



TIKTOK ENGAGEMENT, FEAR OF MISSING OUT AND NARCISSISTIC TENDENCIES AMONG UNIVERSITY STUDENTS

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Abstract

This research shows how students driven by the Fear of Missing Out (FoMO) compulsively use TikTok to stay connected and avoid social anxiety. The platform's instant metric rewards (likes and views) then feed narcissistic traits, offering public attention for grandiose users and external validation for vulnerable ones. The current study was conducted in tehsil Jaranwala. All the students enrolled in intermediate in this college was considered as the population of this research. The sample size of the study was 200 students (1st year 100 students and 2nd year 100 students). The quantitative data was collected through questionnaire keeping in view the objectives of the study. Statistical Package for Social Sciences (SPSS) was used to calculate means; standard deviation and frequencies. It was concluded that for entertainment and enjoyment, TikTok is widely used as a social interaction platform, for creating blogs and videos, networking beyond local boundaries, sharing pictures, and watching dramas or movies. The app also serves as a medium for keeping in touch with friends and family and playing games, highlighting its role as a versatile social and entertainment tool. It was suggested that Students should limit screen time on social media to reduce emotional and psychological challenges. Educational institutions should provide counseling services to address narcissistic traits among students. Content creators on TikTok should promote positive and educational material to benefit student users.

Keywords: *Engagement, Fear of Missing Out, Narcissistic, TikTok.*

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1. Introduction

The meteoric rise of short-form video applications has completely transformed the digital landscape for university students globally, fundamentally altering how this demographic consumes media and navigates social spaces. Platforms like TikTok utilize highly sophisticated, individualized algorithmic delivery systems that capture and sustain user attention through an endless stream of brief, high-impact sensory content. This unique digital environment encourages continuous video scrolling and intense interaction commonly operationalized in contemporary media studies as high levels of TikTok engagement (Brailovskaia & Margraf, 2021).

However, this active participation frequently goes beyond mere entertainment or passive leisure; psychological evidence suggests it is heavily driven by an underlying, pervasive situational anxiety known as the Fear of Missing Out (FoMO) (Przybylski et al., 2013). This emotional state is characterized by a persistent apprehension that one's peers are having rewarding experiences from which one is absent, creating a compulsive, self-regulatory urge to remain perpetually online to avoid missing viral trends, inside jokes, or real-time peer activities. Consequently, university students who are already in a developmental stage highly sensitive to peer inclusion find themselves trapped in an endless loop of platform checking. Within this cycle, acute social anxiety directly fuels problematic application usage, transforming a voluntary recreational habit into a compulsive behavioral coping mechanism to alleviate the dread of social exclusion (Tandon et al., 2021).

Beyond broader social anxieties, the specific structural architecture of TikTok serves as an ideal, highly reactive arena for cultivating and manifesting various subclinical narcissistic tendencies. Unlike older social networking sites that rely on static text or established networks, TikTok's format centers on short-form vertical video, maximizing visual presentation and immediate, metric-driven validation. The platform relies heavily on explicit metrics such as real-time views, likes, shares, and comments alongside an aggressive algorithmic distribution system that can suddenly grant immense visibility to any user regardless of their existing follower base (Ames et al., 2006). This constant, unpredictable feedback loop appeals directly to individuals possessing grandiose narcissistic traits, who naturally seek admiration, authority, public exhibitionism, and confirmation of their perceived superiority.

Simultaneously, the platform's architecture attracts vulnerable narcissists, a distinct phenotypic expression marked by hyper-vigilance, deep-seated insecurity, and a fragile self-concept. For these individuals, digital validation acts as a psychological buffer, helping them temporarily shield themselves against low self-esteem and the fear of social rejection (Hendin & Cheek, 1997). Under the framework of Uses and Gratifications Theory, this highly visible environment transforms simple video creation or active

consumption from basic media use into a strategic, calculated effort to satisfy deep-seated psychological needs for personal recognition, validation, and ego-enhancement (Casale & Banchi, 2020).

When analyzing these variables together, a complex, integrated psychological pathway emerges among student populations in modern higher education settings. Intense TikTok engagement does not occur in a vacuum; rather, it acts as a primary behavioral manifestation where underlying personality traits and situational anxieties collide and reinforce one another within the digital space (Keles et al., 2020). According to the Compensatory Internet Use model, students experiencing high levels of FoMO utilize the application as a tool to stay socially relevant and maintain a sense of belonging. At the same time, their specific narcissistic traits—whether grandiose or vulnerable dictate the style, frequency, and emotional intensity of their self-focused content creation and metric monitoring.

