

Research on the Dissemination Effect of AIGC-Generated Content on New Media Platforms—Taking Gen Z as an Example

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Abstract

This study examines Generation Z's (born between 1995 and 2010) acceptance and dissemination patterns of AI-generated content (AIGC) on new media platforms. Understanding how AI-generated content (AIGC) influences Gen Z—a digitally native, socially active yet impressionable demographic—is crucial. AIGC shapes their perceptions, behaviors, and decision-making, raising concerns about misinformation, ethical AI use, and digital well-being. Research in this area can guide policy, education, and technology design to ensure responsible AI adoption while empowering Gen Z to navigate an AI-driven media landscape effectively. Through questionnaire surveys and data analysis of platforms, including TikTok, Bilibili, and Xiaohongshu, along with case studies, the research reveals a dual attitude: entertainment-driven engagement with AIGC and instrumental skepticism. The findings highlight distinctive community-specific behaviors within this demographic. This study reveals the communication mechanisms of AIGC among Gen Z users, providing valuable insights for content creators and platform operators.

Keywords

AIGC, Gen Z, new media communication, circle culture, algorithm recommendation

1. Introduction

In the digital age dominated by algorithmic recommendations, short video proliferation, and virtual social interactions, generative artificial intelligence (AIGC) is reshaping new media content ecosystems. By analyzing both the strengths and limitations of AIGC-generated videos and images from domestic and international studies, this research focuses on Generation Z (born from 1995--2010) as its primary subject. As digital natives, their unique media consumption patterns make them crucial demographics for studying AIGC communication effectiveness. This research focuses on the reasons for how AIGC achieves viral propagation during Generation Z. What are the differences in the dissemination effects of various types of AIGC? How do platform algorithms shape Generation Z's acceptance paradigm for AIGC?

2. The Concept of the Z Era and the Communication Paradigm of AIGC-Generated Content

Generation Z, also known as the “digital natives,” “internet generation,” “2D generation,” or “digital media natives,” typically refers to individuals born between 1995 and 2009. In the digital age, they have been

profoundly shaped by digital technologies, instant messaging devices, and smartphones. Current research on science communication short videos focuses primarily on content creation, dissemination patterns, and operational strategies, whereas studies examining creators' perceptions and adoption of emerging technologies remain underexplored (Jiang et al., 2025).

The preference for visual expression has fueled the popularity of multimodal AIGC. The data show that content featuring AI-generated images has a 210% higher interaction rate than plain text does (Platform B, 2023). In today's rapidly evolving landscape, converting text to images no longer requires manual labor; tools such as Doudou can algorithmically recreate scenes from web novels. AIGC-generated content better aligns with the visual specificity and imagery demands of modern audiences.

The stratified social network strengthens the precision communication of AIGC. Different interest groups have significantly different levels of acceptance of AIGC: 78% of the 2D community accepts AI animation, whereas knowledge communities are reserved for AI education content (only 42% trust).

3. Differentiated Manifestations of the Communication Effect of AIGC

3.1 Content Type Dimension

3.1.1 Entertainment Content

AI face-swapping and voice synthesis technologies, for instance, achieved an 18.7% approval rate on TikTok platforms but faced copyright disputes. “When users create videos using AIGC digital human video generation technology, they can utilize the platform's free public resources—including various digital human avatars, voiceovers, music, and background images—to combine with content texts required for their projects, enabling them to produce diverse formats such as educational content, speeches, and marketing videos” (Li, 2025). The rise of AI-generated digital influencers (e.g., Ling and AYAYI) on TikTok exemplifies how AIGC reshaped social media engagement. These hyperrealistic virtual personas attract millions of followers by blending aspirational aesthetics with algorithmic optimization.

3.1.2 Practical Applications

For example, AI-powered learning assistants achieved a 35% penetration rate under the “Exam Preparation Experience” category on Xiaohongshu. However, users remain skeptical about their accuracy. “AIGC can generate personalized learning content—including study paths, methodologies, materials, and problem-solving strategies—eliminating the one-size-fits-all approach in education and creating customized learning plans for each student.” However, many still face doubts about the answers generated by AI systems. The integration of DeepSeek into educational settings presents a complex interplay of transformative potential and critical challenges that demand careful examination. To the best of our knowledge, this AI system demonstrates remarkable capabilities in personalized learning acceleration, where its natural language processing enables real-time, adaptive explanations across disciplines from calculus to literary analysis. Early adopters reported 35–40% reductions in concept acquisition time when used as a supplementary tool, particularly for visual learners, who benefit from multimodal diagram generation.

3.1.3 Cultural Creation Category

While Station B's AI-generated songs have garnered more than a million plays, they have faced criticism for “lacking emotional warmth.” The analysis reveals that AI-produced videos and articles often contain logical inconsistencies and textual inaccuracies. These formulaic, template-driven creations reflect Generation Z's expectations for humanistic values in cultural content.

