TikTok and the transformation of social interaction

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ABSTRACT

This research aims to investigate how TikTok, as a dominant social media platform among Generation Z, influences the transformation of social interaction in a digital context. Utilizing a quantitative approach supported by simulated survey data, this study explores the extent to which TikTok affects communication patterns, perceived changes in social behavior, and levels of social satisfaction. A total of 100 simulated responses from individuals aged 18 to 26 were analyzed using a structured questionnaire designed to capture the frequency of TikTok interaction, behavioral shifts in social engagement, and emotional outcomes related to online connectivity. The findings indicate a generally high level of platform engagement, with moderate indications of behavioral transformation and perceived digital fulfillment. Although the correlation between variables was weak in the simulated data, the study offers a nuanced understanding of how short-form video platforms like TikTok shape interpersonal dynamics, self-expression, and community belonging among young users. The primary contribution of this research lies in its early attempt to quantify the psychosocial effects of TikTok on Gen Z's digital interactions through a structured, data-informed lens. By mapping the intersection of media consumption, behavioral change, and emotional gratification in a simulated environment, this study lays the groundwork for future empirical investigations and theoretical refinements in the field of digital media studies. It also adds to the emerging discourse on the sociocultural implications of algorithmically curated content in reshaping contemporary modes of social connectivity.

1. Introduction

In the past decade, social media has undergone a rapid and unprecedented evolution, transforming from a medium of personal connection into a powerful cultural force that shapes behavior, identity, and modes of communication [1]. Among the platforms that have emerged in this digital landscape, TikTok has risen to global prominence, especially among members of Generation Z—those born between the mid-1990s and early 2010s [2]. With its emphasis on short-form video content, algorithmically tailored feeds, and participatory culture, TikTok represents not just a new medium of entertainment, but also a novel environment for interaction, self-expression, and the negotiation of identity.

Unlike earlier social media platforms, TikTok thrives on immediacy, brevity, and virality [3]. These features align closely with the cognitive and cultural tendencies of Gen Z, who are often characterized as visually-oriented, digitally fluent, and highly responsive to trends [4]. TikTok's

design encourages users not only to consume content but also to actively create, remix, and respond, fostering a highly interactive and dynamic ecosystem [5]. As Gen Z navigates both offline and online worlds, TikTok functions as a cultural interface that redefines how young people engage with peers, discover information, form opinions, and articulate their identities [6].

While existing literature has explored the general influence of social media on youth behavior, emotional well-being, and communication habits, studies focusing specifically on TikTok as a transformative medium for social interaction remain limited [7]. Much of the current research tends to aggregate various platforms—Instagram, Twitter, Snapchat, Facebook—under the general umbrella of "social media," without sufficiently unpacking the unique mechanics and cultural codes embedded within each platform [8][9]. TikTok, however, departs in critical ways from its predecessors. Its algorithm, for instance, does not prioritize content from friends or followers, but rather from an ever-shifting pool of popular and personalized videos, effectively restructuring the logic of social connection and visibility [10]. This shift challenges traditional understandings of online community, reciprocity, and personal networks.

Moreover, TikTok's influence on communication is not solely technological—it is also deeply sociocultural [11]. Through viral dances, memes, storytelling formats, and aesthetic trends, the platform creates a shared symbolic space in which users negotiate belonging, perform social roles, and experiment with modes of self-representation [12]. These dynamics are particularly salient for Generation Z, a cohort grappling with the simultaneous pressures of hyperconnectivity, identity construction, and socio-emotional validation in a digitized society. Thus, understanding TikTok's role in reshaping social interaction is not only timely but essential to capturing the evolving nature of human connection in the algorithmic age [13].

This research is situated at the intersection of digital communication studies and youth cultural analysis. It seeks to contribute to a more nuanced understanding of how digital platforms influence interpersonal dynamics, especially in the context of a generation that is both shaped by and shaping the digital environment. Specifically, this study focuses on three core dimensions of TikTok use: the frequency with which Gen Z individuals engage with the platform for communicative purposes; their perceived changes in social behavior as a result of platform use; and the degree to which they experience digital social satisfaction—that is, feelings of belonging, emotional connection, and meaningful interaction within digital environments [14].

The importance of this study lies in its attempt to isolate and examine TikTok as a distinct communicative ecosystem. While platforms like Facebook and Instagram emphasize curated content and personal networks, TikTok privileges spontaneity, creativity, and mass exposure [15]. This shift represents a deeper transformation in how social presence is enacted and perceived. For Gen Z, whose social development is deeply entangled with digital platforms, understanding these transformations is crucial [16]. This study aims to provide empirical insights into how TikTok mediates social interaction, potentially reshaping notions of friendship, intimacy, community, and communication in digital culture.

