

From Information to Emotion: The Structural Reversal of Online News and Video Consumption in China (2008–2025)

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ABSTRACT

Based on longitudinal CNNIC data (2008–2025), this study identifies a structural reversal in Chinese online news and video usage rates, shifting from strong positive correlation ($r = 0.77$) to pronounced negative correlation ($r = -0.82$), with mid-2019 as the critical breakpoint. Treating macro-level adoption trends as behavioral proxies, we indicate that public media consumption has fundamentally shifted from information acquisition to-ward emotional regulation. Extending Uses and Gratifications Theory, we introduce a Gratification–Algorithm Paradox: algorithmic recommendation systems transform active need-fulfillment into passive affective reinforcement, systematically crowding out cognitive processing when emotional needs surpass factual thresholds under high predictive precision. This paradox delineates the boundary conditions of traditional UGT in algorithm-driven environments and reconceptualizes media consumption as cognitive resource allocation under computational affordances. The findings offer a theoretical lens for understanding attention reallocation, digital dependency, and the rising risk of emotion-prioritized cognition in contemporary information ecosystems.

Keywords: Online news; Short-form video; Structural reversal; Algorithmic; Cognitive load; Emotional gratification

1. Introduction

Since its inception, the Internet has served as a vital channel for public information acquisition. In its early stages, user behavior primarily focused on obtaining news and searching for materials, with core needs centered on information credibility, completeness, and practical value (Niu et al., 2010). During this period, information acquisition constituted the primary utility of the Internet.

With the advancement of the mobile internet, user behavior patterns have undergone significant transformations. Online environments have evolved from fixed locations toward fragmented and mobile contexts. Users' objectives have expanded beyond traditional text-based reading to integrate emotional gratification with information acquisition (Montag et al., 2021). This shift represents a transition from prioritizing practical utility to seeking immediate emotional experiences. It also reflects an adjustment in information processing strategies. The rise of online video has reconstructed news presentation through visual media. This re-construction shifts cognitive modes from deep elaborative processing toward rapid visual perception and shallow engagement. News is no longer merely an independent information source but is increasingly embedded within entertainment that satisfies emotional needs.

This represents a behavioral shift from acquiring information to consuming emotions. At the macro level, this manifests as a structural reorganization of public attention allocation among different media types. Existing research has explored incidental news exposure under algorithmic recommendation, immersive mechanisms in audiovisual content, and active news avoidance phenomena (Newman et al., 2025). These studies mostly focus on single media forms or micro-level individual behaviors. Such a narrow focus makes it difficult to capture long-term structural reversals or effectively reveal macro trends and their underlying driving factors. Research from a purely micro perspective thus has limitations.

Some studies explain media consumption evolution through macro-perspectives like technological or policy determinism (Hu, 2025). Strict determinism offers limited explanatory power in the Chinese context. During the study period (2008–2025), regulatory frameworks and infrastructure conditions maintained consistent continuity in China. We treat these macro-environmental factors as contextual boundary variables rather than direct causal drivers to isolate the impact of user psychological mechanisms. Drawing on Uses and Gratifications Theory (UGT) (Katz et al., 1974), this research focuses on user agency and internal psychological decision-making, specifically examining cognitive avoidance instincts under information overload (Saud Alzahrani, 2024) and the pursuit of entertainment-oriented needs (Golding et al., 2025).

While traditional UGT posits a linear, agency-driven process where users actively select media to fulfill pre-existing needs (Jung & Kim, 2025), our findings reveal a Gratification–Algorithm Paradox in algorithmic environments. As platforms deploy precision recommendation systems, user gratification shifts from active pursuit to passive reception (Qiao et al., 2024), triggering an emotion-reinforcement loop that systematically crowds out cognitive processing and factual acquisition. This paradox marks a critical boundary condition for UGT's applicability: when emotional regulation needs surpass information-seeking thresholds under high algorithmic predictability, the theory's core assumption of "active choice → need satisfaction" is replaced by

a non-linear mechanism of “algorithmic anticipation → affective reinforcement → cognitive displacement.” Media consumption in this context should be reconceptualized not as gratification fulfillment, but as cognitive resource allocation under algorithmic affordances.

Building on this theoretical shift, the study aims to address three core questions: (1) What structural behavioral changes are reflected in the correlation trends during the evolution of online news and video usage rates? (2) Is there a clear psychological-behavioral logic behind this transformation? (3) How do technology, psychology, and platform mechanisms collaborate to promote the formation of this trend?

