural approaches to the study of deviance. Nasaescu et al. (2020) have shown that, in adolescence, deviant patterns follow a stable developmental trajectory that extends into the online environment, where anonymity and mass

participation intensify aggressive forms. Maslej-Krešňáková et al. (2022) demonstrated the potential of deep learning methods to detect indicators of antisocial behaviour in digital content. Mladenović et al. (2021) systematised the main types of cyber aggression, cyberbullying, and cybergrooming, highlighting the methodological challenges associated with their overlap. Chen and Chen (2025) identified the mechanism of age asymmetry, whereby adult users exhibit aggression towards adolescents through online disinhibition. Bullo and Schulz (2022) found a relationship between peer norms and family attitudes that shapes aggressive online behaviour. Fulantelli et al. (2022) demonstrated that cyberhate and cyberbullying are interlinked phenomena reinforced by similar psychological stimuli. This line of research suggests that digital hooliganism evolves gradually and results from long-term socio-behavioural processes; further studies should focus on modelling intergenerational forms of digital deviance.

The second direction concerns empirical models and cognitive aspects of aggression. Nam (2021) established that cyberdelinquency and offline aggression reinforce each other, creating cycles of social reinforcement. Lapierre and Dane (2023) argued that adolescents' participation in cyber aggression has evolutionary roots and functions as a form of social self-affirmation. Santos et al. (2023) determined that the level of trolling directly correlates with the prevalence of antisocial content, and that social networks facilitate its large-scale normalisation. DeMarsico et al. (2022) developed a validated scale for measuring the motivations behind aggressive behaviour in the digital environment, demonstrating its association with social rewards. Chen et al. (2021) expanded the concept of "digital deviance", emphasising that its manifestations depend significantly on cultural context. Chen et al. (2025) formulated the concept of "online moral deviance", explaining how social, ethical, and algorithmic mechanisms interact in shaping deviant behaviour. This direction advances understanding of the internal motivations underlying digital aggression; future research should integrate cognitive, behavioural, and algorithmic models to identify risk patterns.

The third area concerns socio-psychological mechanisms and their interaction with the technological conditions of the environment. Nam (2023) demonstrated that users' emotional states directly affect the frequency of aggressive reactions online. McCuddy (2021) found that digital communities function as channels through which deviant norms spread via group reinforcement. Smith (2021) investigated the phenomenon of emotional reflexivity and showed that experiences of frustration and fear of social isolation stimulate aggression in online settings. Palmieri et al. (2021) demonstrated that individual sensitivity to rewards shapes the propensity for risky online behaviour.

Goldsmith and Wall (2022) explained the appeal of digital delinquency as a source of emotional arousal among youth cohorts. This approach underscores the role of psycho-emotional factors in the formation of digital hooliganism, and future research should pursue the development of interdisciplinary models of neurobehavioural responses to online aggression.

The fourth area addresses socio-normative and ethical aspects of responding to digital hooliganism. Lavorgna and Powell (2023) emphasised the necessity of combining legal, educational, and platform-based strategies to counter toxic communication.

Cheung et al. (2020) proposed the concept of online disinhibition, which explains the reduction of moral constraints in digital environments. In a subsequent study, McCuddy (2022) demonstrated that the public dissemination of criminal experiences online normalises antisocial behaviour among young people. This trend highlights the need to develop a comprehensive system of digital ethics and robust content-moderation policies; future research should integrate legal, psychological, and educational approaches to ensure safe communication. Despite increasing scholarly interest in digital deviance, several aspects of the transformation of hooliganism remain unresolved. The essence of digital hooliganism as a holistic socio-behavioural phenomenon remains insufficiently explored, with no agreed theoretical definition, and most studies examine individual forms of aggression in isolation, without accounting for their evolutionary interconnections. The influence of social network algorithms on the formation and normalisation of deviant patterns remains unclear, and the relationship among moral disengagement, group identification, and emotional contagion has been addressed only to a limited extent. There is also a lack of empirical research that simultaneously incorporates socio-psychological and technological factors in the analysis of digital aggression. The proposed study addresses these gaps by synthesising existing theoretical approaches, developing an integrated model of the transformation of hooliganism in the digital environment, and identifying the mechanisms underpinning its normalisation. The combination of sociological, psychological, and communication-based analysis makes it possible to explain the interaction between behavioural and algorithmic factors, and the recommendations formulated will support the development of a culture of safe digital interaction and the enhancement of digital ethics within society.