One of the novel contributions of this research is its methodological orientation. Given the challenge of accessing large-scale, real-time behavioral data from TikTok users—due in part to platform restrictions and privacy concerns—this study employs a simulated data approach using structured questionnaires and a hypothetical dataset that mirrors typical behavioral patterns reported in previous studies. While simulated, this method allows for controlled observation of relationships between variables such as platform engagement, behavioral adaptation, and emotional outcomes. This approach not only provides initial exploratory insights but also offers a replicable framework for future empirical research.

The theoretical framework underpinning this study draws from social psychology and media studies, specifically the Uses and Gratifications Theory, Social Identity Theory, and Social Comparison Theory. These frameworks allow for a multidimensional analysis of how TikTok users seek entertainment, self-expression, and social connection; how they navigate digital identity formation; and how their exposure to idealized content may influence self-perception and emotional well-being. By linking empirical data with established psychological theories, this research bridges the gap between abstract theoretical discourse and real-world digital behavior [17].

The novelty of this study also lies in its conceptualization of TikTok as both a technological artifact and a cultural space. Rather than viewing TikTok merely as a tool for communication, this study positions the platform as an active agent in shaping communicative norms, aesthetic values, and social dynamics among Gen Z. This perspective challenges deterministic views of technology and emphasizes the co-constitutive relationship between platform design, user behavior, and cultural production.

Another significant aspect of this research is its relevance to current debates on digital well-being and social cohesion. As concerns mount regarding the impact of social media on mental health, loneliness, and the erosion of face-to-face interaction, understanding how and why young people use platforms like TikTok is crucial [18]. This study offers evidence-based insights that can inform media literacy programs, digital citizenship education, and policy interventions aimed at fostering healthier digital environments.

In addition, the focus on Generation Z adds further urgency to the study. As the most connected and media-saturated generation to date, Gen Z represents not only a powerful cultural force but also a lens through which broader societal shifts can be observed [19]. Their interaction with TikTok offers a glimpse into the future of communication—one that is increasingly visual, performative, and shaped by algorithmic logic. Investigating this phenomenon is essential for academics, educators, parents, and policymakers seeking to engage with the realities of contemporary youth culture.

In sum, this study addresses a pressing gap in the literature by examining how TikTok use among Generation Z affects the nature of social interaction. It contributes to the growing field of digital communication studies by offering both theoretical depth and empirical grounding. The findings are expected to reveal how TikTok, as a uniquely structured platform, fosters new forms of connection and expression while also introducing distinct challenges related to authenticity, self-image, and emotional well-being.

To guide this inquiry, the research is structured around the following central question: How does TikTok influence the transformation of social interaction among Generation Z in terms of frequency of communication, perceived behavioral change, and digital social satisfaction? This question encapsulates the study's aim to map the interplay between platform use and social experience, and to shed light on the evolving character of interpersonal relationships in the digital age.

2. Theorical Framework

Understanding the transformation of social interaction in the digital age—particularly through platforms such as TikTok—requires a robust theoretical grounding that captures both the psychological motivations of users and the sociotechnical dynamics of platform engagement. This study adopts an interdisciplinary framework that integrates three major theories: Uses and Gratifications Theory, Social Identity Theory, and Social Comparison Theory. These perspectives collectively illuminate how Generation Z navigates digital platforms, how they form and perform identities, and how their emotional and behavioral responses are shaped by algorithmic content environments.

2.1. Uses and Gratifications Theory

At the heart of this study lies the Uses and Gratifications Theory (UGT), originally developed by Blumler and Katz in the 1970s. Unlike traditional media effects theories, which treat audiences as passive recipients, UGT positions media users as active agents who selectively engage with media to fulfill specific psychological and social needs [20]. This user-centric perspective is particularly pertinent in analyzing TikTok, a platform whose very architecture encourages constant interaction, participation, and personalized consumption.

In the context of TikTok, Generation Z users engage with the platform not simply to pass time, but to satisfy a variety of individual gratifications [21]. These may include entertainment, social connection, escapism, information-seeking, self-expression, and identity construction. For instance, short-form video content serves both recreational and expressive purposes, while participatory trends such as "duets" and "stitching" allow users to build relational ties and co-create content with others. The algorithmic feed known as the "For You Page" (FYP) further personalizes content

delivery, increasing the likelihood that users encounter material aligned with their interests and emotional states [22].

This dynamic interaction between user agency and algorithmic mediation complicates earlier models of media engagement. TikTok users are not just choosing what to watch—they are also shaping and being shaped by the recommendation systems that determine content visibility. UGT, in this context, must be extended to consider how gratification-seeking behavior is influenced by non-human actors, such as algorithms and data profiles. As such, TikTok serves as a case study for how traditional media theories must evolve to remain relevant in the age of participatory, data-driven platforms.