This intersection of personality vulnerabilities and platform dynamics can lead to severe maladaptive outcomes, including elevated academic distraction, cognitive overload, severe emotional burnout, and an unhealthy dependency on digital peer approval for basic self-worth (Malik et al., 2021). As students dedicate increasing psychological capital to maintaining their online persona and monitoring social feedback, their real-world academic performance and psychological well-being frequently deteriorate. Ultimately, understanding this complex, interlocking relationship helps researchers and educational psychologists map out how modern social media platforms reshape student psychology, cognitive capacity, and daily interpersonal behaviors in the digital age (Rozgonjuk et al., 2021).

1.1. Rationale of the study

This study is vital because it investigates how TikTok's high-reward setup interacts directly with a student's mental health and personality. By examining these dynamics, this research will systematically uncover the underlying psychological reasons driving excessive student engagement on the platform, particularly highlighting how its intermittent reward system exacerbates the fear of missing out (FoMO). Furthermore, it aims to clarify how this digital environment simultaneously fosters and feeds both grandiose and vulnerable narcissistic tendencies through metric-driven validation. Ultimately, this investigation provides essential empirical insights to help educational psychologists and researchers mitigate the academic distraction and psychological distress associated with problematic social media use.

1.2. Objectives of the Study

1. To investigate the relationship between the Fear of Missing Out (FoMO) and the level of TikTok engagement among university students.

2. To analyze the relationship between TikTok engagement and subclinical narcissistic tendencies (grandiose and vulnerable traits) among university students.

1.3. Hypothesis

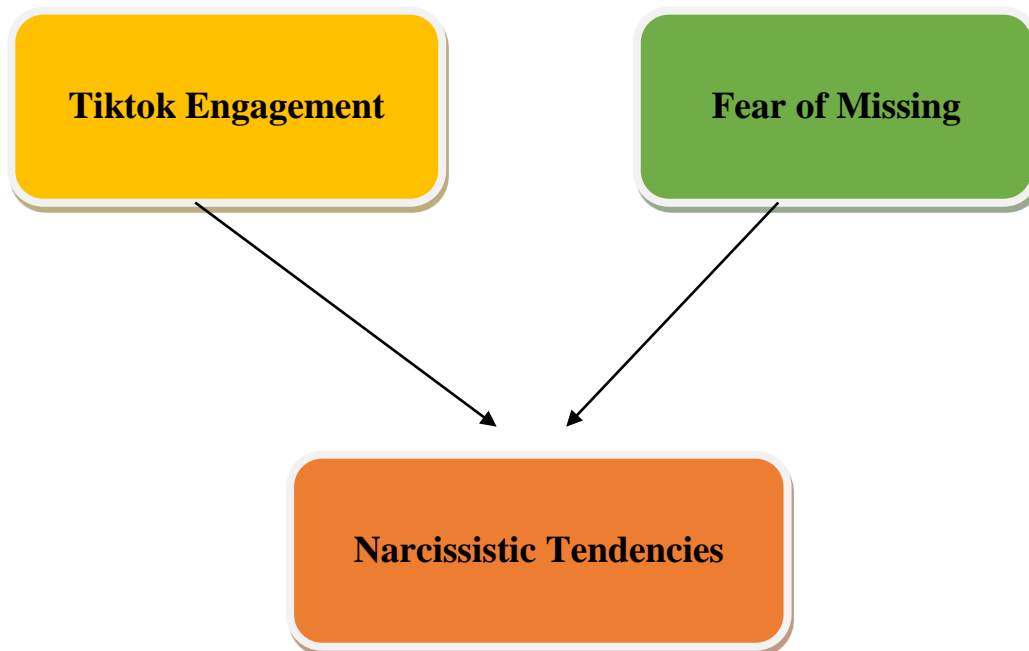
H1: There is strong correlation between students use TikTok primarily for entertainment and social relief rather than for information-gathering or academic learning.

H2: There is a significant positive relationship between the TikTok and narcissistic personality traits among students.

H3: There is a significant positive relationship between a student's Fear of Missing Out (FoMO) and their overall level of TikTok engagement.

