

The Impact of Social Media “Seeding Content” on College Students’ Brand Loyalty

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Abstract:

This study systematically reviews 38 core articles published between 2018 and 2024 that examine how social media “seeding content” influences brand loyalty among college students. With social media penetration surpassing 90% among Generation Z, college students’ consumption decision-making has gradually shifted from functional comparison to content-driven motivation. The analysis focuses on three core dimensions: visual appeal, content credibility, and interactivity. Findings reveal that, at the theoretical level, an integrated “stimulus–cognition–behavior” chain has been formed, yet significant gaps remain in the integration of neural mechanisms, the exploration of group-specific characteristics, and longitudinal dynamic effect tracking. Methodologically, most studies rely on traditional measurement scales (e.g., Li Yucui’s visual appeal scale, Su Qisheng’s loyalty scale) but lack cross-platform frameworks and dynamic effect assessments. Future research should strengthen campus-specific model construction, integrate multi-modal approaches, and conduct cross-cultural comparative analyses. These steps would not only deepen consumer behavior theory but also provide theoretical foundations for precise Generation Z marketing.

Keywords: Social media; seeding content; brand loyalty; college students; interactivity.

1. Introduction

As a vital type of user-generated content (UGC), “seeding content” refers to marketing-oriented narratives that stimulate consumer purchase intentions through scenario-based storytelling. Its distinguishing feature lies in its non-commercial narrative style

and viral dissemination, which differentiates it from traditional advertising [1].

Meanwhile, the concept of brand loyalty has expanded from the classical definition of “repurchase rate” to a three-dimensional structure involving emotional attachment, behavioral commitment, and cognitive preference [2].

Among Generation Z, with social media penetration reaching 92%, college students' decision-making patterns have shifted from "functional comparison" to "content-driven" models.

According to the *2024 China College Student Consumption White Paper*, 68% of students follow brands at least weekly due to seeding content, and high-visual-appeal posts achieve 3.2 times higher brand recall than ordinary text and images [3]. This UGC-centered marketing model reconstructs the pathway of brand loyalty by leveraging visual symbols, credible information, and interactive mechanisms, challenging the traditional "product attribute-brand cognition" framework.

College students, as digital natives, process more than 300 short videos daily. Their selective attention is shaped by visual appeal, and their need for social identity construction makes interactivity 23% more influential on loyalty compared to other groups [4,5].

Such distinctiveness has attracted growing academic and business interest. However, existing studies still reveal shortcomings in theoretical integration and methodological innovation.

2. Literature Review

2.1 Visual Appeal: From Aesthetic Design to Neurocognitive Insights

Li Yucui et al. developed a visual appeal scale that operationalized livestreaming visual stimuli into four dimensions: product clarity, multi-angle display capability, environmental comfort, and overall layout attractiveness [6]. In college student samples, the scale showed high reliability (Cronbach's $\alpha = 0.912$) and strong correlations with physiological indicators such as fixation duration ($r = 0.63$) and pupil dilation ($r = 0.57$).

Later studies extended the framework by adding a "semiotic dimension" (e.g., cultural metaphors in filter styles) and a "cognitive load dimension" (e.g., information density effects on attention). Zhang Lin et al. found that students spent 52% longer fixations on "scenario-based compositions" (e.g., dormitory vanity tables) than on product close-ups, with pupil dilation significantly predicting brand recall ($\beta = 0.41$, $p < 0.01$) [5].

Two major perspectives dominate: the "direct effect theory" and the "dual mediation model." Liu Fengjun et al. confirmed the direct effect of visual appeal on brand loyalty ($\beta = 0.38$) using the S-O-R framework [7].

In contrast, Wang and Chen demonstrated that visual appeal affects loyalty indirectly through "perceived pleasure" ($\beta = 0.27$) and "self-congruence" ($\beta = 0.19$), with indirect effects accounting for 63% of the total effect. Platform differences may explain this: Douyin emphasizes

"immersive experiences" dependent on instant visual impact, while Xiaohongshu emphasizes "lifestyle seeding" requiring emotional accumulation [8,9].

2.2 Content Credibility: From Information Authenticity to Relational Trust

Li Yuhang proposed a three-dimensional framework—source, content, and context—which highlighted KOL professionalism (e.g., ingredient analysis ability) and peer similarity (e.g., student identity) as key contributors to credibility, accounting for 41% and 32% respectively. Indicators such as "third-party certifications" and "flaw disclosure" (e.g., "long-lasting but slightly drying") formed the measurement core [10].

Zheng Xiaoping demonstrated experimentally that flaw disclosures doubled credibility compared to "perfect endorsements," aligning with students' "anti-marketing" psychology [11].

Cross-platform comparisons also reveal differences. Wang Wenbo found that Xiaohongshu's hashtag system (#NoFilterTesting) enhanced credibility by 28%, Douyin's comment feedback system increased reliance on peer evaluations (credibility weight = 43%), while Bilibili's "hardcore review" strengthened perceptions of professionalism ($\beta = 0.39$) [12].

These findings suggest brands must adopt "platform-specific" credibility strategies—emphasizing comment authenticity on Douyin while reinforcing certification tags on Xiaohongshu.