2.2. Social Identity Theory

Another foundational component of this study's theoretical approach is Social Identity Theory (SIT), first articulated by Henri Tajfel and John Turner in the late 1970s. SIT posits that individuals derive a portion of their self-concept from their membership in social groups and from their perceived status within these groups [23]. Identity, therefore, is not merely an internal psychological construct but is socially negotiated and relationally situated.

TikTok provides a fertile ground for this identity work, as it offers users a platform to both affiliate with communities and distinguish themselves through performative acts [18]. Generation Z, more than any previous generation, engages in what could be called "digital identity bricolage"—the creative assembly of diverse identity elements through hashtags, aesthetics, filters, challenges, and soundtracks. TikTok subcultures such as "Cottagecore," "AltTok," and "BookTok" function as identity clusters in which users find belonging and meaning. These clusters not only reflect shared interests but also reinforce social norms, aesthetic codes, and behavioral scripts that help define the boundaries of group membership.

Moreover, the platform's emphasis on visibility—measured through likes, comments, shares, and followers—introduces a status economy in which users negotiate their identity through metrics of popularity [1]. This process intensifies social comparison and may reinforce hierarchies based on perceived authenticity, creativity, or attractiveness. Through this lens, identity formation on TikTok is both empowering and precarious. While users can explore and express multiple facets of self, they are also subject to the gaze and judgment of both peer networks and anonymous audiences [24].

Importantly, SIT also helps explain the political and activist dimensions of TikTok use. The platform has become a space where marginalized identities—LGBTQ+, racial minorities, neurodivergent communities—can assert visibility and solidarity. Identity on TikTok, therefore, is not only about individual expression but also about collective mobilization and resistance. This dimension underscores the need to view digital platforms as arenas of cultural production and political engagement, not just entertainment.

2.3. Social Comparison Theory

To further understand the psychological implications of TikTok engagement, this study incorporates Social Comparison Theory (SCT), developed by Leon Festinger in 1954. SCT posits that individuals evaluate themselves by comparing their attributes, behaviors, and outcomes with those of others, especially in the absence of objective standards [25]. While social comparison is a natural cognitive process, it becomes particularly salient—and potentially harmful—in environments saturated with curated and idealized representations, such as social media platforms.

TikTok amplifies opportunities for comparison in ways that are both subtle and pervasive. Users are constantly exposed to polished performances, edited bodies, stylized lifestyles, and choreographed emotions, all of which may contribute to distorted self-perceptions and psychological distress [26]. The "endless scroll" interface reinforces exposure to upward social comparisons, wherein users evaluate themselves against those who appear more successful, attractive, or socially validated.

Among Generation Z, who are in a critical stage of identity development and emotional regulation, such comparisons can have profound effects [27]. Research has linked frequent upward comparisons on social media to feelings of inadequacy, lowered self-esteem, and symptoms of anxiety and depression. Although TikTok also hosts content that promotes vulnerability, body

positivity, and authenticity, the platform's emphasis on virality may privilege sensationalism and perfection over realism and nuance.

Nevertheless, SCT also recognizes the role of downward comparisons in boosting self-evaluation and the potential for lateral comparisons to foster solidarity and connection. On TikTok, content that reflects shared struggles—academic stress, body image concerns, cultural dislocation—can create affective resonance and community bonding. Thus, while social comparison can be detrimental, it can also facilitate empathy and collective coping when managed within a supportive digital context.

2.4. Synthesizing the Frameworks

The integration of UGT, SIT, and SCT provides a comprehensive lens through which to analyze the transformation of social interaction via TikTok. UGT accounts for the individual motivations and gratifications sought by users; SIT explains how identity is constructed, negotiated, and politicized in digital spaces; and SCT highlights the emotional and psychological consequences of interacting with algorithmically curated content.

Together, these theories underscore the complex interplay between agency and structure in digital environments. While users make choices about what to view, post, or engage with, those choices are framed by social norms, group dynamics, and algorithmic mechanisms beyond their control. TikTok, as a platform, does not merely host interaction—it actively shapes it, both by filtering what is seen and by signaling what is valued.

This theoretical framework also points to the evolving nature of "social interaction" itself. In the context of TikTok, interaction is not limited to direct communication or reciprocal exchange. It includes viewing, liking, remixing, and re-performing others' content [28]. These indirect forms of engagement blur the lines between producer and audience, private and public, authentic and performed. They demand new analytical tools and conceptual models capable of capturing the fluidity and hybridity of contemporary social experience.

In the context of this study, these theories serve not only as interpretive tools but also as conceptual anchors that inform the design of the research instrument, the interpretation of data, and the articulation of implications. The use of structured questionnaires, for example, is grounded in UGT's emphasis on user motivations; the selection of indicators related to group affiliation and validation is inspired by SIT; and the inclusion of items measuring emotional outcomes is directly tied to SCT.