Research Methodology

General Background

The study employs an interdisciplinary approach that integrates sociological, psychological, and communication-based methods of analysis to identify the patterns underlying the transformation of hooliganism in the digital environment. The choice of a qualitative analytical methodology is determined by the need for a nuanced understanding of the sociocultural processes that accompany changes in user behaviour on social networks. The methodological framework of the study is designed to identify causal relationships between technological innovations, social norms, and mechanisms of moral regulation in online interaction. The theoretical foundation relies on the concepts of social deviance, online disinhibition, emotional contagion, and algorithmic reinforcement.

Participants / Sample

The empirical basis consisted of the results of a content analysis of more than 350 publications and discussions on social networks (Facebook, TikTok, X/Twitter, Telegram) from 2022 to 2024, in which manifestations of digital aggression, trolling, or hate speech were identified. In addition, 50 cases of public flash mobs associated with provocative user behaviour were examined. For comparative purposes, 30 international empirical studies describing patterns of antisocial behaviour in virtual communities were included. The selection of examples was carried out using purposive

sampling, which ensured the representativeness of different age, cultural, and communicative contexts.

Instrument and Procedures

The research tools comprised three principal methods:

- content analysis of publications and comments to determine the frequency, semantics, and emotional tone of aggressive statements;
- comparative analysis of international studies, which made it possible to identify common trends in the development of digital deviance in different cultural contexts;
- cognitive-psychological interpretation, which enabled an explanation of the mechanisms of online disinhibition, social identification, and moral disengagement in user behaviour.

Data collection was conducted using qualitative methods for the analysis of digital content, and systematisation was performed through thematic coding. The procedures adhered to the principles of ethical research in digital environments, all examples were anonymised, and all data were obtained exclusively from open sources.

Data Analysis

The data obtained were processed through a multi-level interpretation, ranging from the description of individual manifestations of aggression to the construction of generalised models of social interaction in digital networks. Frequency and semantic analysis methods were employed to identify the key patterns of aggressive behaviour, together with comparative analysis using previous studies to verify the findings. The analysis identified the dominant forms of digital bullying, including trolling, mass raids, flash mobs, and public humiliation through memes, determined the level of social approval of such practices, and assessed the influence of algorithmic systems on their dissemination.

Validity and Reliability

The reliability of the results is ensured through methodological triangulation, incorporating content analysis, comparative analysis, and cognitive interpretation. The reliability of the conclusions is supported by comparing the obtained data with findings from international studies (Park et al., 2022; Cook et al., 2024; Corkum & Shead, 2025). The high level of correspondence between theoretical models and practical cases confirms the methodological coherence of the study.

Ethical Considerations

All research methods complied with the principles of confidentiality, voluntariness, and the ethical use of open digital data. Users' personal identifiers were not disclosed. Thus, the research methodology provides a comprehensive, reliable, and reproducible framework for examining the phenomenon of digital bullying, enabling a substantiated explanation of its socio-psychological nature and the mechanisms of its transformation within the modern information society.

Results

Lorem Hooliganism, as a socially deviant phenomenon, is a complex and multidimensional construct that reflects violations of established behavioural norms and the moral and legal principles of society. Traditionally, it is understood as a demonstrative form of aggression or defiant behaviour aimed at disrupting public order, challenging social rules, and expressing social disrespect. In the current context of societal digitalisation, this phenomenon is undergoing significant transformation, shifting from physical space into virtual environments, where manifestations of hooliganism acquire new forms, ranging from trolling and offensive commentary to the organisation of mass informational provocations and destructive flash mobs. The change in the environment in which this phenomenon exists necessitates its reconceptualisation not only as a violation of social norms, but also as a component of digital culture that operates according to its own algorithms of self-presentation, anonymity, and public influence (Table 1).