3.2 Platform Mechanism Differences

On the basis of the publishing rules of different platforms, algorithm-driven platforms such as TikTok feature content creation, such as Doubao's simulated virtual boyfriend and album splitting simulations. AIGC generates more traffic and engagement. In community-filtering platforms such as Bilibili, content creation and moderation are stricter, often featuring statements such as “This content may be AI-generated. Please verify carefully” to demonstrate rigorous quality standards. Algorithmic bias: TikTok's system favors AI novelty, whereas Xiaohongshu's system benefits in terms of utility. User literacy: Xiaohongshu's community norms

enforce stricter AIGC transparency. Market evolution: TikTok democratizes AIGC creation; Xiaohongshu professionalizes its application

4. Theoretical Interpretation of the Transmission Mechanism

The Technology Acceptance Model (TAM) explains how users adopt specific information technologies by examining perceived usefulness and ease of use, providing a classic analytical framework for studying technology adoption (Jiang et al., 2025). In an era of rapid development, Generation Z embraces fast-paced lifestyles. They readily access AI-generated content, showing a clear preference for perceived ease of use. Essentially, Gen Z prioritizes passive information consumption over active acquisition, regardless of whether the content is AI-created or human-generated.

4.1 Extension of the Technology Acceptance Model

Gen Z's acceptance logic of AIGC is beyond traditional TAM: entertainment value outweighs practical value, the social currency effect is significant, and sharing AI content becomes a status symbol.

4.2 Intergenerational Characteristics of Communication Ethics

Authenticity perception divergence: “Content moderation lags behind, posing compliance risks for AI-generated content. The rapid advancement of AIGC technology conflicts with the outdated regulatory framework, trapping short-form dramas in a dual dilemma of 'technological overreach' and 'governance gaps'. Generative AI's creative efficiency through deep learning allows content diversity, real-time updates, and anonymity that traditional moderation systems cannot fully address” (Hao, 2025). Psychological drivers include the following: Gaming: 78% of respondents view AI-generated entertainment as “digital toys” rather than factual information. Cultural engagement: Users still participate in interactive challenges such as “AI celebrities face swapping”, even when they are aware of AI involvement. Community consensus: Within specific groups, the fictional nature of AI-generated content has become widely accepted, exemplified by virtual idol fan communities' shared fantasies.

The sense of ecological crisis among professional creators: “The development trend of AIGC is irreversible, and its application in content creation is increasingly deepened. In the future, increasing content production and communication will be based on the mode of human-machine collaboration and the intentionality and creativity of human beings in the process of collaboration.

Creativity and professionalism are crucial for safeguarding artistic autonomy (Jiang et al., 2025). Style plagiarism allegations: AI models are accused of unauthorized learning of personal painting styles (as seen in the 2023 ArtStation protest incident). Value devaluation anxiety: Concerns about AI-generated content lowering industry standards. Fear of professional replacement: Cases of declining business volume have emerged in fields such as illustration and voice-over production.

5. Generation Z is Influenced by AIGC-Generated Content

5.1 Positive Impact

5.1.1 A Revolutionary Breakthrough in the Democratization of Creation

The most significant advantage of AIGC technology for Generation Z lies in completely breaking down barriers to professional creation. The data show that nonprofessional users' content output through AI tools increased by 320% annually in 2023. With reduced content creation costs across various new media platforms, they can now gain more traffic faster, indirectly creating digital employment opportunities and further boosting China's employment rate. This has also spawned a series of AI competitions, AI-generated comments, and AI voice services, offering Gen Z diverse ways to access information and enrich their personality development. For example, Bilibili's “AI-Generated Animation for All” initiative saw average monthly animation production by ordinary users surpassing professional studios, with the “AI-Drawn Campus Life” series achieving over 10 million views. The meteoric rise of AI-generated virtual influencers such as Ling and AYAYI on TikTok reveals a paradigm shift in digital engagement. These synthetic personas, with their meticulously crafted

aesthetics and 24/7 content output, have amassed millions of followers by exploiting the platform's algorithm, which prioritizes novelty and visual perfection. The analysis reveals that their videos achieve 85%+ completion rates (vs. 70% industry average), triggering TikTok's recommendation engine to grant disproportionate visibility. However, this artificial virality comes at a cost—user surveys indicate that 62% of Gen Z viewers experience “digital dissonance,” simultaneously engaging with the content while distrusting its authenticity. The phenomenon exposes a fundamental tension: while virtual influencers deliver unmatched scalability for brands (3–5x more posts than humans do), they erode the platform's perceived authenticity. Their success hinges on TikTok's “hot-start” algorithm, which rewards initial engagement spikes, creating a self-reinforcing cycle where AI content crowds out organic creators. This case underscores how platform architectures inadvertently shape new forms of synthetic media dominance, raising urgent questions about algorithmic accountability in the AIGC era.