2. Materials and Methods

This study utilizes authoritative third-party data to identify a structural shift in media usage patterns at the group level. This shift is subsequently explained from a user-psychological perspective. The study thus reveals the underlying evolutionary logic of media usage behavior. The research paradigm combines quantitative analysis with qualitative theoretical interpretation.

This study adopts a mixed-methods design integrating macro-level quantitative tracking with micro-level theoretical interpretation. Quantitatively, semi-annual usage rates for online news and video from the China Internet Network Information Center (CNNIC, 2008–2025) serve as behavioral proxies to detect structural shifts via correlation analysis and segmented regression. Qualitatively, Uses and Gratifications Theory (UGT) and cognitive load frameworks explain how algorithmic environments transform active information-seeking into passive emotional regulation. While macro-level trends aggregate individual psychological choices rather than establishing direct causal inference, this exploratory approach is theoretically grounded: media consumption reflects cumulative user trade-offs between cognitive effort and affective gratification under algorithmic curation. To mitigate single-source bias and eco-logical fallacy risks, findings are cross-validated with independent datasets (Reuters Institute Digital News Report), ensuring robustness in identifying the structural breakpoint and its psychological drivers.

2.1 Data Sources and Variable Definitions

Drawing on 35 semi-annual Statistical Reports on China's Internet Development (2008–2025; see Table A1), this study captures the structural shift during the mobile internet era. This long-cycle perspective reveals deep trends often missed by short-term cross-sectional surveys. These reports represent authoritative macro-level monitoring tools for China's internet behavior. Using a binary classification (yes/no) based on six-month service usage. Following CNNIC's (2025) methodology, the raw data were cleaned and interpolated into a consistent semiannual

framework. This study adopts segmented regression to identify a structural break-point. It avoids spurious correlations from time-series nonstationarity.

This study assumes the stability of CNNIC's core classification standards and data collection protocols throughout the 2008–2025 period. The research framework maps two primary functional dimensions, namely information acquisition and entertainment experience, directly on-to CNNIC's classifications of online news and online video, respectively. This alignment is supported by Greber (2023) and Pjesivac & Ahn (2024). They note that while online news focuses on information retrieval and cognitive processing, online video tends to trigger emotional and affective responses. Even in cases where video formats are integrated into online news, the core purpose of news remains anchored in information acquisition. In contrast, online video primarily serves leisure-oriented needs.

Although content forms frequently overlap (e.g., news delivered via video formats, or informational elements within entertainment videos), this study adheres to CNNIC's functional classification framework by prioritizing differences in core user motivations. In this context, 'information acquisition' refers specifically to cognitive knowledge and fact acquisition, whereas 'online entertainment' emphasizes emotional experience and psychological relaxation. These represent psychologically distinct, motivation-oriented behaviors rather than a negation of the informational content itself.

2.2 Data Processing and Analysis Methods

The research data underwent rigorous processing; original data were cleaned, standardized, and unified to a semi-annual time scale. To quantify the relationship strength between usage rates, two statistical techniques are employed: first, the Pearson correlation coefficient to measure the strength and direction of linear relationships; and second, the Spearman rank correlation coefficient as a robustness test, suitable for non-normal distributions or outliers.

Given that macro-level statistical data often exhibits time-series nonstationarity, this study adopts a segmented regression strategy (2008–2018 vs. 2019–2025) to identify a structural break-point rather than simple linear trends. This method conforms to methodological conventions for macro-trend analysis (Xiang, 2024). Technical implementation was completed using Python with the Pandas library, ensuring all variables were compared on a consistent time scale.

It should be noted that some news-related online videos may be classified by users as entertainment, potentially causing a slight underestimation of online news usage rates. However, this classification itself indicates that when users encounter such content, they are motivated more by entertainment than information acquisition. While the decline in online news usage may partially reflect the migration of news content into video formats, the divergence in correlation

suggests a deeper shift in user motivation—from cognitive processing to emotional gratification. Given the long-term stability of CNNIC's standards, this bias does not alter the direction of macro trends. This logic reveals how a preference for entertainment fundamentally reshapes media usage patterns (Wirz & Zai, 2025), suggesting that news is losing its independent format boundaries and becoming a content element within the video entertainment ecosystem.

Finally, this study examined the role of external factors. While social stability, technological accessibility, and policy regulation provide the 'soil' for media change, they are not viewed as the direct driving forces of macro-trend shifts. According to UGT, true core explanatory variables lie at the micro-level of individual agency rather than passive shaping by external environments (Shi et al., 2024). Within given macro-structures, the way users navigate psychological trade-offs under information overload—specifically between pursuing facts and seeking emotion—shapes their media usage patterns (Bai et al., 2025). The model proposed in this paper is thus a multi-level explanatory framework: macro environments set the stage, while micro-level psychological mechanisms determine specific user behavioral patterns.