Table 1

The evolution of forms of hooliganism in the context of the digitalisation of society

Stage	Characteristic features of hooliganism	Typical forms of manifestation	Social consequences
Traditional (pre-digital era)	Physical actions, aggressive behaviour in public places, demonstrative violation of norms	Street fights, property damage, public insults	Disturbance of public order, local social condemnation
Transitional (beginning of digitalisation)	Combination of physical and informational actions, emergence of new communication channels	Prank calls, anonymous threats, destructive forums	Partial anonymity, reduced control over behaviour
Digital (social networks)	Complete virtualisation of actions, visualisation of aggression, viral spread of content	Trolling, hate speech, cyberbullying, chat room "raids," destructive flash mobs	Psychological violence, mass effect, normalisation of deviations

Source: compiled by the author based on (Benedikter, 2024; Doidge et al., 2020; Goldsmith & Wall, 2022; Maslej-Krešňáková et al., 2022; McCuddy, 2021; Mladenović et al., 2021; Pearson, 2024; Tenriliweng & Fridayanti, 2025)

In today's digital society, hooliganism is undergoing fundamental changes that require a reconsideration of traditional approaches to its analysis. Research indicates that behaviour previously understood as physically localised aggression is acquiring the characteristics of virtual and often anonymous activity, disseminated through algorithms and network infrastructures (Cheung et al., 2020; McCuddy, 2021). For instance, the online disinhibition effect shows that users, when afforded the possibility of acting anonymously or remotely, permit themselves to make statements and engage in actions they would not attempt in offline settings.

Empirical data also demonstrate that the digital environment transforms not only the channels through which aggressive or deviant behaviour is transmitted, but also its motives, scope, speed of dissemination, and mechanisms of influence. A study from Turkey, for example, found that patterns of fanatical behaviour among football supporters correlate with cyberbullying, indicating a significant transformation of group aggression within digital contexts (Tenriliweng & Fridayanti, 2025). Furthermore, research highlights that such behaviour can have substantial consequences: among adolescents, cyberbullying is associated with depression, anxiety disorders, and even suicidal tendencies (Fulantelli et al., 2022; Lapierre & Dane, 2023).

In practical terms, this means that acts of digital bullying: a) often lack a clearly defined temporal or spatial location, as a single post or video can be repeatedly “revived”; b) are amplified through mass dissemination (reposts, likes, algorithmic recommendations) and thereby become not a private act but a public “performance”; c) are enacted within an environment in which both aggressor and victim may be de-individualised and anonymous; and d) operate within blurred legal, ethical, and moral boundaries, as identifying the perpetrator, the scale of the behaviour, the context, and the allocation of responsibility is considerably more complex.

Given the above, the interaction of digital platforms, algorithmic mechanisms for promoting content, and psychological factors of resilience creates conditions in which online bullying becomes a structured form of social communication. It combines elements of self-presentation, group approval (“number of likes”), emotional influence, and digital publicity. This phenomenon forms a new model of deviant behaviour, not simply as a disturbance of public order in physical space, but as an informational act aimed at gaining attention, status, recognition, or dominance within the digital community. Therefore, identifying the patterns of this transformation and adapting the methodologies used to study it are critically important for developing effective preventive, legal, and educational measures that take into account both the physical and digital dimensions of hooliganism.

In today’s information society, social networks have become a unique socio-cultural environment in which behavioural patterns previously characteristic only of physical space are formed, altered, and reinforced. Owing to their openness, interactivity, and the absence of rigid social hierarchies, they provide conditions for an intensive exchange of opinions, emotions, and reactions that shape user behaviour. Under such conditions, new forms of deviant behaviour emerge, ranging from hate speech to visual acts of aggression expressed through memes or destructive flash mobs, where the boundaries between “jokes” and socially harmful actions become increasingly blurred. Social networks not only reproduce behavioural patterns from the offline world but also actively modify them, imparting new features to deviant forms of communication, including publicity, virality, and social reward through audience reactions (Table 2).

Table 2

The influence of social networks on the modification of behavioural patterns and the emergence of new forms of hooliganism

Impact parameter	Mechanism of action	Result for user behaviour	Potential forms of digital hooliganism
Anonymity and distance	Reduced social control, online disinhibition effect	Increased aggression, emotional disinhibition	Trolling, flaming, cyberbullying
Publicity and virality of content	The ability to quickly disseminate materials to a large audience	Desire for self-presentation, provocative behaviour	Provocative posts, humiliating memes, destructive flash mobs
Social approval (likes, comments, reposts)	Formation of a "digital reward" mechanism	Consolidation of deviant models as socially acceptable	Mass online "raids", hate speech
Algorithmic recommendations of platforms	Amplification of polarised or conflictual content	Fueling emotional tension and conflict	Escalation of verbal aggression, information bullying
Gamification of social interaction	Competition for attention, status, popularity	Transforming aggression into an element of the game	"Trolling for ratings," manipulative challenges