2.3 Interactivity: From Behavioral Engagement to Value Co-creation

Su Qisheng classified interactivity into primary (likes/comments), intermediate (questions/shares), and advanced (UGC co-creation) levels, revealing a significant inverted U-shaped relationship with brand loyalty—intermediate interaction had the strongest effect ($\beta = 0.32$), while excessive engagement led to resistance ($\beta = -0.17$).

Recent studies have further refined this understanding [2]. Zhang, in a meta-analysis, found that active interaction (self-initiated comments) was 3.8 times more effective than passive interaction (brand replies), while "response speed" (within one hour) increased positive effects by 56% [13].

Wang and Chen confirmed through structural equation modeling that interactivity influences loyalty via "perceived value" ($\beta = 0.23$) and "community identity" ($\beta = 0.19$) [9].

Among these, "interaction-based reward mechanisms" (e.g., coupon incentives) had the most significant impact (path coefficient = 0.41). This "interaction-value-loyalty" chain was particularly strong in campus-based private traffic communities, where WeChat groups improved Net

Promoter Scores (NPS) by 29 percentage points.

3. Research Gaps and Methodological Reflections

3.1 Structural Deficiencies in Theoretical Models

Current research on black-box neural mechanisms primarily addresses behavioral responses while neglecting a systematic exploration of neural pathways such as the retina–thalamus–cortex. For example, Li et al. identified nucleus accumbens activation under conditions of visual appeal but did not construct a comprehensive, “stimulus–activation–attitude” model [6].

Another limitation is the generational disconnection in sampling. More than 68% of existing studies rely on generalized consumer samples, and only 12% specifically focus on students. Wang demonstrated that multitasking behaviors—such as simultaneous engagement with short videos, barrages, and comments—reduce measurement accuracy by 19% [4]. Despite this finding, current models rarely incorporate such moderating factors.

A further issue lies in the lack of longitudinal research designs.

Fewer than 8% of studies adopt longitudinal methods, making it difficult to distinguish between short-term arousal effects and long-term reinforcement patterns. Su observed that visual effects differed by 27% between one week and one month, highlighting the importance of temporal design [2].

Methodological issues also persist. Scholars often rely excessively on e-commerce contexts while neglecting the fragmented and fast-paced dynamics of short video platforms, such as three-second hooks. Additionally, there remains insufficient cross-cultural comparison of consumer values, which further limits the generalizability of findings [9].

3.2 Methodological Controversies and Sampling Bias

Most measurement scales were developed for e-commerce livestreams, insufficiently addressing fragmented short-video stimuli (e.g., “first 3-second hooks”).

The lack of campus-specific indicators (e.g., “library desk seeding”) reduces ecological validity for college populations. Moreover, Chen demonstrated cultural differences: Western students emphasized professional expertise ($\beta = 0.39$), whereas Chinese students valued lifestyle proximity ($\beta = 0.47$) [14]. Current models fail to integrate such cultural moderators.

4. Future Research Directions and Managerial Implications

4.1 Theoretical Innovation

Future research should emphasize cross-disciplinary integration by combining visual neuroscience with consumer behavior studies.

Techniques such as fMRI and eye-tracking could be applied to map neural activation patterns during exposure to seeding content, thereby providing empirical validation for the proposed “visual appeal–nucleus accumbens–hippocampus” pathway of memory formation [5,6].

Another direction involves the development of dynamic visual models that incorporate temporal, intensity, and frequency dimensions into a unified framework.

Such models would allow researchers to distinguish between immediate arousal (e.g., pupil dilation observed within one week), mid-term emotional consolidation (occurring between one and four weeks), and long-term processes of identity formation (extending beyond one month).

In addition, there is a need for campus-specific frameworks that account for unique contextual variables.

These models should integrate factors such as “scenario fit,” which reflects the resonance of visual content with dormitory or classroom settings, and “peer KOL trust,” which captures the influence of endorsements by student leaders or senior peers in shaping attitudes and behaviors.

4.2 Practical Implications for Brand Marketing

Brands should align seeding strategies with generational features. For beauty products, dual-light shooting (daylight + soft light) combined with dormitory scenarios can enhance immersion [6]. Multi-angle and zoom transitions improve visual experience.

For electronics, unboxing dynamics with slow-motion detail shots cater to immersive preferences.

In terms of credibility, Xiaohongshu should emphasize lifestyle aesthetics and #RealStudentTesting hashtags, while Douyin should enhance first-3-second visual impact with rhythm effects and pinned authentic comments. For interactivity, brands may use Q&A prompts in captions (e.g., “Is this foundation suitable for oily skin? Find out in the comments”), or launch “Campus Seeding Ambassador” programs encouraging UGC co-creation, fostering value co-creation and identity.

5. Conclusion

This review deconstructs the three dimensions of visual appeal, content credibility, and interactivity in the context of social media seeding content and reveals their signif-

icant influence on college students' brand loyalty. While existing studies validate the critical roles of these mechanisms, gaps remain in neural exploration, group-specific measurement, and longitudinal effect tracking. Future research should integrate interdisciplinary methods and construct campus-specific models, thereby deepening consumer behavior theory for Generation Z and providing scientific evidence for precision marketing strategies in fragmented media environments.

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