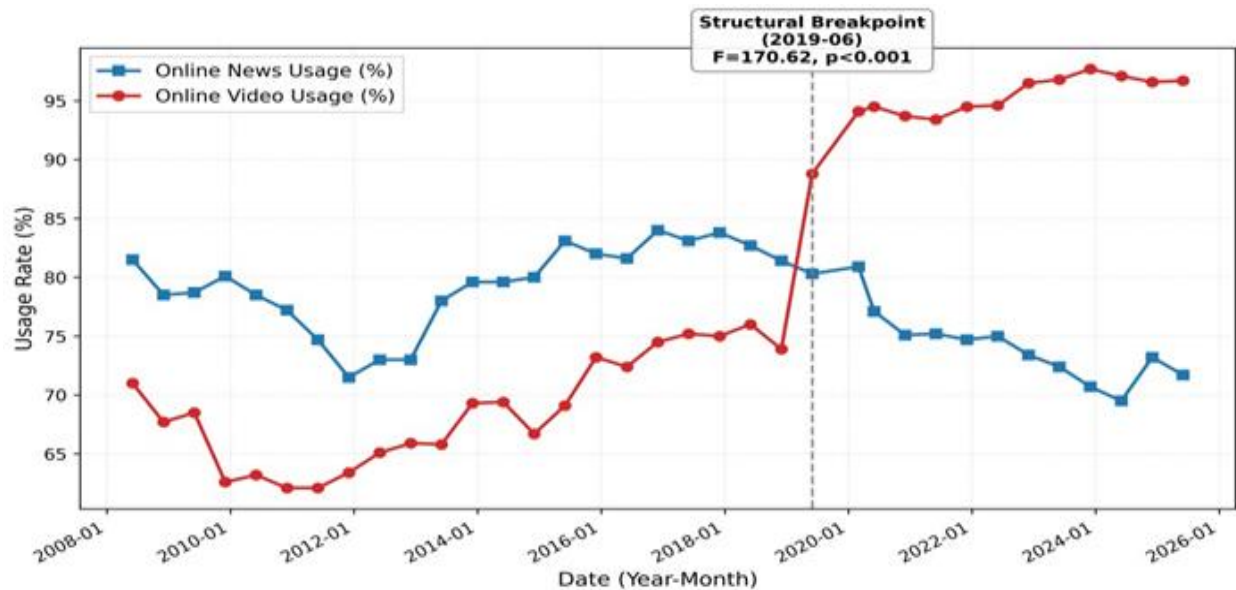
The boundary between online news and online video has become increasingly blurred. It is due to the rise of short-form news clips. However, this study argues that this blurring is not a measurement error, but rather a significant empirical finding in itself. It signifies a fundamental shift in user categorization logic: users are no longer sorting media based on content attributes (e.g., whether it is news or entertainment), but rather on psychological functions (i.e., cognitive processing vs. emotional gratification). Thus, the perceived overlap is actually the manifestation of this functional transition.

To formally identify the timing of this divergence, we applied the BaiPerron (2003) single-breakpoint test. This detects structural shifts in the association between online news and video usage rates. We then computed segmented Pearson and Spearman correlation coefficients for pre- and post-breakpoint periods. These calculations capture how strongly the relationship has reversed.

It is important to acknowledge that this study employs macro-level usage rates as proxy variables for behavioral shifts. While we recognize the potential risk of ecological fallacy—where group-level trends may not perfectly mirror every individual's trajectory—this approach is intended as an exploratory analysis to identify structural breakpoints. The subsequent theoretical interpretation serves to provide a plausible psychological mechanism rather than a definitive causal inference at the individual level.

3. Results

Figure 1. Trends in China's Online News and Video Usage Rates (2008–2025)



3.1 Significant Reversal of Correlation Coefficients

BaiPerron segmented regression identifies a statistically significant structural breakpoint at index 22 (June 2019; $F = 170.62$, $p < 0.001$). Prior to this point (2008–2018), online news and video usage rates exhibited a strong positive correlation (Pearson's $r = 0.772$, $p < 0.001$; Spearman's $r_s = 0.814$, $p < 0.001$). Post-breakpoint (2019–2025), the association reversed to a strong negative correlation (Pearson's $r = -0.818$, $p = 0.0006$; Spearman's $r_s = -0.913$, $p < 0.001$). This divergence confirms a fundamental shift from synergistic to opposing usage trajectories following the late-2018 behavioral incubation phase.