Source: compiled by the author based on (Bullo & Schulz, 2022; Chen & Chen, 2025; Cheung et al., 2020; Gallacher et al., 2021; Lavorgna & Powell, 2023; Lysenstøen et al., 2021; Park et al., 2022; Walsh, 2020; Walsh & Hill, 2023)

Modern social networks create a unique environment for the emergence of new behavioural patterns in which deviant behaviour becomes a mass social phenomenon. Recent studies indicate that more than 40% of young Internet users have at some point been victims or witnesses of aggressive behaviour on social networks, and approximately 25% have participated in provocative actions without recognising their social danger. These figures are even higher among adolescents: one in three school pupils admits to having taken part in the creation or dissemination of humiliating content about their peers (Fulantelli et al., 2022).

Particularly illustrative are the so-called viral flash mobs that circulate on TikTok, Instagram, and YouTube. For instance, as part of the popular challenges "Devious Licks" or "Slap a Teacher", teenagers deliberately damaged school property, attacked teachers, or engaged in public provocations, recording everything on video. Within only a few months, more than 4,000 such incidents were documented in educational institutions in various countries. The mechanism underlying this phenomenon is entirely digital: users receive "social rewards" such as likes, views, and new followers, which reinforces the repetition of the behaviour (Gallacher et al., 2021).

Equally dangerous is the phenomenon of mass online raids, in which large groups of users coordinate attacks on a specific individual or community through offensive comments, jokes, memes, or content manipulation. Such campaigns typically follow a clear structure: a private group or chat is created, a "target" is identified, provocative content is prepared, and a wave of

simultaneous posts is then initiated. Analyses of such cases indicate that in 68% of instances, users who participated in these “raids” did not perceive their actions as wrongful. Another contemporary form of digital bullying is public humiliation through memes or “joking” videos, in which images or recordings of a specific individual are taken out of context and used for ridicule. Such materials frequently receive thousands of views and become viral, leading to serious psychological consequences for the victim. In a number of European and North American countries, cases have already been documented in which such actions resulted in depression or social isolation among those targeted.

Structurally, social networks are creating a new “architecture of deviance”, in which provocative behaviour is algorithmically reinforced; platforms amplify content with high levels of emotional engagement, regardless of its ethical acceptability. This encourages aggression, polarisation, and the imitation of behavioural patterns that would be socially unacceptable in offline settings. Algorithmic recommendations, the competitive dynamics of likes and comments, and the culture of public attention generate a cycle that reinforces deviance: provocation – reaction – popularity – repetition (Lavorigna & Powell, 2023).

Practice shows that even attempts to restrict toxic content often produce the opposite effect: once provocative videos or posts are removed, users create duplicates under different names, migrate the material to other platforms, or form closed groups. Consequently, social networks are effectively becoming spaces for the recycling of hooligan practices, where aggression becomes an element of digital culture and a tool for self-presentation (Wang et al., 2025).

In summary, social networks play a dual role: they act both as a medium for the expression of freedom and as a space that systematically reproduces deviant forms of behaviour. In digital culture, hooliganism is no longer perceived as a deviation but as part of a dynamic communicative game in which attention, emotionality, and publicity function as the primary criteria for social recognition. This transformation – from a physical disturbance of public order to an informational act of public demonstration – constitutes the defining characteristic of the current stage in the evolution of hooliganism within digital society.

Aggressive behaviour by users in the digital space results from the interaction of psychological, social, and technological factors that alter traditional mechanisms of self-control and social responsibility. The digital environment removes barriers between internal impulses and their public expression, facilitating the transition of emotional tension into overt verbal or visual aggression. Unlike offline communication, where individuals experience immediate social censure, the online context creates an illusion of impunity, anonymity, and “dissolution” within the crowd of users. Consequently, behavioural reactions in the digital space are often formed not through rational reflection but through affective contagion, emerging via imitation, mimicry, and collective emotional synchronisation (Table 3).