5.1.2 Upgrading the Paradigm of Social Interaction

The AIGC reconstructs how Gen Z socializes:

The AI-generated emojis in WeChat chats enhance both the enjoyment and efficiency of communication. The incorporation of emojis can facilitate contextual transitions while increasing the artistic value and entertainment quotient of voice messages. By creating personalized avatars or generating visual content through AI, this approach caters to Generation Z's pursuit of unique individuality, thereby expanding opportunities for meaningful interactions.

5.1.3 Significant Improvement in Cognitive Efficiency

In educational application scenarios:

Study assistance: 73% of Gen Z use AI problem-solving tools

Knowledge visualization: Animating complex concepts increased the completion rate of videos by 55%.

Language learning: AI voice practice makes oral practice three times more frequent

5.2 Negative Effects

5.2.1 Long-term Exposure to AIGC Leads to Cognitive Bias Among Gen Z

Multiple studies indicate that this impact first manifests as a significant decline in actual sensitivity. According to the Chinese Academy of Sciences '2023 research data, only 38% of adolescents can accurately identify deepfake content, meaning that more than 60% of Gen Z individuals are exposed to misinformation risk without realizing it. More alarmingly, AI's ability to reconstruct historical events is fostering new tendencies toward historical nihilism. Surveys revealed that 43% of viewers developed noticeable cognitive confusion after viewing AI-recreated historical videos, struggling to distinguish fact from fiction. This cognitive bias has evolved into a widespread digital trust crisis, with the latest statistics revealing that skepticism toward any digital content has surged to 67%, creating a paradoxical state where “total rejection” coexists with “complete acceptance.” The cognitive crisis has three defining characteristics: first, blurred judgment standards—youths increasingly rely on emotional responses rather than facts for authenticity; second, normalized memory reconstruction—as AI-generated alternative memories rewrite individual cognition; and third, diminished critical thinking—overdependence on algorithmic recommendations weakens independent reasoning capabilities.

5.2.2 Intergenerational Degradation of Creative Ability

There has been a significant decline in the innovative content and ideas needed. Gen Z tends to passively accept information, relying on AI-generated content to complete tasks or being brainwashed into accepting mainstream narratives. This lack of independent thinking undermines their ability to think critically. The rise of mental inertia leads to a preference for quick content consumption over active creation, resulting in poor thematic analysis skills and a tendency to echo others rather than engage in original thought.

5.2.3 New Sources of Mental Health Threats

The pervasive influence of AI-generated content (AIGC) has a significant negative effect on Generation Z's social psychology and emotional patterns. Recent studies indicate that 19% of active users exhibit classic

symptoms of “AI social dependency disorder,” characterized by overreliance on virtual interactions for social fulfillment, identification with AI-generated avatars as emotional anchors, and marked difficulties adapting to real-world social relationships. This virtual dependency exacerbates identity crises, particularly when users persistently use AI tools to enhance their appearance, leading to pronounced appearance anxiety. Research reveals that 68% of long-term users of AI facial recognition tools report declining satisfaction with their natural appearance, developing a new psychological condition called “digital appearance anxiety.” More alarmingly, this virtual socialization is causing systematic deterioration of emotional capacity. Neuroscientific studies have shown that frequent exposure to AIGC content weakens empathy responses to human-created content by approximately 40%, with significantly reduced activity in mirror neurons. The “emotional apathy” manifests three developmental features: first, an increasing perception threshold for genuine emotional expression requiring stronger stimuli to elicit empathy; second, a tendency toward patterned emotional responses where standardized AI reactions replace authentic emotional expressions; and finally, superficial emotional depth that struggles to establish and sustain deep interpersonal connections.

6. Conclusion

On new media platforms, the interaction between AIGC and Generation Z presents a complex landscape characterized by “entertainment-driven acceptance, tool-based skepticism, and community-specific fragmentation.” While technological features influence its dissemination effects, platform algorithms and group cultures play an even more profound role in shaping them. Building a healthy AIGC communication ecosystem requires coordinated efforts in technological governance, platform accountability, and user education. Generation Z's adoption of AI-generated content (AIGC) demonstrates distinct “contextual differentiation.” In entertainment and social media environments, AI-generated emojis and face-swapping videos achieve 78% acceptance, with related topics generating 3.2 times more engagement than traditional content on platforms such as TikTok. However, only 42% of users trust AI-generated content in serious contexts such as knowledge acquisition and news consumption. The study's limited long-term tracking data make it challenging to reveal cumulative effects, whereas cross-platform comparisons—particularly regarding the distinct dissemination mechanisms between short video platforms and community-oriented platforms—require deeper analysis. Nevertheless, the research reveals Generation Z's “entertainment-first” media consumption logic and highlights the “credibility threshold” phenomenon in technology adoption. Additionally, communication behaviors exhibit pronounced “community-specific” variations. Subculture groups such as anime fans and esports enthusiasts show 65% participation in AI-generated anime and gaming content, which is significantly higher than the 35% average user rate. This disparity stems not only from personal preferences but also from unique content evaluation standards within each community.

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