This pattern indicates a clear divergence in media usage trajectories post-2018. Macro-level correlation shifts reflect population-level attention reallocation rather than individual causal pathways. Micro-level validation remains necessary. This divergence can be interpreted as a substitution effect, where the proliferation of low-threshold video content effectively displaces traditional, high-load news consumption.

The June 2019 breakpoint is more than a data anomaly. It is the statistical shadow of a broader shift. Specifically, the way users interact with media was fundamentally altered as short-video platforms matured and algorithms became more predictive. While this section establishes the 'what,' the 'why'—the underlying socio-technical drivers—is explored in Section 4.

3.2 Support from Third-Party Data

In China, the average daily usage time for comprehensive information applications (primarily online news) dropped from approximately 65 minutes in 2017 to 48.8 minutes by 2024. Meanwhile, short video usage surged from 65.8 minutes to 156 minutes during the same period, accounting for over 70% of total online audio-visual consumption (QuestMobile, 2018, 2025; China Netcasting Services Association, 2025). As short videos now constitute the bulk of online video usage, their trends effectively reflect overall behavioral characteristics. These data provide critical supplementary evidence for structural shift. Under the constraints of limited attention resources, users have replaced high-cognitive-load news reading with low-threshold video consumption. Attention has shifted. This corroborates a fundamental transition: prioritizing emotional gratification over pure information acquisition.

A comparable pattern is observed globally. The Reuters Institute's global survey (Newman et al., 2025) shows approximately 40% of respondents sometimes or often actively avoid news content, among whom 39% explicitly stated that news negatively affects their mood. This further confirms that changes in online news and video usage rates stem from users' active preferences for emotional needs and psychological trade-offs under cognitive load.

4. Structural Drivers of Usage Rate Evolution

From 2008 to 2018, online news and video usage rates exhibited a high positive correlation, reflecting a synergistic state of functional complementarity and resource sharing. The following are the external drivers for this phenomenon.

4.1 Technical and Scenario Factors

During the early period of internet popularization (2008-2018), China had not yet achieved comprehensive mobile connectivity and low-cost data access. Users faced many restrictions when using the mobile Internet. Limited by 3G network speeds, high data costs, and terminal device performance, user online behavior was mainly concentrated in fixed Wi-Fi environments. Text-based information offers high information density and small file size. It became the primary method for fact acquisition during fragmented time, achieving low-effort cognitive input that met public needs for basic information immediacy. Meanwhile, online video, due to high data consumption, was positioned as a high-threshold entertainment service used mainly for leisure relaxation in home scenarios. It satisfied users' emotional needs and sense of social belonging. The functional differences between the two regarding usage scenarios, technical thresholds, and psychological loads jointly shaped user usage paths.

From 2008–2011, among China's new netizens, the proportions of youth, rural residents, and elderly groups increased significantly (CNNIC, 2010). Their media usage habits had distinctive characteristics. Limited by information literacy and device performance, these groups had lower contact frequencies with text-based news and high-definition videos. This resulted in declines in both online news and online video usage rates. According to cognitive load theory (Sweller, 1988), they tended to choose low-threshold, highly interactive applications such as mini-games and instant messaging because these could satisfy basic social and emotional needs. Under conditions of insufficient technological accessibility, the influx of these novice users directly lowered both usage rates. This suggests a potential alignment between macro-level usage shifts and micro-level psychological transitions.

The synergistic state of online news and video usage from 2008–2018 was a result of the combined effects of technical conditions, media characteristics, and user structure. This functional differentiation and scenario-based coexistence laid the foundation for the subsequent correlation reversal.

4.2 Divergence Stage

From 2019 onwards, online news and video usage rates showed a significant negative correlation, breaking the previous synergistic evolution pattern. This constitutes a structural reversal. During this period, online video usage rates continued to climb while online news showed the opposite trend. The significant rise in online video usage rates may reflect the convergence of technological breakthroughs, platform strategies, and regulatory frameworks. June 2019 marks a tipping point. This was the moment the 'short-video war' between platforms like Douyin and Kuaishou shifted from a period of rapid growth to one of market dominance, fundamentally altering the public's information gateways (Chen, 2023). Technical barriers also vanished. The rollout of affordable, unlimited data plans by major carriers transformed video consumption from a home-based luxury into a ubiquitous mobile habit. But the real engine was the algorithm. The industry moved away from 'social-graph' recommendations—based on who a user follows—toward 'interest-graph' curation. This transition allowed platforms to capture latent emotional needs with a precision that traditional news portals simply could not match, effectively triggering the divergence between cognitive-heavy reading and affect-driven viewing.