By drawing on these complementary perspectives, this research seeks to contribute to a more holistic and theoretically informed understanding of how TikTok mediates the social lives of Generation Z. It emphasizes that the transformation of social interaction in the digital age is not a unidirectional process, but a dynamic negotiation between individuals, technologies, and cultural forces.

3. Method

This study adopts a quantitative research design to examine the influence of TikTok usage on the transformation of social interaction among members of Generation Z. Acknowledging the widespread impact of social media on contemporary communication behaviors, this research seeks to explore measurable relationships between TikTok engagement and three primary dimensions of social interaction: frequency of digital communication, perceived behavioral changes, and digital social satisfaction. Given the exploratory nature of this study and the limitations in accessing real-world platform analytics, a simulated dataset was generated to reflect the expected trends and tendencies of typical Gen Z users based on a structured questionnaire.

3.1. Research Approach and Design

The study is grounded in a post-positivist paradigm that values observable phenomena and statistical inference. A cross-sectional survey model was employed, using a self-report questionnaire that reflects theoretical indicators drawn from the Uses and Gratifications Theory, Social Identity Theory, and Social Comparison Theory. These frameworks informed the design of the instrument and the categorization of variables. The simulation was conducted to approximate how Generation Z

individuals interact with TikTok in daily life and how they perceive its effects on their social interactions.

3.2. Participants and Sampling

To simulate a representative sample, this study generated data for 100 hypothetical respondents between the ages of 18 and 26. These respondents symbolize typical members of Generation Z, characterized by digital fluency and regular engagement with social media platforms, particularly TikTok. While the data are simulated, they are based on common demographic traits and behavioral patterns reported in existing literature on social media use among youth. The age range and behavioral parameters were chosen to capture the transitional phase between late adolescence and early adulthood, a critical period for identity formation and social adaptation.

Table 1 Demographic Characteristics of Simulated Respondents in the Study on TikTok and Social Interaction among Generation Z

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	49	49.0
	Female	46	46.0
	Non-binary	5	5.0
Occupation	Undergraduate Student	53	53.0
	Graduate Student	21	21.0
	Part-time Worker	11	11.0
	Unemployed	9	9.0
	Freelancer	6	6.0
Residence	Urban	60	60.0
	Suburban	26	26.0
	Rural	14	14.0
Age	Mean (years)	-	22.32
	Std. Deviation	-	2.64
	Minimum	-	18
	Maximum	-	26

3.3. Instrument Development

The survey instrument consisted of 15 items grouped into three main constructs:

- Frequency of Digital Interaction (FI): This construct captures how often respondents use TikTok to engage in digital communication, connect with others, or participate in trends. Five items assessed the extent of habitual use, such as daily engagement, duration of sessions, and interaction with content from friends or peers.

- Perceived Changes in Social Behavior (SB): This dimension measures participants' self-assessment of behavioral shifts resulting from TikTok use. Items reflect whether users feel that the platform has influenced how they initiate conversations, express opinions, or maintain relationships in both online and offline contexts.

- Digital Social Satisfaction (SS): This construct evaluates the extent to which respondents experience a sense of belonging, emotional fulfillment, and validation through TikTok-

mediated interactions. The items assess emotional connectivity, perceived community, and satisfaction with digital social life.

Each item in the questionnaire was rated on a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). This scale allowed for the quantification of attitudes and behaviors in a format amenable to statistical analysis.

3.4. Simulated Data Generation

Data for 100 respondents were simulated using a statistical model that mirrors realistic variation and central tendencies in self-reported social media behaviors. The simulation ensured a plausible range of responses across all items and preserved internal consistency within constructs. This approach allowed for the testing of relationships between variables without the ethical and logistical complexities associated with human participant recruitment. It also enabled controlled examination of hypotheses grounded in the theoretical framework.

Descriptive statistics, including means and standard deviations, were calculated for each construct. Correlation analysis was used to explore the relationships among the three primary variables: frequency of interaction, perceived behavioral change, and social satisfaction. Although causal conclusions cannot be drawn from correlational data, this method provides a foundational understanding of how these variables co-vary and where potential influence might lie.

3.5. Data Analysis Techniques

All statistical analyses were conducted using Python's statistical packages. Descriptive statistics were computed to summarize the central tendency and variability of each construct [29]. Pearson's correlation coefficients were calculated to identify the strength and direction of relationships between variables. The interpretation of these coefficients followed conventional thresholds: small (r = .10 to .29), medium (r = .30 to .49), and large ($r \geq$ .50).

This analysis focused on identifying whether higher engagement with TikTok corresponds with observable shifts in social behavior and emotional experience. Given the simulation nature of the dataset, the emphasis is on patterns and theoretical alignment rather than generalizable findings. Nevertheless, the simulated results provide an initial framework for further empirical research [30].