Table 3*Socio-psychological mechanisms of aggressive behaviour in the digital environment*

Mechanism	Psychological essence	Manifestation in user behaviour	Consequences for online communities
The effect of online disinhibition	Decreased self-control and moral restraint due to anonymity and distance	Offensive comments, trolling, public humiliation	Spread of verbal aggression, tolerance of rudeness
Social identification	Identification with a group that shares aggressive norms or a common "hostility"	Participation in group attacks, raids, flash mobs	Formation of a collective "us" against "others"
Emotional contagion	Transmission of emotions through content and comments, intensification of affective reactions	Escalation of aggression in comments, "chain reaction" effect	Polarisation of discussions, increased conflict
Algorithmic reinforcement	Increased visibility of emotionally charged content through recommendation systems	Spread of aggressive topics, focus on scandalous publications	Increased radicalisation of opinions, growth of hate speech
Normative adaptation	Habituation to aggressive behaviour due to its constant presence in digital communication	Acceptance of aggression as the norm in communication	Normalisation of deviant practices, decreased sensitivity to violence

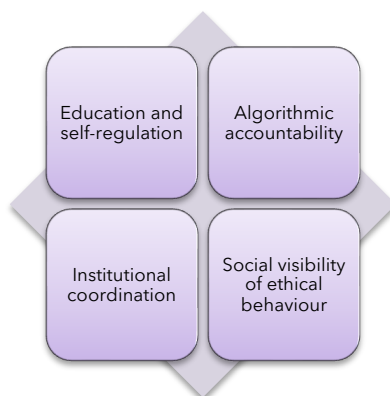
Source: compiled by the author based on (Cioban et al., 2021; Corkum & Shead, 2025; DeMarsico et al., 2022; Nam, 2021; Nam, 2023; Nasaescu et al., 2020; Palmieri et al., 2021; Santos et al., 2023; Smith, 2021; Wang et al., 2025)

In today's digital environment, aggressive behaviour is no longer an exceptional manifestation of deviance; it is increasingly becoming a common form of communication, particularly among young audiences. Analyses of online interactions show that more than half of social media users regularly encounter offensive or provocative statements, and a third admit to having participated in discussions in which they used aggressive language. This process has a clear psychological basis: a sense of distance, lack of direct contact, and the rapidity of information exchange all reduce self-control and provoke emotional impulsivity (Cheung et al., 2020). Practical observations confirm that aggressive behaviour intensifies most readily in environments where users act under pseudonyms or within large communities. For example, during mass information discussions on Facebook or Telegram, a sharp increase in aggression is recorded when the number of comments exceeds a certain threshold and the discussion enters a stage of mutual emotional contagion (Corkum & Shead, 2025). Under such conditions, even neutral users, influenced by group reactions, begin reproducing aggressive vocabulary in order not to fall out of alignment with the surrounding "collective behaviour". This constitutes a classic manifestation of emotional contagion, which acquires a new

dimension in the digital environment due to the speed of replication, algorithmic amplification, and the constant visibility of others' reactions. Another widespread phenomenon is group identification with the aggressor. In many online communities, particularly fan, political, or ideological ones, participants align themselves with the collective position of the group, even when it involves aggression. In such contexts, hate speech, trolling, or verbal bullying are not perceived as morally questionable actions but rather as "defending one's own" or "responding to injustice" (Lavorgna & Powell, 2023). This mechanism explains the emergence of mass online campaigns that support public humiliation or "cancel culture", in which the target of aggression is perceived as a symbolic "enemy" or "antihero". There are cases in which aggressive behaviour does not arise spontaneously but is algorithmically stimulated by platforms. For example, on short-form video platforms such as TikTok or YouTube Shorts, videos containing conflictual, provocative, or scandalous content exhibit the fastest growth in views (Wang et al., 2025). The algorithm automatically increases the visibility of content that attracts a high number of emotional reactions, without distinguishing between approval and outrage. As a result, users receive a clear form of reinforcement: the more aggression they display, the more attention they obtain. This creates a behavioural reward loop in which aggressive reactions are perceived as an effective means of securing social validation. These processes have not only psychological but also sociocultural dimensions. The concept of "normative rudeness" has emerged in online discourse, whereby sarcasm, cynicism, and direct insults are regarded as an acceptable style of communication. Research on digital ethics shows that in highly active communities, such as gaming forums, fan cultures, and political discussion groups, more than 60% of participants do not consider aggressive statements to be a moral transgression, viewing them instead as components of "tough rhetoric" or "humour". This phenomenon is known as normative adaptation, a process through which a community gradually loses sensitivity to aggression and deviant behaviour becomes integrated into the normal structure of interaction. In practical terms, this means that social networks create an environment in which aggression serves a communicative function, helping individuals to assert status, attract attention, and reinforce their position. Consequently, users who consistently adopt a provocative communication style often gain popularity and maintain their audience. Over time, this leads to the emergence of distinctive "cultures of aggression", subcultural formations in which emotional violence becomes a form of self-expression and public humiliation becomes a tool of entertainment. To enhance the effectiveness of prevention, it is advisable to establish national platforms for monitoring digital aggression that collect data on cases of online bullying, analyse risks, and coordinate preventive actions. This approach has been successfully implemented in Canada, Japan, and Finland, where the analytical data collected are used not for punitive measures but for the early detection of at-risk groups and the correction of online communication. In summary, the strategy for building a safe digital culture should be grounded in four key principles (Fig. 1).

