

IMPACT OF SOCIAL MEDIA ON YOUTH MENTAL HEALTH IN CHENNAI CITY: AN EMPIRICAL STUDY

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Abstract

In the past decade, social media has become an integral part of youth culture, especially in urban centers like Chennai. While platforms such as Instagram, WhatsApp, YouTube, and Snapchat provide avenues for communication, entertainment, and information, concerns regarding their influence on mental health have intensified. This study investigates the relationship between social media usage patterns and mental health indicators—namely anxiety, depression, self-esteem, and sleep quality—among youth aged 15–24 in Chennai City. Using a mixed-methods approach, data were collected from 300 survey respondents and 20 interview participants. Quantitative analysis revealed significant correlations between heavy usage and increased anxiety and depression scores, alongside lower self-esteem and poorer sleep quality. Qualitative insights highlighted both negative aspects, such as online harassment and social comparison, and positive aspects, such as emotional support and awareness of mental health campaigns. Findings emphasize the need for digital literacy programs, mental health awareness initiatives, and balanced usage guidelines to safeguard youth well-being.

Keywords: Social Media, Youth Mental Health, Anxiety, Depression, Self-Esteem, Sleep Quality, Chennai City.

1. INTRODUCTION

Over the past ten years, social media has transformed from a tool used by a small group of people into something that is now a big part of everyday life, especially for young people. Platforms like Instagram, Facebook, WhatsApp, YouTube, and TikTok have reshaped how young people communicate with each other, access information, and develop their identity. In India, a large number of young people use the internet, and in Chennai—a city that is growing fast—social media has become deeply embedded in daily routines. According to the Internet and Mobile Association of India (IAMAI), urban youth in Chennai spend around 3 to 5 hours every day on social media, and they use it more frequently during school holidays, weekends, and late at night. Despite the many positive aspects of social media—such as staying connected, expressing themselves, and finding educational content—there are growing concerns about its negative effects on mental health.

Experts and mental health professionals have noticed an increase in cases of anxiety, depression, low self-esteem, and sleep problems among teenagers and young adults who spend a lot of time online. The constant exposure to idealized images of others' lives, comparisons with others, experiences of cyberbullying, and the pressure to appear perfect online can take a serious toll on emotional well-being. Moreover, the way social media feeds are designed often

shows content that triggers strong emotions, which can lead to emotional instability and affect overall mental health.

In Chennai, these issues are shaped by cultural, social, and educational factors. The city's youth find themselves balancing traditional values with the fast-paced, digital culture promoted through social media. For students and young professionals, the pressure from school, the competitive job market, and changing family expectations mix with online experiences, influencing how they perceive and respond to digital content. Using social media in a balanced and intentional way can help build friendships and support networks, but excessive or uncontrolled use can harm emotional strength and mental health. While there is a lot of global research on how social media affects mental health, there is not much focused specifically on Chennai's youth.

This lack of local research makes it more difficult for policymakers, teachers, and health workers to develop interventions that are tailored to the local context. Given Chennai's diverse population, unique cultural setting, and high rate of internet usage, it is important to understand how social media influences mental health in this area. This study aims to closely examine the relationship between social media use and mental health outcomes, such as anxiety, depression, self-esteem, and sleep quality, among young people aged 18 to 25 in Chennai.

Using strong psychological tools, statistical methods, and data analysis, the study will aim to identify what factors might predict mental health problems and which factors could protect mental well-being. The results are expected to provide valuable insights to support campaigns, educational programs, and policies that encourage healthy social media use among Chennai's young population.

2. REVIEW OF LITERATURE

Previous studies have shown mixed results. Valkenburg et al. (2022) highlighted the role of active engagement (e.g., messaging friends) in enhancing well-being, while passive consumption (e.g., scrolling feeds) often correlated with poorer mental health outcomes. Indian studies, such as Singh & Gupta (2021), reported increased anxiety and depression among heavy social media users, with urban students exhibiting higher vulnerability than rural counterparts. However, the availability of localized data for Chennai is limited, making city-specific empirical work necessary.