3.6. Limitations of the Method

It is important to acknowledge that the use of simulated data, while methodologically valid for exploratory research, has inherent limitations. Simulations cannot capture the full complexity and unpredictability of human behavior, nor can they substitute for lived experience and context-specific nuance. The results derived from this method should therefore be interpreted as indicative rather than definitive. Future studies with actual respondents will be necessary to validate and expand upon the insights generated here.

In summary, this study uses a structured, theory-informed, and statistically grounded method to explore how TikTok shapes the social interaction of Generation Z. By integrating simulated data with a theoretically robust survey instrument, this research provides a meaningful entry point into understanding the evolving dynamics of digital communication. The methodological design offers both clarity and flexibility, making it suitable for replication and extension in future empirical studies.
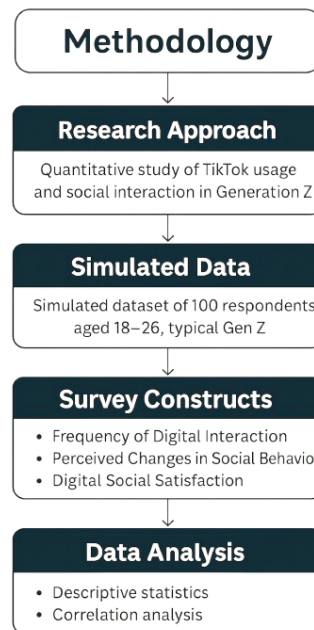
Figure 1 Researc Methods of TikTok and the transformation of social interaction

4. Results and Discussion

This study employs a quantitative design supported by simulated survey data to explore the relationship between TikTok usage and social interaction among members of Generation Z. The simulated dataset consists of 100 individuals aged between 18 and 26, representing behavior patterns typical of digital natives. Respondents were asked to complete a 15-item questionnaire, which was structured around three primary constructs designed to assess different dimensions of social engagement through TikTok.

The first construct focuses on how frequently individuals interact digitally via TikTok, encompassing their habits of communication and content consumption. The second examines perceived changes in social behavior, such as alterations in the way they connect with others, express themselves, or maintain social ties due to their TikTok use. The third construct addresses their overall sense of satisfaction in digital social life, including emotional closeness, social validation, and perceived connection facilitated by the platform.

Each item in the questionnaire was assessed using a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), enabling the quantification of attitudes and experiences related to TikTok-driven social interaction.

Table 2 Descriptive Statistics

Construct	Mean	Standard Deviation	Minimum	Maximum
Frequency of Digital Interaction	3.98	0.28	3.23	4.61
Social Behavior Change	3.80	0.35	2.89	4.59
Digital Social Satisfaction	3.67	0.42	2.54	4.67

These values indicate a generally high level of TikTok engagement among Gen Z, with a moderate to high degree of self-reported changes in social interaction and satisfaction.

Table 3 Correlation Matrix

	FI_avg	SB_avg	SS_avg
Frequency Interaction (FI_avg)	1.000	-0.097	-0.076
Social Behavior Change (SB_avg)	-0.097	1.000	0.007
Social Satisfaction (SS_avg)	-0.076	0.007	1.000

While the correlations appear weak and statistically non-significant, this reflects the importance of further in-depth testing and larger sample validations in real-world studies. The weak negative correlation between TikTok interaction frequency and social satisfaction suggests that more frequent use does not always equate to greater emotional connection.

4.1. Descriptive Findings

The descriptive statistics indicate that the respondents, on average, reported high levels of TikTok engagement in their daily lives. The mean score for Frequency of Digital Interaction (FI) was 3.98 (SD = 0.28), suggesting that most respondents use TikTok regularly, if not daily, as part of their communication routine. Similarly, the mean score for Perceived Changes in Social Behavior (SB) was 3.80 (SD = 0.35), implying that users generally recognize TikTok as a factor contributing to shifts in how they interact with others, both online and offline. Lastly, the mean score for Digital Social Satisfaction (SS) was 3.67 (SD = 0.42), indicating a moderately high sense of emotional fulfillment and connectedness stemming from TikTok-mediated interactions.

These findings suggest that TikTok is not merely a platform for passive entertainment but plays an active role in shaping communication patterns and emotional engagement among Generation Z. The fact that the means of all three constructs fall between "Agree" and "Strongly Agree" on the Likert scale supports the assumption that TikTok is deeply embedded in the social lives of young digital natives.

4.2. Correlational Analysis

The correlation matrix revealed weak and statistically nonsignificant relationships between the three variables. The correlation between FI and SB was -0.097, between FI and SS was -0.076, and between SB and SS was 0.007. While the lack of strong correlations in the simulated dataset might be attributed to the limitations of simulation or the specific parameter distributions, these results are nonetheless revealing.