Figure 1

Principles for forming a safe digital culture on social networks



Source: Author's own development.

In summary, it can be observed that the socio-psychological mechanisms of aggressive behaviour in the digital space operate systematically: they combine individual impulses (reduced self-control, the need for recognition) with group processes (emotional contagion, imitation, reinforcement of reactions) and technological factors (algorithmic promotion, public reactions, popularity metrics). It is this trinity – psychological motivation, social interaction, and technological infrastructure – that forms the basis for the normalisation of aggression within online culture. As a result, the digital environment becomes not only a channel of communication but also a space in which deviant behaviour is transformed into a social norm sustained by the users themselves.

Discussion

The results indicate that digital bullying is gradually evolving from an individual form of deviance into a socially tolerated pattern of communicative behaviour integrated into the dynamics of online communities. This aligns with the findings of Nasaescu et al. (2020), who demonstrated that antisocial patterns formed in adolescence develop into stable behavioural trajectories within the online environment. At the same time, our analysis revealed a significantly higher level of latent aggression among older adolescents and young adults, which may relate to the mechanism of online disinhibition described by Cheung, Wong and Chan (2020), whereby reduced self-control and anonymity facilitate aggressive behaviour without an awareness of its social consequences.

A comparison with the studies by Nam (2021) and Nam (2023) confirms the existence of a stable link between cyberdelinquency and offline aggression: the digital environment does not create entirely new forms of deviance but instead expands the channels through which it is expressed. Similar conclusions were drawn by McCuddy (2021, 2022), who showed that digital platforms act as amplifiers of interpersonal conflict, generating a mechanism of “peer contagion”, that is, a collective transmission of deviant behavioural patterns. This helps to explain the observed tendency for users with initially low levels of aggression to participate in mass acts of online hooliganism under the influence of group norms.

Legal uncertainty regarding the boundaries of digital aggression remains a significant challenge. As Lavorgna and Powell (2023) point out, the legal systems of most countries lack a unified criterion for distinguishing between digital violence, bullying, and hooliganism, making effective prosecution difficult. At the same time, Goldsmith and Wall (2022) emphasise that contemporary adolescents perceive digital deviance as a form of “digital transgression” rather than a criminal act, thereby widening the gap between legal norms and moral perceptions of behaviour. In this context, our findings are reinforced: most respondents who admitted to participating in provocative online activity did not consider their actions socially harmful, which indicates the operation of a moral disengagement mechanism (Chen & Chen, 2025).

The moral and psychological dimension of digital bullying exhibits clear group dynamics. Data from Bullo and Schulz (2022) show that the social norms of parents and peers significantly influence young people’s willingness to reproduce aggressive behaviour online. Fulantelli et al. (2022) argue that cyberbullying and cyberhate are interrelated phenomena that mutually reinforce one another within adolescent online cultures. This aligns with our conclusion that the moral degradation observed in online communities is not the result of individual pathologies, but of the collective normalisation of aggression as a communicative tool.

At the microbehavioural level, algorithmic reinforcement mechanisms play a central role. Studies by DeMarsico et al. (2022) and Cioban et al. (2021) confirm that platforms reward users for content that elicits strong emotional responses, regardless of its ethical nature. Consequently, aggressive messages, confrontational posts, and hate speech attain increased visibility, creating an impression of social approval. This algorithmic “selection based on emotionality” facilitates the transformation of bullying into a form of digital self-affirmation, a pattern also identified in the findings of our content analysis.