Around 2018, China's network infrastructure and mobile tariffs underwent significant optimization. Improved 4G/broadband speeds and affordable unlimited data packages significantly lowered the barriers to mobile internet access. The expansion of high-speed coverage ensured stable connectivity even in remote areas. This shift enabled seamless video viewing anytime and anywhere, transforming video consumption into a fragmented, ubiquitous

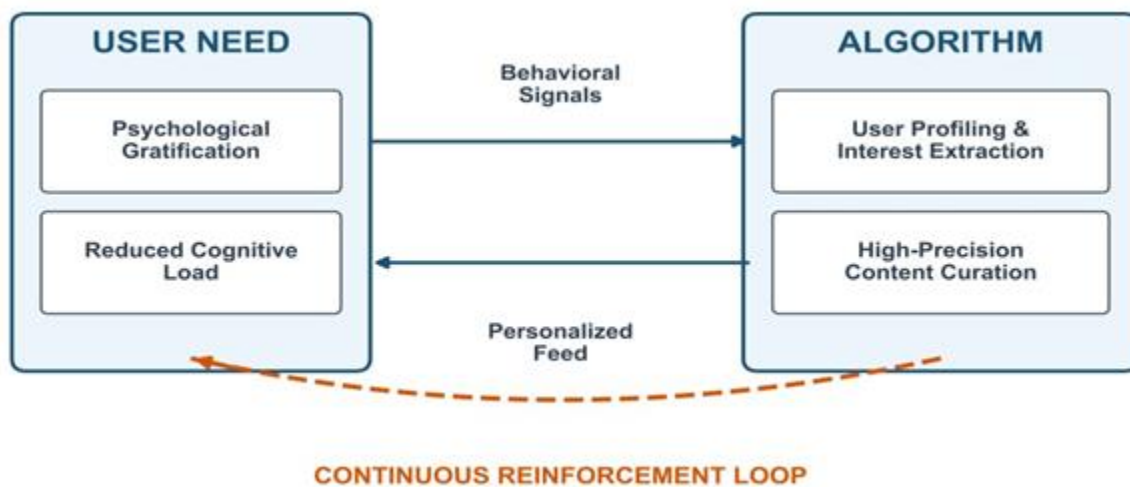
activity. Such widespread accessibility provides essential context for research on mobile internet us-age, online video addiction, and social media use.

Platforms adopted proactive operational strategies. Leading platforms, such as TikTok, launched creator support programs featuring cash subsidies and preferential content distribution. These initiatives lowered the barriers to entry, attracting a vast number of users to en-gage in content production. By leveraging precise algorithms for efficient content delivery, platforms effectively captured user attention, increased dwell time and stickiness, and drove rapid industry-scale expansion. The subsequent entry of major internet giants further intensified market competition, accelerating the popularization of online video.

Policy guidance synchronized with platform efforts. Early loose and inclusive regulatory environments provided space for initial industry development. As the industry scale continued to expand, relevant regulations gradually emerged, with the regulatory focus shifting toward content auditing and platform responsibility, promoting an industry transition from extensive expansion to orderly development. Platform promotion combined with policy regulation worked synergistically, jointly contributing to the significant rise in online video usage rates.

5. Dynamic Mechanisms Behind Media Selection

Figure 2. Needs–Algorithm–Reinforcement' Model Diagram



This paper proposes an ‘emotion–algorithm–reinforcement’ model to explain the aforementioned structural shift. Drawing on Uses and Gratifications (UGT) theory while integrating relevant psychological research, this model discusses the dynamic evolution of the online media usage pattern across three aspects: emotional needs, algorithm design, and functional reconstruction.

Under states of stress or information fatigue, users utilize online videos for emotional buffering, constituting a typical psychological self-regulation mechanism. Platform algorithms reinforce this process, causing users to develop a stronger psychological dependence on these platforms (Golding et al., 2025). This process exploits the principle of cognitive economy, where users instinctively gravitate toward content that minimizes mental effort while maximizing immediate affective feedback. This process satisfies personalized preferences at the micro level.