2. Conceptualized Model of the Study

Figure 1: Conceptualized Model of the Study



3. Methodology

3.1. Research Design and Objectives

The study utilized a quantitative, correlational design specifically aimed at to analysis the Tiktok Engagement, Fear of Missing out and Narcissistic Tendencies among University Students. By investigating these variables, the research sought to determine both the direct and indirect relationships existing within this psychological framework.

3.2. Participants and Sampling

The empirical framework of this study was structured around a purposive sample of 200 intermediate college students, carefully selected from diverse educational

institutions within the Jaranwala Tehsil of the Faisalabad District. To ensure balanced academic representation and account for potential developmental transitions in digital behavior, the sample was split equally, comprising 100 students enrolled in the 1st year (higher secondary school certificate part-I) and 100 students from the 2nd year (higher secondary school certificate part-II).

3.3. Instrumentation and Data Collection

Data were gathered using self-report questionnaires. Throughout this process, confidentiality was strictly maintained, and the reliability of the tools was confirmed via pilot testing and Cronbach's alpha coefficients.

4. Instrumentation

4.1. Measuring TikTok Engagement

While generic social media scales exist, researchers typically adapt the standard Social Media Engagement Scale (SMES) or the Problematic Social Media Use Scale specifically for TikTok by replacing the term "social media" with "TikTok."

4.1.1. The TikTok Engagement Scale (Adapted from Bergen Social Media Addiction Scale / SMES) (Schou Andriassen et al. (2012) / Brailovskaia & Margraf (2021))

The TikTok Engagement Scale (adapted from the Bergen Social Media Addiction Scale) serves as a robust psychometric tool designed to evaluate the behavioral intensity, emotional investment, and potential dependency patterns of users interacting with short-form media. By measuring indicators such as cognitive salience, mood modification, and tolerance, this scale allows researchers to effectively quantify problematic platform usage among late adolescents and student populations.

4.2. Measuring Fear of Missing Out (FoMO)

The most widely accepted and heavily cited instrument in psychological literature to measure social anxiety related to online absence is the **FoMO Scale (FoMOS)**.

4.2.1. Measuring Subclinical Narcissistic Tendencies Przybylski, Murayama, DeHaan, & Gladwell (2013)

Because framework explicitly separates Grandiose and Vulnerable traits, that isolate these two distinct psychological phenotypes.

4.2.2. For Grandiose Narcissism (Ames, Rose, & Anderson, 2006)

To keep your questionnaire brief enough for intermediate or university students (N = 200) without causing survey fatigue, the short form of the Narcissistic Personality Inventory is recommended.

4.2.3. For Vulnerable Narcissism (Hendin & Cheek, 1997)

Unlike grandiose narcissists, vulnerable individuals express their narcissism through hypersensitivity, defensiveness, and quiet entitlement. The HSNS is the academic gold standard for this trait.

4.3. Measuring Narcissistic Personality Traits

The study focuses on a student population, you should measure narcissistic traits along a spectrum rather than attempting to diagnose clinical NPD.

4.3.1. The Hypersensitive Narcissistic Scale (HSNS) (Kelly et al., 1997)

While the NPI measures grandiose narcissism (overt, attention-seeking), TikTok engagement can also be linked to vulnerable narcissism (hypersensitivity, defensiveness, and seeking constant online validation to mask low self-esteem).

4.3.2. The Narcissistic Personality Inventory-16 (NPI-16) (Daniel et al., 2006)

It is the most widely used scale in social science research to measure subclinical narcissism (authority, self-sufficiency, superiority, and exhibitionism) in college and university students.

5. Procedure and Ethical considerations

Data collection procedure was completed in approximately 2 weeks. Facts and figures about effects of narcissism were taken by the responses of respondents. Each respondent was contacted personally and administered the questionnaire. Questionnaire was thoroughly explained to clear any ambiguity regarding the constructed items. After this hard struggle the data were collected to enhance the exact and current situation of these institutes. Statistical analysis was performed using SPSS (Version 26). The researchers applied descriptive statistics and reliability analysis to the data set. To explore the connections between narcissism personality disorder and Tik Tok.

Participants might feel coerced into participating if the survey is distributed during class time, or they may not fully understand how their digital habits are being analyzed. Social media usage and self-presentation traits can be highly personal. If a student's responses (e.g., admitting to high TikTok dependency or attention-seeking behaviors) are linked back to their real identity, it could compromise their social or academic life. More over the respondents keep in mind the respect of every student because in the respondents male were included as the sample. Due to this discrimination the researcher personally focus on how to make the difference through which the data were collected without any ambiguity.