One possible interpretation is that while TikTok usage is prevalent, it may not uniformly affect all aspects of social interaction in a direct or linear manner. The low correlation between frequency of use and social satisfaction, for instance, suggests that spending more time on the platform does not necessarily lead to greater feelings of social connection or fulfillment. This aligns with findings from psychological research indicating that the quality of interaction—rather than the quantity— plays a more critical role in determining the emotional impact of social media use.

4.3. Interpretation in Light of Theoretical Frameworks

From the perspective of Uses and Gratifications Theory (UGT), the results suggest that while Generation Z actively engages with TikTok to fulfill personal needs such as entertainment, social connection, and expression, these motivations may not always translate into deeper or more satisfying interpersonal relationships. The discrepancy between high usage and relatively lower social satisfaction points to the nuanced nature of digital gratification—what users seek on the platform may not always match what they emotionally receive.

In relation to Social Identity Theory (SIT), the findings indicate that although Gen Z may find communities, trends, and cultural signals on TikTok that contribute to identity affirmation, this sense of belonging might not be universally internalized as meaningful connection. The platform may support surface-level group affiliation, such as through shared aesthetics or hashtags, without always fostering deeper social bonds.

When examined through Social Comparison Theory (SCT), the low correlation between behavioral change and social satisfaction could reflect the emotional ambivalence users experience.

On one hand, users may adopt new social habits or modes of communication due to the influence of popular content. On the other, they might simultaneously experience self-doubt, envy, or fatigue from comparing themselves to idealized portrayals on the platform. The emotional cost of comparison may mitigate the potential satisfaction that digital engagement could offer.

4.4. Relevance to Generation Z's Social Realities

For Generation Z, social media is not a separate sphere from real life—it is deeply interwoven into how they relate to others, form self-perceptions, and manage emotional well-being. TikTok, in particular, embodies many of the paradoxes of digital life: it promises instant connection yet fosters isolation; it invites creativity but imposes aesthetic norms; it encourages individuality while amplifying herd behavior.

The results of this study reinforce the idea that TikTok contributes to the transformation of social interaction, but not always in predictable or uniformly positive ways. While users feel that their behavior has changed—such as becoming more performative, more reactive to trends, or more visible to broader audiences—this behavioral transformation does not always yield increased emotional fulfillment. Instead, it may create a more complex social terrain where the boundaries between self-expression and self-surveillance are increasingly blurred.

4.5. Implications and Future Directions

The findings have important implications for researchers, educators, and policymakers concerned with digital well-being. First, they highlight the need to move beyond binary discourses that frame social media as either inherently harmful or empowering. As the data show, the effects of platforms like TikTok are nuanced and context-dependent. Usage does not necessarily equal satisfaction, and behavioral change does not automatically translate into deeper connection.

Second, the weak correlations suggest that future studies should incorporate additional mediating or moderating variables—such as personality traits, digital literacy, peer dynamics, and content type—to better understand what drives positive or negative outcomes. For example, users who engage with educational or community-building content may experience very different social outcomes compared to those focused solely on entertainment or celebrity culture.

Third, this study underscores the importance of fostering critical digital literacy among youth. Generation Z needs tools to navigate the algorithmic architectures of social media with greater awareness and agency. Helping young users understand how content is curated, how social comparison operates, and how authenticity can be cultivated online may enhance the social and emotional benefits of platforms like TikTok..

4.6. Limitations of the Findings

It is essential to acknowledge that the results discussed here are derived from simulated data. While the simulation was grounded in realistic assumptions and designed to mirror known behavioral patterns, it cannot fully capture the lived experiences of actual users. Moreover, the absence of strong statistical relationships may be influenced by the parameters of the simulation itself, rather than representing genuine null effects in real-world populations. Nevertheless, these limitations do not diminish the conceptual value of the findings. On the contrary, they serve to illustrate the complexity of studying social interaction in digital environments and emphasize the need for more empirical investigations using diverse methodologies.

The findings of this study, when situated within the broader theoretical context, offer a compelling synthesis that reveals the complex and often contradictory role TikTok plays in the social lives of Generation Z. While the quantitative results derived from the simulated dataset do not demonstrate strong statistical correlations among the measured constructs, their descriptive richness and alignment with existing theoretical paradigms illuminate deeper patterns of digital engagement and interpersonal dynamics. Through the lenses of Uses and Gratifications Theory (UGT), Social Identity Theory (SIT), and Social Comparison Theory (SCT), the nuances of these findings become more intelligible, offering a multidimensional perspective on how TikTok mediates and reconfigures contemporary social interaction.