'Emotion' focuses on how users satisfy emotional needs through media selection within the context of information overload. 'Algorithm' refers to how online video platforms use algorithms to precisely capture user psychological states and push content that matches those emotional needs. 'Reinforcement' refers to how interactions between users and platforms (likes, comments, shares, etc.) further enhance algorithmic recommendation mechanisms, intensifying user dependence on emotionalized content. These three links form a self-reinforcing feedback loop. This process satisfies personalized preferences at the micro level while reconstructing public media usage structures at the macro level, gradually pushing society into an 'affective public sphere' (Papacharissi, 2015) dominated by algorithms and centered on emotions.

The 'emotion–algorithm–reinforcement' model should be understood as a conceptual framework. This study integrates Uses and Gratifications theory (UGT), cognitive load theory, and 'affective public sphere' perspectives to provide theoretical lenses for understanding macro trends. It should be noted that this paper does not constitute strict causal inference.

5.1 From Cognitive Understanding to Emotional Needs

Classical UGT views the user as the primary agent, selecting media to fulfill pre-existing needs. However, the current AI-mediated environment complicates this autonomy (Ju & Stewart, 2024). We are witnessing a transition toward 'Algorithmic Gratifications.' In this model, the platform does not merely satisfy a need—it anticipates and constructs it (Qiao et al., 2024). This is a co-constructive loop. The cognitive effort once required to search for news has been replaced by the passive, affective pleasure of being 'fed' content that resonates with the user's immediate emotional state. Consequently, the gratification is no longer a result of active choice, but a product of algorithmic precision.

This shift aligns with the concept of 'cognitive economy,' where users strategically allocate limited mental resources toward low-effort, high-reward stimuli in an environment of chronic information overload. By integrating UGT with Cognitive Load Theory, this study suggests that the preference for online video is not merely a change in format, but a psychological defense mechanism against cognitive exhaustion.

The Reuters Institute's global survey (Newman et al., 2025) confirms this trend. Approximately 40% of respondents sometimes or often actively avoid news content. Notably, 39% of these individuals state that news negatively affects their mood. This pattern is particularly significant among high-frequency social media users. These findings align closely with the phenomena observed in this study. In an era characterized by information overload, public psychological responses to news have shifted from seeking factual cognition toward prioritizing emotional avoidance and psychological protection. Consuming online videos has emerged as a prevalent strategy for both news avoidance and psychological buffering.

Traditional news, characterized by high information density and strong causal chains, is often regarded as a knowledge product requiring deep understanding, which easily triggers cognitive fatigue and emotional stress (Nguyen et al., 2025). This phenomenon is especially pronounced in the era of information overload. Online videos compress complex topics into concise, intuitive visual narratives, significantly reducing immediate cognitive load while enhancing emotional resonance and instant gratification (Jiang & Ma, 2024). Interactive behaviors such as likes, comments, and shares further strengthen a sense of belonging and self-worth, creating social experiences of 'being seen' and 'being responded to.' This provides a relaxed and pleasant experience, representing an extension of the 'social connection needs' in UGT within digital platforms (Bhatiasevi, 2024).

In the era of information overload, emotional needs have become core drivers for online video consumption (Hu & Huang, 2024). Individuals may no longer persistently pursue truth but instead tend to seek content that brings immediate pleasure, achieving short-term emotional buffering. Recent empirical research on TikTok confirms this shift. When users consume news-type online videos on this platform, motivations such as emotional satisfaction, social interaction, stress release, reality escape, and entertainment have significantly surpassed pure information acquisition (Dong & Xie, 2024). While UGT remains explanatory in the online video era, its connotation has evolved into an 'emotion-priority multi-gratification fusion' (Ruiz et al., 2022).

5.2 How Algorithms Reinforce User's Need

Individual psychological needs constitute the underlying logic of media selection, while online video platform algorithm design determines whether this selection will be continuously reinforced. Main-stream platforms (such as TikTok) use algorithms to infer user preferences from behavioral signals and push emotional content, forming an 'emotion-behavior-feedback' loop, a mechanism partially verified in empirical research (Qin et al., 2022). This feedback loop is driven by personalized recommendation algorithms. These algorithms leverage behavioral

data to simultaneously amplify users' emotional responses via reinforcement learning mechanisms, significantly increasing platform stickiness.