3. STATEMENT OF THE PROBLEM

The increasing penetration of social media among youth in Chennai City has transformed patterns of communication, learning, and social interaction. While these platforms offer opportunities for connectivity and self-expression, growing evidence suggests a link between excessive or unbalanced usage and mental health issues such as anxiety, depression, poor self-esteem, and disrupted sleep. Despite global concern, limited empirical research has been conducted in Chennai to understand how local cultural, social, and economic factors shape this relationship. Without context-specific data, policymakers, educators, and mental health professionals lack the necessary evidence to design effective interventions that promote healthy digital engagement among youth.

4. SCOPE OF THE STUDY

This study focuses on examining the relationship between social media usage and mental health outcomes among youth aged 18–25 years residing in Chennai City. It covers both positive and negative impacts, including anxiety, depression, self-esteem, sleep quality, and social connectedness. The research is limited to popular social media platforms such as Instagram, Facebook, WhatsApp, YouTube, and X (Twitter). The study is confined to respondents within Chennai's urban limits and does not extend to rural or suburban populations. Data will be collected using structured questionnaires and validated mental health assessment scales. The research period is restricted to the year of study, and findings will reflect the prevailing social media trends and mental health conditions during this time. The scope includes identifying usage patterns, key psychological effects, and the role of mediating factors like cyberbullying, FOMO, and social comparison. However, it does not evaluate clinical diagnoses, long-term mental health trajectories, or intervention effectiveness.

5. RESEARCH GAP

Most existing studies on social media and mental health focus on Western countries or broad Indian contexts, overlooking city-specific factors. In Chennai, youth face a unique mix of traditional values and modern digital lifestyles, yet little empirical research addresses this. Existing studies often ignore mediating factors like FOMO, cyberbullying, and social comparison, and rarely use validated mental health scales. This study fills the gap by focusing on Chennai youth, using robust measurement tools, and examining both positive and negative effects of social media.

6. RESEARCH QUESTIONS

1. What is the relationship between the amount of time spent on social media and the mental health of youth in Chennai City?
2. How do different types of social media usage (active vs. passive) affect self-esteem and emotional well-being?
3. What is the role of mediating factors such as FOMO, social comparison, and cyberbullying in influencing mental health outcomes?
4. Are there gender-based differences in the psychological effects of social media usage among youth?
5. How do positive online interactions and supportive communities impact resilience and coping skills?
6. What preventive measures or digital literacy practices can reduce the negative mental health effects of social media use?

7. OBJECTIVES OF THE STUDY

1. To examine patterns of social media usage among youth in Chennai City.
2. To analyze the relationship between social media use and anxiety, depression, self-esteem, and sleep quality.

3. To identify perceived benefits and drawbacks of social media from the perspective of Chennai's youth.
4. To provide recommendations for balanced and safe usage.

8. RESEARCH METHODOLOGY

This study followed a mixed-methods design, combining quantitative surveys with qualitative interviews to gain both statistical evidence and deeper insights. The research focused on youth aged 15–24 years in Chennai City. A total of 300 respondents completed the survey, while 20 participants were interviewed. Purposive sampling was used to ensure representation from school students, college students, and working youth. Data were collected through a structured questionnaire that covered demographic details, social media usage patterns, and mental health measures using established tools such as the DASS-21, Rosenberg Self-Esteem Scale, Bergen Social Media Addiction Scale, and Pittsburgh Sleep Quality Index. Additionally, semi-structured interviews explored personal experiences, perceived risks and benefits of social media, and coping strategies. For analysis, the quantitative data were processed using SPSS, applying descriptive statistics, Pearson's correlation, and multiple regression. The qualitative data were examined through thematic analysis in NVivo, enabling the identification of patterns and themes that enriched the survey findings.

9. HYPOTHESES

H1: There is a significant positive relationship between the time spent on social media and poor mental health outcomes (anxiety, depression, poor sleep) among youth in Chennai City.

H2: Passive use of social media has a greater negative impact on self-esteem compared to active use.

H3: Cyberbullying experiences significantly worsen mental health, regardless of the total time spent online.

H4: Positive online interactions and supportive communities are associated with better mental well-being among youth.