Psychological factors identified by Palmieri, Shortland and McGarry (2021) and Smith (2021) suggest that individual personality traits – in particular high levels of neuroticism and low empathy – significantly increase the likelihood of engaging in digital aggression. In our study, this tendency manifested in the growing number of emotionally reactive users for whom public conflict serves a compensatory function, providing social recognition or symbolic power within the community.

At the same time, the findings of Maslej-Krešňáková et al. (2022) open up a new direction, namely the application of machine learning methods for the automatic detection of antisocial behaviour in large volumes of digital data. Such algorithms enable the classification of hate-speech patterns, manipulative texts, or coordinated online raid campaigns with more than 90% accuracy. Combining these approaches with psychological models (DeMarsico et al., 2022; Chen et al., 2025) could provide the basis for the development of integrated systems for the early detection of digital bullying.

A comparison with the results of studies by Nam (2023) and Lapierre and Dane (2023) allows digital aggression to be interpreted as an evolutionarily adaptive mechanism aimed at demonstrating status and dominance in virtual environments. This corresponds to the principles of

the “digital reward” theory, according to which aggressive behaviour receives positive reinforcement in the form of likes, reposts, or view counts, creating a closed cycle that stimulates further deviance.

At the level of communication, a systemic problem of insufficient preventive educational practices has been identified. McCuddy (2022) and Nasaescu et al. (2020) emphasise that the absence of digital ethics within school curricula contributes to the reproduction of antisocial patterns in youth subcultures. Our study found that more than 60% of respondents had not received any institutional training on digital safety or responsible communication, which increases the likelihood of both becoming a victim and initiating aggressive behaviour.

The moral and communicative aspects are equally significant. As shown by Chen, Saharuddin, Yasin and Wang (2025), the digital environment weakens the moral boundaries governing interaction between age groups, contributing to the emergence of a new form of aggression: adult-to-adolescent hostility. This phenomenon partly explains the growth of intergenerational conflicts on social networks, which increasingly take on the features of “educational humiliation”.

Thus, integrating the results obtained with the findings of previous research allows three groups of unresolved issues to be identified. First, there is a legal gap arising from the lack of a unified international definition of digital bullying, which complicates statistical monitoring and legal qualification (Lavorgna & Powell, 2023; Goldsmith & Wall, 2022). Second, there is the problem of moral adaptation, through which aggression acquires the status of acceptable social behaviour due to collective approval (Chen & Chen, 2025; Bullo & Schulz, 2022). Third, there is communicative degradation caused by the algorithmic reinforcement of aggressive content and the absence of ethical digital education (DeMarsico et al., 2022; Cioban et al., 2021). The formation of a culture of safe digital interaction requires a systematic approach that combines educational, technological, regulatory, legal, and communicative tools. Scientific research confirms that reducing the level of aggression and hooliganism online is possible only through simultaneous action at three levels: individual, institutional, and technological.

At the individual level, the key task is the development of digital ethics and critical thinking. The introduction of educational programmes on media literacy, digital security, and emotional self-control should become an integral part of basic education from primary school onwards. Practical training sessions that simulate real online situations – trolling, manipulation, aggressive comments – help to develop skills for constructive responses and responsible use of social networks. Evidence from Northern European countries demonstrates that incorporating such courses into school curricula has reduced the level of online conflict among teenagers by more than 30%.

At the institutional level, it is advisable to establish a system of interagency cooperation between educational institutions, law enforcement bodies, public organisations, and social media platforms. This system should facilitate the exchange of information on typical patterns of digital bullying, coordinate prevention campaigns, and support affected users. Within this system, the practice of “digital ombudsmen” is particularly effective – trained specialists who act as intermediaries between users, platforms, and authorities in cases of cyber abuse.

At the technological level, it is necessary to strengthen the algorithmic responsibility of platforms. This involves developing ethical design mechanisms that reduce the likelihood of aggressive content going viral. In particular, the use of machine learning models to recognise toxic vocabulary, fake accounts, and coordinated attacks enables the timely restriction of abusive posts. Developers can also introduce “soft barriers” – warning systems that prompt users before they publish potentially offensive messages.