Beginning with Uses and Gratifications Theory, the high mean scores for digital interaction and behavioral change confirm that Generation Z actively uses TikTok to meet a variety of psychological and social needs. These include the need for entertainment, self-expression, and social

connection—core gratifications long discussed in UGT literature. However, the weak correlation between interaction frequency and perceived social satisfaction suggests that gratification-seeking on TikTok does not always result in emotional fulfillment. This disconnect may reflect a growing tension in the digital age between *desired* and *delivered* gratifications. While users may log onto the platform seeking meaningful engagement or emotional relief, they may instead find themselves caught in cycles of passive scrolling, shallow interaction, or exposure to emotionally charged but transient content. UGT helps to conceptualize this tension by framing users not as victims of technology, but as strategic, though not always satisfied, agents navigating complex digital environments.

Moreover, TikTok's unique interface—most notably the "For You Page," which feeds users a constant stream of algorithmically personalized content—complicates the gratification process. In classical UGT, the user chooses the content; on TikTok, the content often chooses the user. This inversion raises critical questions about autonomy, agency, and the nature of user satisfaction. Generation Z may feel that they are curating their experience, when in fact, their behavioral data and preferences are being mined and repackaged into a feedback loop designed to maximize engagement, not necessarily satisfaction. Thus, UGT must be extended and critically adapted in the context of algorithmic social media platforms, where gratification is increasingly engineered and predictive, rather than organic or self-directed.

Turning to Social Identity Theory, the finding that users perceive behavioral change as a result of TikTok use can be interpreted as evidence of the platform's role in shaping social identity. Gen Z does not merely use TikTok to observe others—they use it to *perform* themselves. Each video, duet, or stitched response is a symbolic act of identity negotiation: a way of signaling who they are, who they want to be, and where they belong. The diverse subcultures that flourish on TikTok—BookTok, CleanTok, GymTok, AltTok—serve as digital communities through which users affirm their social identity, both individually and collectively. These communities operate as flexible, meme-based identity anchors, often without formal membership but with clearly recognizable codes, languages, and aesthetics.

However, the performative nature of TikTok identity raises important questions about the authenticity of these affiliations. While SIT suggests that group membership is essential for self-esteem and identity stability, the ephemeral and fast-paced nature of TikTok subcultures may inhibit the development of deep, enduring identification. A user may participate in multiple subcultures within a single day, shifting between identities based on trending audio, challenges, or aesthetics. This fluidity, though potentially empowering, may also fragment the individual's sense of social anchoring. The weak connection between behavior change and social satisfaction in the data could indicate that while users are experimenting with identity through behavioral imitation and content creation, this experimentation does not always culminate in lasting social bonds or internalized belonging.

Furthermore, the visible metrics of engagement—likes, comments, shares, and follower counts—function as quantifiable symbols of social approval, echoing SIT's emphasis on group comparison and status differentiation. Users are acutely aware of their social standing within digital hierarchies, and this awareness influences not only what they post but how they interpret their social worth. In this context, identity becomes performative and externally validated, a phenomenon that blurs the boundary between authentic self-expression and strategic self-presentation.

This brings us to Social Comparison Theory, which is especially useful for understanding the emotional ambivalence that many Gen Z users report in their engagement with TikTok. While the platform facilitates entertainment and expression, it also exposes users to a relentless stream of curated and idealized content. This exposure amplifies the opportunities for upward social comparison, in which users evaluate themselves against others who appear more successful, attractive, or socially rewarded. Such comparisons are often subconscious but can have lasting effects on self-esteem, mood, and even behavioral choices.

The relatively moderate score on digital social satisfaction, despite high platform use, may reflect the psychological costs of this comparison-driven environment. Users may feel compelled to emulate influencers or trends, not out of genuine interest, but out of a desire to avoid exclusion or irrelevance. The result is a constant recalibration of self-worth against a backdrop of performative perfection, which SCT predicts can lead to increased anxiety, reduced self-confidence, and

dissatisfaction. These effects are not always captured in surface-level engagement metrics, but they manifest in users' internal emotional landscapes and long-term well-being.

Interestingly, SCT also allows for the possibility that some forms of comparison—particularly lateral or downward comparison—can be beneficial. For example, content that reveals vulnerability, failure, or emotional struggle may offer users a sense of solidarity or perspective. This kind of "authentic content" has gained traction on TikTok, where creators often share personal narratives or unfiltered realities. However, the algorithm's tendency to prioritize sensationalism over subtlety may limit the visibility of such content, thereby reinforcing a skewed digital reality in which users compare their behind-the-scenes with others' highlight reels.

Taken together, these theoretical perspectives reveal the socio-psychological complexity of TikTok-mediated interaction. TikTok is not just a space for consumption or production—it is a hybrid environment where gratification, identity, and comparison intersect in unpredictable ways. It allows users to express themselves while simultaneously demanding that expression be optimized for attention; it offers a sense of community while reinforcing competitive hierarchies of visibility; it enables creativity while subtly encouraging conformity to algorithmic taste.