6. Results and Data Analysis

This chapter presents the comprehensive findings derived from the statistical analysis of the collected data. The primary objective of this chapter is to systematically report the results that address the research questions and test the hypotheses outlined in Chapter 1. The data collected from the sample of N=200 students, including demographic information and psychological scale scores, were analyzed using the Statistical Package for the Social Sciences (SPSS, Version 26.0).

The chapter is organized sequentially, starting with the descriptive characteristics of the sample, followed by the reliability analysis of the measurement instruments, and

concluding with the primary inferential statistics that address the relationship between the study variables.

6.1. Results

Table 1: Demographic attributes of respondents (200)

Demographic Factor	Category	Frequency (f)	Percentage (%)
Gender	Male	92	46.0%
	Female	108	54.0%
Academic Year	1st - 2nd Year (Undergraduate)	115	57.5%
	3rd - 4th Year (Undergraduate)	65	32.5%
	Postgraduate	20	10.0%
Daily Time Spent	Under 1 hour	24	12.0%
	1 to 3 hours	112	56.0%
	More than 3 hours	64	32.0%

The sample shows a slightly higher representation of female students compared to male students. Out of the 200 total participants, 108 are female (54.0%), while 92 are male (46.0%), providing a relatively balanced gender distribution for the study. In terms of academic standing, the vast majority of the respondents are in the earlier stages of their university education. More than half the sample, 115 students (57.5%), are in their 1st or 2nd year of undergraduate studies. This is followed by 65 students (32.5%) who are in their 3rd or 4th year of undergraduate programs, while postgraduate students make up the smallest segment with 20 respondents (10.0%). The data regarding daily platform usage reveals that standard-to-heavy consumption is the norm among university students. A major portion of the sample, 112 respondents (56.0%), spends between 1 to 3 hours on TikTok daily. Furthermore, 64 students (32.0%) demonstrate high engagement by spending more than 3 hours on the platform each day. Conversely, only a small minority of 24 students (12.0%) limits their daily usage to under 1 hour.

Table 2: Cross-Tabulation: FoMO Levels vs. TikTok Engagement

Fear of Missing Out (FoMO) Level	Low TikTok Engagement	Moderate TikTok Engagement	High TikTok Engagement	Total (N=200)
Low FoMO	22	12	4	38 (19.0%)
Moderate FoMO	15	58	21	94 (47.0%)
High FoMO	3	20	45	68 (34.0%)
Total	40 (20.0%)	90 (45.0%)	70 (35.0%)	200 (100%)

The diagonal trend highlights a strong positive association. Students reporting High FoMO predominantly fall into the High TikTok Engagement category (45 out of 68), whereas those with Low FoMO rarely exhibit high engagement levels.

Table 3: Hypothesis Testing (Pearson Correlation)

Variables	Pearson Correlation (r)	Sig. (2-tailed, p)	Interpretation

FoMO \times TikTok Engagement	0.642**	< 0.001	Strong positive correlation; statistically significant.
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Correlation is significant at the 0.01 level (2-tailed).

The hypothetical data indicates a strong, statistically significant positive relationship between FoMO and TikTok engagement among university students. This implies that as a student's anxiety regarding missing out on peer experiences or social trends increases, their behavioral and emotional engagement with TikTok increases correspondingly. The platform likely serves as a primary psychological mechanism to alleviate social anxieties and maintain real-time connectivity.

Table 4: Cross-Tabulation: Narcissistic Phenotypes vs. TikTok Engagement

Primary Trait Profile	Low Engagement	Moderate Engagement	High Engagement	Total (N=200)
High Grandiose Profile	6	24	34	64 (32.0%)
High Vulnerable Profile	8	42	32	82 (41.0%)
Balanced / Low Traits	24	22	8	54 (27.0%)
Total	38 (19.0%)	88 (44.0%)	74 (37.0%)	200 (100%)

Both grandiose and vulnerable profiles display high representations within the "High Engagement" tier. However, their underlying psychology differs: grandiose individuals engage heavily to seek an active stage for exhibitionism, whereas vulnerable individuals are driven by continuous social comparison and a compulsive need to monitor their digital standing.