- 1) **Emotion Perception Stage:** Platforms infer users' psychological states (such as anxiety, boredom, or anger) in real-time based on micro-behavioral data, such as swiping speed and video completion rates. Fast swiping often corresponds to a bored or anxious state, whereas high completion rates signal strong emotional resonance. These behavioral patterns have been proven to reflect users' negative emotional states (Montag et al., 2021).
- 2) **Content Push Stage:** Once the system detects negative emotion signals, it prioritizes pushing content with strong dramatic or high-impact emotional characteristics, such as sudden incidents, arguments, or extreme plots. Through high-intensity sensory and emotional stimulation, these algorithms quickly capture user attention, leading users into rapid, continuous immersion in similar content streams. Such content does not primarily aim to calm user emotions. Instead, it achieves improved short-term retention through immediate emotional arousal/release and impulsive satisfaction via recommendation algorithms (Habib & Nithyanand, 2025).
- 3) **Behavioral Feedback Stage:** Users generate interactive behaviors, such as likes, comments, and forwards, due to the strong emotional responses triggered by content. These feed-backs are treated by algorithms as high-quality signals, further refining user profiles and precisely identifying content preferences and emotional needs. They form continuous emotion reinforcement loops through a refined understanding of target users (Wang & Wang, 2025).
- 4) **Reinforcement Stage:** Systems continuously push homogenized or more stimulating content based on user behavioral feedback, constructing highly immersive feedback loops. This process follows behaviorist positive reinforcement mechanisms, inducing 'flow states' characterized by intense focus, hedonic enjoyment, and distorted time perception. Such states elevate the risk of addictive usage patterns. Among adolescent groups, this mechanism often further amplifies the impact of negative emotions (Jiang et al., 2025).

This algorithmic cycle functions as more than a mere engagement tool. It represents a fundamental reconfiguration of the media landscape. The observed overlap in content formats reinforces the argument that media consumption has entered a "post-content era." In this era, the traditional distinction between news and entertainment is being superseded by a distinction between 'high-cognitive load' and 'low-threshold gratification.' The blurring of media boundaries

is not a loss of content identity. It is a reconfiguration of user attention. Attention is no longer captured by the veracity or topicality of information. It is the capacity to trigger emotional resonance. The convergence of news into video formats represents the final stage of this structural shift.

5.3 Cognitive and Behavioral Consequences

Driven by emotional needs, an increasing number of users choose online videos as their primary window for information contact. This means public information acquisition paths have undergone significant changes.

5.3.1 Cognitive Bias and Mental Health

When information acquisition is primarily motivated by emotion regulation, users may tend to rely more on intuition and feelings (i.e., heuristic processing), significantly weakening their motivation to analyze facts. In major public events, content triggering strong empathy is more likely to capture attention resources, but this may cause users to react without fully understanding the background. This emotion-priority mode not only weakens critical thinking but may also intensify cognitive biases (Jiang, 2024; Nguyen et al., 2025).

From a mental health perspective, this mechanism has dual effects. On one hand, online videos provide immediate stress buffering. On the other hand, over-reliance on emotionalized content may contribute to compensatory patterns. When users face real-world pressures, they tend to escape negative emotions through high-frequency emotional stimulation, which may trigger doomscrolling phenomena. This passive emotional immersion is significantly associated with decreased individual subjective well-being and increased psychological distress (Nguyen et al., 2025; Singh et al., 2025). Therefore, emotion-driven information consumption patterns may become potential risk factors for individual mental health.

5.3.2 From Objective Verification to Emotional Resonance

In traditional information environments, individual trust in information often rests on source professionalism and factual accuracy. However, in online video-dominated ecosystems, the psychological perception of authenticity is undergoing reconstruction. Social platforms, with their powerful emotional mobilization capabilities, have become the primary windows for public understanding of the world. A single video can serve as both news and entertainment, conveying facts while creating dramatic conflict. Ultimately, resonance replaces accuracy.

Attention is a finite media resource. Whoever triggers strong emotional fluctuations wins the competition for user attention. Social platforms use algorithms to precisely capture psychological

states, pushing conflict-ridden and dramatic scenes to achieve higher user retention (Wang & Wang, 2025). In such situations, objective facts often yield to perceptible and empathetic images. When information dissemination anchors on emotions, individuals focus more on 'whether I am understood' rather than 'whether the report is accurate.' People establish social identities more through shared emotional experiences than through reaching understanding via shared facts.

This mechanism poses challenges to individual cognitive control. Online video platform algorithms often use immediate feedback mechanisms to reinforce clicking and swiping behaviors, which may weaken users' inhibitory functions, increasing the risk of digital addiction. When emotion feedback loops are over-activated, users may find it difficult to autonomously terminate usage, leading to distorted time perception and a decline in self-control (Yang et al., 2024). The evolution of media behavior constitutes a systematic test of individual self-regulation capabilities.