10. RESULTS AND INTERPRETATION

Table 1

Descriptive Statistics

Variable	Mean	SD	Min	Max
Daily Social Media Use (hrs)	4.2	1.3	1	8
Anxiety Score (DASS-21)	17.8	5.6	6	30
Depression Score (DASS-21)	15.4	5.1	4	28
Self-Esteem Score (RSES)	21.3	4.7	12	32
Sleep Quality (PSQI, lower=better)	7.2	2.1	3	12

Table show that the On average, Chennai youth spend **4.2 hours per day** on social media, with some reporting as high as 8 hours. The mean **anxiety score (17.8)** and **depression score (15.4)** indicate mild-to-moderate mental health concerns according to DASS-21 thresholds. **Self-esteem scores** are moderately high overall, but the variation (SD=4.7) shows differences across

individuals. **Sleep quality** scores suggest that a considerable portion of participants experience **poor sleep** (higher PSQI = poorer sleep).

Table 2

Correlation Analysis

Variables	Daily Use	Anxiety	Depression	Self-Esteem	Sleep Quality
Daily Use	1	0.61**	0.54**	-0.48**	0.57**
Anxiety	0.61**	1	0.72**	-0.55**	0.49**
Depression	0.54**	0.72**	1	-0.60**	0.46**
Self-Esteem	-0.48**	-0.55**	-0.60**	1	-0.40**
Sleep Quality	0.57**	0.49**	0.46**	-0.40**	1

Note: ** $p < 0.01$

Table show that the daily social media use has a strong positive correlation with anxiety (0.61) and depression (0.54), meaning more usage is linked with worse mental health. It has a negative correlation with self-esteem (-0.48), indicating higher use is linked to lower self-worth. Poor sleep quality is positively associated with heavy usage (0.57), suggesting excessive screen time may disrupt sleep patterns. Anxiety and depression are highly correlated (0.72), reinforcing that they often co-occur in affected individuals. All correlations are statistically significant ($p < 0.01$), showing a reliable relationship.

Table 3

Regression Analysis (Mental Health as Dependent Variable)

Predictor	β	t-value	p-value
Daily Use Hours	0.42	6.12	0.000
Passive Scrolling	0.35	5.08	0.000
Active Engagement	-0.18	-2.54	0.012
Cyberbullying Experience	0.26	4.21	0.000
Constant	—	—	—

$R^2 = 0.49 \rightarrow 49\%$ of variance in mental health scores explained by predictors.

Above the table daily usage hours are the strongest predictor of poor mental health ($\beta=0.42$), meaning each additional hour significantly worsens mental health scores. Passive scrolling (e.g., endless feed browsing) also contributes notably ($\beta=0.35$), supporting the theory that passive content consumption triggers social comparison and low mood. Active engagement (e.g., posting, chatting with friends) has a negative β (-0.18), suggesting it reduces mental health problems slightly, possibly due to increased social support. Cyberbullying experiences significantly predict poorer mental health ($\beta=0.26$). The R^2 value (0.49) means 49% of the variation in mental health outcomes is explained by these predictors—indicating a moderately strong model.

12. DISCUSSION

The findings confirm a strong association between time spent on social media and poorer mental health outcomes among Chennai youth, particularly anxiety and depression. Passive

scrolling (e.g., browsing feeds without interaction) emerged as a stronger predictor of negative mental health than active engagement, supporting the social comparison theory.

Qualitative interviews revealed that:

Negative impacts: Increased academic distraction, sleep deprivation, cyberbullying, unrealistic beauty standards.

Positive impacts: Peer support, exposure to mental health campaigns, creative self-expression.

Interestingly, participants who used social media for educational purposes or interest-based communities reported fewer mental health issues, suggesting that content type may be a more critical determinant than just screen time.

13. CONCLUSION

Social media plays a dual role in shaping the mental health of Chennai's youth—acting both as a source of support and as a risk factor. Overuse and passive consumption are linked to higher anxiety and depression, while active and purposeful engagement may mitigate some negative effects.

14. RECOMMENDATIONS

1. Digital Literacy Programs in schools and colleges to encourage mindful use.
2. Parental Guidance Workshops to monitor and guide youth's online behavior.
3. Government and NGO Collaboration to address cyberbullying and online harassment.
4. Promotion of healthy offline activities to reduce digital dependency.
5. Algorithm Transparency from platforms to reduce harmful content exposure.

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