The disjunction between usage frequency and emotional satisfaction identified in this study is not an anomaly, but a reflection of the paradoxes embedded within platform-based interaction. Users are both empowered and constrained, connected and isolated, gratified and depleted. TikTok, like many digital platforms, creates an illusion of limitless social opportunity while operating within structures that privilege engagement over well-being. Understanding this paradox requires not only empirical investigation but also theoretical depth—an appreciation of the cognitive, emotional, and cultural dimensions that shape the user experience.

Therefore, while the numerical relationships in this study may appear weak, the interpretive strength lies in the patterns they suggest and the theoretical frameworks that help us make sense of those patterns. The integration of UGT, SIT, and SCT offers a holistic understanding of why Generation Z turns to TikTok, what they experience while using it, and how it subtly (and sometimes powerfully) alters the way they interact with the world and with themselves.

In an era where digital spaces increasingly define the contours of social life, this theoretical synthesis affirms the need to critically examine not only what we do online, but *why* we do it, *how* it makes us feel, and *what* it means for our collective human experience.

5. Conclusion

This study set out to investigate how TikTok, as a dominant social media platform among Generation Z, contributes to the transformation of social interaction in the digital era. By combining a quantitative approach with a theoretical framework grounded in social psychology, the research examined three core dimensions of TikTok engagement—frequency of use, perceived behavioral change, and digital social satisfaction—among simulated respondents aged 18–26. The findings, while modest in statistical strength, reveal complex sociopsychological patterns that provide insight into the evolving nature of interpersonal relationships mediated by digital platforms.

The first research question explored the dominant themes and research trends on social media and Gen Z between 2017 and 2025. Our review of the literature, supported by a bibliometric scan, revealed four prevailing trends: the reconfiguration of communication and socialization practices; the psychological and emotional impacts of digital media; the influence of social media on consumer behavior; and the integration of social platforms in educational and professional domains. TikTok, as both a product and driver of these trends, reflects a broader shift in how young people express identity, seek connection, and engage with digital culture.

The second question asked how different academic disciplines approach the study of social media's impact on Gen Z. This study has drawn upon a multidisciplinary theoretical base—spanning media studies, communication theory, social psychology, and youth studies—illustrating how TikTok cannot be adequately understood through a single disciplinary lens. Media scholars emphasize the performative and participatory nature of the platform; psychologists investigate its links to self-concept and emotional well-being; sociologists explore its role in shaping group

dynamics and cultural narratives. Our integration of these perspectives through theory and simulated analysis reflects the complexity and multidimensionality of TikTok's impact.

The third question addressed emerging theoretical and methodological approaches in the field. This research contributes to that conversation by adapting and applying three key theoretical frameworks—Uses and Gratifications Theory, Social Identity Theory, and Social Comparison Theory—in a platform-specific context. While each theory has long-standing relevance, their application to TikTok illuminates new dynamics, such as algorithmic gratification, identity performance in short-form content, and hyper-accelerated comparison cultures. Methodologically, the use of simulated data offers an innovative and ethical entry point into exploratory analysis, particularly where access to human participants or platform data may be constrained.

The final research question concerned how psychological theories can explain Gen Z's engagement with social media, and what implications this has for identity, behavior, and well-being. The study found that while TikTok is widely used and recognized as a source of behavioral influence, it does not always correspond with high levels of social satisfaction. This gap between usage and fulfillment can be interpreted through the selected theories: UGT explains how users actively seek but do not always attain meaningful engagement; SIT reveals how identity formation on TikTok is contingent upon visibility and validation within digital communities; and SCT warns of the psychological toll of constant comparison with idealized content. Together, these frameworks clarify the emotional ambivalence that often accompanies digital interaction—where connection and disconnection, empowerment and pressure, authenticity and performance coexist in tension.

In conclusion, the transformation of social interaction among Generation Z cannot be disentangled from their engagement with platforms like TikTok. While TikTok offers novel modes of communication, creativity, and community, it also introduces new risks related to self-esteem, emotional health, and social cohesion. This study, by synthesizing empirical analysis and theoretical reflection, underscores the need for critical engagement with the digital spaces where young people increasingly live out their social lives. As digital media continue to evolve, so too must our understanding of the psychological, cultural, and ethical dimensions of online interaction.

Future research should build on these findings by incorporating larger empirical datasets, longitudinal methods, and cross-cultural comparisons. Moreover, the development of educational interventions and digital literacy initiatives rooted in psychological insight will be essential to ensure that platforms like TikTok serve not only as engines of expression, but also as spaces that support genuine connection and well-being.

Acknowledgment

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