

Social Media Usage and Mental Health among College Students

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Abstract: Social media plays an important role in the daily lives of college students, influencing communication, learning, social relationships, and emotional well-being. This study examines the relationship between social media usage patterns and mental health among 122 college students aged 18 to 25. A descriptive, cross-sectional survey was conducted using a structured questionnaire to assess stress, anxiety, fear of missing out (FoMO), sleep disturbance, social comparison, and problematic social media use. Statistical analysis included correlation, group comparisons, and multiple regression, supported by qualitative responses. Results showed that 62.3% of participants used social media shortly before bedtime, while passive engagement was more common than active interaction. Passive use was positively associated with anxiety ($r = .607$), sleep disturbance ($r = .567$), and problematic use ($r = .569$). FoMO showed a strong relationship with problematic use ($r = .704$), while sleep disturbance was also closely associated with problematic use ($r = .740$). Daily usage duration alone showed no significant relationship with anxiety or problematic use. The findings highlight the relevance of engagement patterns, emotional factors, and bedtime habits in understanding students' digital well-being. However, the cross-sectional design and reliability limitations of some measures restrict causal interpretation. Greater awareness of balanced social media habits, responsible digital engagement, and sleep management may help educational institutions support student well-being.

Keywords: Social Media Use, College Students, Mental Health, Fear of Missing Out, Sleep Disturbance

1. Introduction

Social media is widely used by college students for communication, learning, entertainment, and self-expression. Its constant availability may influence routines, self-image, and emotional well-being. This study examines social media use and its relationship with stress, anxiety, fear of missing out (FoMO), and sleep disturbance among college students.

1.1 Background and Significance of the Study

Students aged 18–25 balance identity development and academic demands while using social media. Platforms can support belonging and information-sharing, but comparison, FoMO, frequent checking, and bedtime use may coincide with distress. The study provides findings relevant to students, counsellors, and educational institutions.

1.2 Theoretical Framework

The study draws on Social Comparison Theory (Festinger, 1954), Uses and Gratifications Theory (Katz et al., 1973), the Cognitive-Behavioural Model of problematic internet use (Davis, 2001), and the FoMO framework (Przybylski et al., 2013). These perspectives explain how comparison, motives, and repeated checking may influence well-being.

1.3 Research Gaps and Statement of the Problem

Existing findings are mixed, Indian evidence is limited, and studies measure use and mental health differently. Total screen time may overlook differences between active interaction and passive browsing. This study examines associations between usage patterns, stress, anxiety, FoMO, social comparison, problematic use, and sleep. Its cross-sectional design cannot establish causation.

1.4 Scope and Operational Definitions

Participants were social-media users aged 18–25 enrolled in undergraduate or postgraduate programmes. Usage included

duration, frequency, purpose, timing, and engagement style. Active use involved posting, commenting, and messaging; passive use involved scrolling or viewing. Mental-health indicators were assessed dimensionally, not as clinical diagnoses.

1.5 Objectives, Hypotheses and Research Questions

Objectives were to describe usage patterns, assess stress, anxiety and sleep disturbance, examine links with mental health, identify factors associated with problematic use, and suggest balanced-use strategies. The main hypothesis proposed a significant relationship between social media use and mental health. Related questions considered active/passive use, bedtime use, FoMO, daily hours, and demographic differences.

2. Review of Literature

2.1 Review of Empirical Literature

The reviewed literature addressed depression, anxiety, FoMO, stress, sleep, social comparison, body image, active and passive use, problematic use, academic performance, cyberbullying, and digital well-being. Overall, social media has potential benefits and risks; outcomes appear to depend on purpose, content, and style of engagement.

2.2 Main Themes and Theoretical Synthesis

Social Comparison Theory explains how curated posts may encourage unfavourable self-evaluation. FoMO may increase checking and anxiety, while the Cognitive-Behavioural Model describes how problematic use can reinforce itself. Uses and Gratifications Theory highlights motives such as communication, information, entertainment, and self-expression. Passive use is often more consistently associated with reduced well-being than reciprocal engagement, although context matters.

Use near bedtime may disturb sleep by displacing sleep time and increasing arousal through continued checking. Problematic use is often more closely associated with distress than duration alone. However, social media can also offer social support, connection, and self-expression when use is purposeful.

2.3 Research Gaps and Relevance to the Present Study

Gaps include limited India-specific evidence, few longitudinal studies, inconsistent measures, and limited evaluation of prevention. This study collects primary data and considers multiple psychological indicators alongside active and passive use. Its cross-sectional findings cannot demonstrate cause and effect.