It is crucial to clarify that this structural shift does not represent a unidirectional imposition of technology upon users. Instead, it reflects a complex interplay between user agency and algorithmic environments. While algorithms provide the mechanism, the core driver remains the users' pursuit of cognitive economy. In essence, technology and psychology converge; algorithms act as catalysts that amplify existing tendencies toward emotional consumption (Dang et al., 2025).

6. Conclusions

Based on CNNIC data from 2008–2025, this study reveals a structural reversal in online news and video usage rates. The rates shifted from a significant positive correlation ($r = 0.77$) to a strong negative correlation ($r = -0.82$). Segmented regression analysis identifies mid-2019 as a structural break-point. It marks the transition from synergistic to divergent usage patterns. The break-point coincides with the maturation of mobile data infrastructure and algorithmic recommendation maturity. It lowers the cognitive thresholds for video consumption. This technological affordance interacted with users' growing preference for cognitive economy under information overload, triggering the observed correlation reversal.

The theoretical contribution of this paper lies in reinterpreting the applicability boundaries of Uses and Gratifications patterns in the online video era. Under algorithm-dominated backgrounds, user satisfaction experiences increasingly exhibit passive and emotion-oriented characteristics. The 'emotion–algorithm–reinforcement' explanatory model proposed in this paper reveals that media selection is a dynamic, cyclic process driven by psychological needs. This process is reinforced by platform algorithms. This model also provides a systematic synthesis of existing research: it reveals that while users appear to be passively fed by

algorithms, their selection of online videos is actually an active choice driven by the need to escape cognitive fatigue.

Additionally, the study suggests potential implications of this transformation on individual cognition and behavior. When information dissemination anchors on emotions, users may focus more on feelings than truth, public issues can easily be simplified into opposing emotional stances. This process weakens independent thinking and intensifies cognitive polarization risks. In online video-dominated information ecosystems, individual critical thinking spaces and cognitive control capabilities face structural challenges. This constitutes a potential risk to individual mental health.

From a practical perspective, these findings suggest that digital literacy programs should evolve beyond teaching 'how to search' toward fostering 'cognitive control.' Specifically, promoting an awareness of algorithmic reinforcement loops can help users consciously balance emotional gratification with critical information acquisition, thereby mitigating the risks of cognitive polarization.

Global users universally face information overload dilemmas. The 'emotion-priority mechanism' revealed in this study possesses cross-cultural theoretical explanatory power. The paper underscores a fundamental paradigm shift in the digital ecology: from a 'search-and-find' cognitive mode to an 'algorithmically-fed' affective mode. It constitutes the core value of this paper. Future research should further verify this causal chain through micro-level empirical methods (such as questionnaires or experimental approaches). Future studies should also prioritize strengthening individual cognitive control through enhanced digital media literacy, well-being-oriented algorithmic design, and the promotion of healthier digital habits.

Table A1. Usage Rates of Online News and Online Video in China (2008–2025)

Date	Online News Usage Rate (%)	Online Video Usage Rate (%)
2008-06	81.5	71.0
2008-12	78.5	67.7
2009-06	78.7	68.5
2009-12	80.1	62.6
2010-06	78.5	63.2
2010-12	77.2	62.1
2011-06	74.7	62.1
2011-12	71.5	63.4
2012-06	73.0	65.1
2012-12	73.0	65.9
2013-06	78.0	65.8
2013-12	79.6	69.3
2014-06	79.6	69.4
2014-12	80.0	66.7
2015-06	83.1	69.1
2015-12	82.0	73.2

2016-06	81.6	72.4
2016-12	84.0	74.5
2017-06	83.1	75.2
2017-12	83.8	75.0
2018-06	82.7	76.0
2018-12	81.4	73.9
2019-06	80.3	88.8
2020-03	80.9	94.1
2020-06	77.1	94.5
2020-12	75.1	93.7
2021-06	75.2	93.4
2021-12	74.7	94.5
2022-06	75.0	94.6
2022-12	73.4	96.5
2023-06	72.4	96.8
2023-12	70.7	97.7
2024-06	69.5	97.1
2024-12	73.2	96.6
2025-06	71.7	96.7

Notes:

Note 1: Data Source: CNNIC, 2008-2025.

Note 2: For December 2012 online news usage rate, the extended data is used as marked in the CNNIC report.

Note 3: Data Collection for Dec 2019 was temporarily suspended due to public health measures; figures were retrospectively com-piled and released by CNNIC in Q1 2020

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