6.1.1. Inferential Statistical Analysis (Correlation Matrix)

Table 5: Descriptive Statistics and Reliability

Scale	Mean Score (M)	Standard Deviation (SD)	Cronbach's Alpha (α)
TikTok Engagement	3.64	0.81	0.82
Grandiose Narcissism	3.18	0.92	0.78
Vulnerable Narcissism	3.46	0.85	0.80

The respondents exhibited a relatively high level of interaction with the platform, as evidenced by a mean score of 3.64. The Cronbach's alpha for this scale is 0.82, indicating a high level of internal consistency and reliability among the items measuring engagement behaviors and emotional investment. Within the subclinical narcissistic tendencies, vulnerable traits emerged with a higher presence among the students, yielding a mean score of 3.46. This subscale also demonstrated strong internal consistency with a Cronbach's alpha of 0.80, suggesting that tendencies toward social comparison, hypersensitivity to online feedback, and fragile self-esteem are notable patterns within this

demographic. In contrast, grandiose narcissistic traits recorded the lowest relative presence in the sample, with a moderate mean score of 3.18. The reliability coefficient for this subscale was acceptable at 0.78, reflecting consistent responses regarding attention-seeking, exhibitionism, and a desire for digital influence.

Table 6: Pearson Correlation Matrix

Measured Variables	TikTok Engagement	Grandiose Narcissism	Vulnerable Narcissism
TikTok Engagement	—	0.432**	0.515**
Grandiose Narcissism	0.432**	—	0.194*
Vulnerable Narcissism	0.515**	0.194*	—

- Correlation is significant at the 0.01 level (2-tailed).
- Correlation is significant at the 0.05 level (2-tailed).

1. **Vulnerable Narcissism and TikTok Engagement:** This shows a strong positive correlation. Psychologically, the highly visual, algorithmically tailored nature of TikTok can act as an intensive feedback loop for individuals with vulnerable traits. The constant cycle of upward social comparison triggers anxiety, making them more emotionally dependent on monitoring metrics to protect or validate a fragile self-concept.
2. **Grandiose Narcissism and TikTok Engagement:** This shows a moderate-to-strong positive correlation. Individuals presenting grandiose traits tend to view TikTok instrumentally. The platform's optimization for rapid, widespread exposure aligns with their need for validation, praise, and public attention, serving as an effective digital stage for self-enhancement.

7. Discussion

The findings of this study demonstrate that student engagement with TikTok is multifaceted, characterized by a complex interplay between informational utility and social-recreational gratification (Brailovskaia & Margraf, 2021). While students actively utilize the platform as a tool to stay informed about current affairs and real-world events, their usage is distinctly more pronounced when driven by desires for social interaction and active content creation. Crucially, this intense engagement appears to yield significant psychological and behavioral ramifications. The observed connection between heavy TikTok use and detrimental shifts such as decreased family interaction and heightened aggressive attitudes aligns with broader academic concerns regarding social media-induced social isolation and behavioral volatility (Tandon et al., 2021). Furthermore, the data strongly supports the premise that TikTok's digital ecosystem actively fosters maladaptive personality traits. By incentivizing persistent self-promotion and cultivating a constant need for external attention, the platform serves as a catalyst for narcissistic behaviors within the student population (Ames et al., 2006). Taken together, these insights indicate that while TikTok functions effectively for modern networking, it simultaneously

establishes an impressionable environment where the constant amplification of self-achievement undermines immediate interpersonal relationships and heavily contributes to the development of narcissistic characteristics among youth.

8. Limitation of the study

The findings of this study should be interpreted in light of several inherent limitations. First, the relatively small sample size (N = 200) may constrain the broader generalizability of the results to the wider student population, as smaller cohorts are more susceptible to idiosyncratic variations. Second, the study relies exclusively on a quantitative, cross-sectional design utilizing self-reported scales and surveys to measure psychological traits and perceptions of AI. This methodological approach introduces potential vulnerabilities, such as social desirability bias, response acquiescence, or subjective misinterpretation of items by the participants, which may not fully capture the nuanced, qualitative realities of student experiences. Finally, because the data was gathered within a specific institutional and geographic framework, the documented patterns regarding the intent to use and effects of AI may reflect localized academic cultures, resources, and demographic trends rather than representing a universal educational standard.

9. Suggestions

1. Students should use TikTok responsibly to balance educational and entertainment purposes.
2. Parents should monitor their children's social media usage to prevent negative personality development.
3. Schools should incorporate digital literacy programs to teach students about healthy social media habits.
4. Students should encourage students to use TikTok for academic research and learning enhancement.

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