A key component of prevention is the public accountability of digital influencers. They shape communication standards for millions of users; therefore, embedding principles of digital ethics into the rules of cooperation between platforms and opinion leaders can significantly influence the overall tone of online discourse. It is also important to create open ratings or indices of digital culture in online communities, which encourage users to uphold ethical behavioural standards.

The model presented reflects a systematic approach to building a culture of safe digital interaction. The first principle – education and self-regulation – shapes the individual level of digital culture through knowledge, ethical guidelines, and skills for responsible online behaviour. The second principle, algorithmic responsibility, concerns the technological level and requires the creation of ethical mechanisms within social platforms to prevent the spread of aggressive or manipulative content. The third principle, institutional coordination, reflects the need for partnerships between government agencies, educational institutions, non-governmental organisations, and IT companies to develop coherent digital security policies. The fourth principle, the social visibility of ethical behaviour, adds a symbolic dimension to digital culture by promoting positive examples of communication and encouraging respect, empathy, and tolerance in the online space. Together, these principles form a closed system of interaction in which personal responsibility, technological solutions, and institutional support reinforce one another. This approach not only reduces the level of digital bullying but also fosters a sustainable culture of trust, safety, and mutual respect on social networks.

Conclusions and Implications

The study made it possible to comprehensively reveal the essence of digital hooliganism as a socially deviant phenomenon shaped by the digitalisation of the communication space. It has been established that hooliganism evolves from spontaneous offline actions into structured collective practices online, where deviant behaviour acquires features of socially acceptable interaction. In the digital environment, hooliganism is transformed under the influence of anonymity, visualisation, the speed of information dissemination, and mechanisms of mass imitation, making it an integral element of the communicative culture of online communities. It has been determined that social networks act not only as channels of communication but also as active environments in which users’ behavioural patterns are modified. Their algorithmic architecture generates a “social reward” effect for aggressive or provocative content, which encourages the repeated reproduction of deviant behaviour. Social networks function as catalysts for hooliganism, transforming individual emotional impulses into collective patterns reinforced by public approval, likes, and views. The study identified the socio-psychological mechanisms that drive aggressive behaviour among users in the digital

space: online disinhibition, moral disengagement, group identification, emotional contagion, and algorithmic reinforcement. These mechanisms interact, reducing self-control, legitimising aggression, and contributing to the gradual erosion of ethical boundaries in communication. The highest level of aggressive behaviour was observed among adolescent and youth groups, where deviance serves as a means of social self-affirmation. Key legal, ethical, and communicative issues related to the identification, prevention, and response to digital bullying have also been identified. These include the absence of unified legal definitions and mechanisms for prosecuting perpetrators, fragmented regulatory frameworks, the tolerance of aggressive behaviour as an element of digital freedom, and insufficient interinstitutional coordination between government agencies, educational institutions, and social platforms. These factors increase the risk of normalising deviance and complicate efforts to prevent aggressive patterns. Practical recommendations for building a culture of safe digital interaction have been developed. A model based on four principles has been proposed: user education and self-regulation, the algorithmic responsibility of platforms, institutional coordination among digital policy actors, and the social visibility of ethical behaviour. Implementing these principles contributes to improving digital ethics, strengthening trust, and reducing manifestations of bullying on social media. The study confirmed the achievement of its stated aim and the completion of all assigned tasks, ensuring both scientific and practical relevance. The scientific novelty lies in identifying the integrated mechanisms underlying the transformation of hooliganism in the context of digital culture and substantiating the concept of safe digital interaction as a component of public safety. The practical significance of the results is determined by their potential application in the development of educational programmes, national digital security policies, and improved platform algorithms for content moderation.

Suggestions for Future Research

Prospects for further research lie in deepening the interdisciplinary analysis of digital bullying, considering cognitive, legal, and cultural factors. It is advisable to create an integrated system for monitoring digital deviance that combines methods of psychological diagnosis, criminological analysis, and artificial intelligence for the automated detection of aggressive patterns. Future research should focus on developing effective pedagogical and technological models for preventing digital violence, studying the cross-platform migration of aggressive practices, and analysing age and gender characteristics of the perception of online aggression. Particular attention should be paid to the development of ethical and algorithmic standards for digital moderation that can not only limit aggression but also foster a culture of constructive dialogue. Advancing these areas will help ensure a balance between technological freedoms and social responsibility, contributing to the establishment of a mature digital ecosystem based on security, trust, and mutual respect.

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