3. Research Methodology

3.1 Research Design

A descriptive survey with a correlational approach and supplementary qualitative analysis was used. Quantitative responses described usage and associations with stress, anxiety, FoMO, sleep disturbance, social comparison, and problematic use. Open-ended responses explored students' experiences and self-management. The design cannot establish causality.

3.2 Population and Sample

The target population was college students aged 18–25. Stratified random sampling considered programme and year of study. The sample comprised 122 active social-media users. Participants were currently enrolled, within the age range, and used at least one platform; non-users, out-of-range respondents, and substantially incomplete responses were excluded.

3.3 Tools and Instruments

The Social Media Usage and Mental Health Questionnaire covered demographics, usage patterns, psychological well-being, behavioural impact/self-management, and open-ended reflections. Measures adapted items from PSS-4 (stress), GAD-7 (anxiety), FoMO measures, the Pittsburgh Sleep Quality Index, social-comparison measures, the Bergen Social Media Addiction Scale (problematic use), and active/passive-use research.

3.4 Validity, Reliability and Procedure

Items were aligned with study objectives and adapted from published measures. Internal consistency estimates were PSS-4 $\alpha=.67$, GAD-7 $\alpha=.59$, FoMO $\alpha=.71$, sleep disturbance $\alpha=.72$, social comparison $\alpha=.49$, BSMAS $\alpha=.75$, active use $\alpha=.39$, and passive use $\alpha=.56$. Low reliability for several subscales requires caution. Participation was voluntary; informed consent, anonymity, and confidentiality were maintained. Responses were checked, coded, and analysed for academic purposes.

3.5 Analysis Plan

Analyses included frequencies, percentages, means, standard deviations, reliability estimates, Pearson correlations, t-tests, one-way ANOVA, and multiple regression. Significance was assessed at $\alpha=.05$. Open-ended responses were grouped into recurring themes and considered alongside quantitative results.

4. Analysis, Findings and Conclusions

4.1 Introduction

The findings summarise the reported dataset of 122 respondents, including descriptive patterns, correlations, regression results, and qualitative themes.

4.2 Social Media Usage Patterns

Daily use was 1–3 hours for 46.7%, 3–5 hours for 28.7%, over 5 hours for 16.4%, and under one hour for 8.2%. Most checked social media 10–30 times daily (59.8%); 31.9% checked more than 30 times. A total of 62.3% used social media within 30 minutes of intended sleep. Facebook (64.8%), Instagram (62.3%), and YouTube (61.5%) were commonly used. Communication, self-expression, boredom relief, and news were frequent motives. Passive-use mean (9.45) exceeded active-use mean (8.55), on 0–16 scales.

4.3 Levels of Psychological Indicators

Mean scores were stress 8.08 (0–16), anxiety 6.88 (0–21), FoMO 20.39 (8–40), sleep disturbance 13.94 (6–30), social comparison 11.94 (5–25), and problematic use 13.63 (6–30). These scores show variation in the sample and should be interpreted in light of the reliability limitations reported in Chapter 3.

4.4 Relationships Between Usage and Mental Health

Active and passive use were positively associated with anxiety, FoMO, sleep disturbance, social comparison, and problematic use (reported correlations generally $p<.001$). Passive use correlated with anxiety ($r=.607$), sleep disturbance ($r=.567$), social comparison ($r=.551$), and problematic use ($r=.569$). FoMO correlated strongly with problematic use ($r=.704$), as did sleep disturbance ($r=.740$). Stress showed weak associations with most usage variables. Daily hours alone were not significantly related to anxiety or problematic use.

4.5 Group Comparisons and Regression Findings

No significant differences by gender or year of study were reported for the principal indicators. Regression models explained 42.9% of adjusted variance in anxiety, 59.0% in sleep disturbance, and 42.7% in problematic use. Pre-sleep use independently predicted sleep disturbance, and FoMO was the strongest single correlate of problematic use. These are associations, not evidence of causation.

4.6 Qualitative Themes and Discussion

Open-ended responses highlighted sleep displacement, social comparison, emotional effects, and attempts to regulate use, including screen-time limits and digital detox. Together, the findings suggest that motives, engagement style, FoMO, comparison, and timing may matter alongside duration. Social media can provide connection and information, while unregulated or passive use may coincide with poorer sleep and greater distress.

4.7 Conclusions, Limitations and Recommendations

The study suggests that how and why students use social media may be more informative than daily hours alone. Purposeful engagement, reduced use before sleep, and self-regulation may support well-being. Counsellors and institutions can promote digital-well-being awareness and help students recognise effects on sleep, mood, and study.

Limitations include cross-sectional self-report data, a restricted age/user group, and low reliability for active use, passive use, and social comparison. Findings cannot establish cause and effect or be generalised widely. Future research should use larger, diverse samples, longitudinal designs, stronger measures, and evaluations of digital-well-being interventions.