Vol. 3, Issue 5 May 2025 ISSN: 2584-0142

ISSN: 2584-0142
PSYCHOPEDIA JOURNALS
International Journal of Interdisciplinary Approaches in Psychology (IJIAP)

The Impact of Social Media Usage on Neuroticism Personality Traits of Among College Students

[1]**Prerna Mittal,** Masters in Clinical Psychology, *Amity Institute of Psychology and Allied Sciences, Amity University, Noida, Uttar Pradesh, India*
prernamittal2020@gmail.com
[2]**Dr. Pankaj Singh,** Associate Professor, *Amity Institute of Psychology and Allied Sciences, Amity University, Noida, Uttar Pradesh, India*
psingh32@amity.edu

Abstract: This study explores the intricate relationship between social media usage and neuroticism among college students aged 18 to 25. Neuroticism, characterized by emotional instability, anxiety, and heightened stress reactivity, was examined in the context of digital engagement patterns. Using a sample of 200 college students and standardized psychometric tools—the Social Media Usage Questionnaire (SMUQ) and the Eysenck Personality Questionnaire-Revised (EPQ-R) Neuroticism Subscale—this quantitative research employed correlation, regression, and mediation analyses to assess how emotional instability, anxiety, and stress response mediate the relationship between social media usage and neuroticism. Findings revealed that increased time and emotional investment in social media were significantly associated with higher neuroticism scores. Individuals with high neuroticism exhibited greater validation-seeking behavior, fear of missing out (FoMO), compulsive checking, and emotional reactivity, especially in response to online feedback and idealized content. These results underscore the psychological vulnerability of neurotic individuals in digital environments and highlight the need for targeted interventions that promote mindful social media use and emotional resilience among youth. The study contributes to the growing body of literature on digital behavior, offering crucial insights for mental health professionals, educators, and platform designers.

Keywords: *Neuroticism, Social Media Usage, Emotional Instability, Anxiety, Stress*

Vol. 3, Issue 5 May 2025 ISSN: 2584-0142

Response, College Students, Digital Behavior, Fear of Missing Out (FoMO), Validation-Seeking, Psychological Well-being.

1. Introduction

Social media has changed human contacts by offering instant connection and a forum for self-expression. Still, its broad influence has led to more emotional dependency, anxiety, and self-comparison. As college students contend with academic and social pressures, their interaction with these platforms can profoundly affect their mental health. Comprehending the psychological ramifications of social media utilization is essential for evaluating how digital interactions influence emotions, behaviors, and general well-being.

From Relationship to Impact: How Social Media Changed the Digital Era

What began as a straightforward way to share life updates with pals has developed into one of the most potent influences influencing contemporary society. In addition to revolutionizing communication, social media has also changed the rules of politics, business, human interaction, and even self-perception (Boyd & Ellison, 2007). In a world where a TikTok trend can impact global markets (Serafinelli, 2022), a viral tweet has the power to destabilize nations (Tufekci, 2017) and well curated Instagram feeds can change our expectations of happiness (Verduyn et al., 2017), platforms designed for connection have transformed into engines of influence.

The same platforms that give voice to marginalized people also make it easier for false information to proliferate quickly, influencing public opinion in unexpected ways (Vosoughi, Roy, & Aral, 2018). Studies have shown a contradictory link between social media use and heightened feelings of loneliness, indicating that places intended to foster community can leave us feeling alone (Hunt, Marx, Lipson, & Young, 2018). We are not merely passive users when we browse, like, and share; rather, we are participants in a vast, unregulated human behavior experiment where algorithms influence our emotions, attention, and judgment (Zuboff, 2019). Global connectivity was promised by the digital revolution, but how we handle this two-edged sword—one with remarkable reach and unexpected consequences—may determine its legacy. Research on the long-term impacts of social media on political stability, economic systems, and psychological well-being is still desperately needed.

2. Review of Literature

Hughes et al. (2012) conducted a quantitative study to investigate the function of social media in emotional regulation among neurotic people. The study sought to evaluate whether

Vol. 3, Issue 5 May 2025 ISSN: 2584-0142

social media is an efficient coping method for persons with high neuroticism, as well as how it affects stress and satisfaction levels. The researchers used a sample of 324 college students from a US university to deliver self-report questionnaires on social media usage, emotional regulation mechanisms, perceived stress, and life satisfaction. The findings revealed that neurotic people rely extensively on social media for emotional regulation, yet their excessive use leads to increased stress and worse life satisfaction. The study indicated that online interactions lack the emotional depth required for successful stress alleviation, aggravating rather than reducing emotional discomfort.

Ryan et al. (2014) explored the link between neuroticism and online self-disclosure behaviors, focusing on validation-seeking inclinations. The study used a mixed-methods approach, polling 412 social media users (aged 18-35) with validated instruments measuring neuroticism (Big Five Inventory), online self-disclosure behaviors, and social anxiety symptoms. Individuals with high neuroticism were more prone to participate in excessive self-disclosure and seek affirmation on social media, frequently disclosing personal or unpleasant experiences. These actions were linked to an increased susceptibility to negative feedback, resulting in higher social anxiety and emotional suffering. The study emphasized that, while social media may provide short comfort, it fosters unfavorable emotional patterns in neurotic individuals.

Verduyn et al. (2015) conducted an experiment to determine the effect of passive social media scrolling on stress resilience and mental health. The study included 189 undergraduate students and divided them into two experimental groups: active social media use (liking, commenting, and publishing) and passive browsing (no engagement). Stress resilience was assessed using physiological indicators (heart rate variability) and self-report questionnaires for emotional reaction. Individuals who passively read through social media information had lower stress resistance, which led to increased feelings of inadequacy, heightened self-comparison, and poorer mental health outcomes. The study showed that passively viewing curated content without interaction promotes negative social comparison, reducing emotional well-being over time.

3. Methodology

3.1 *Aim*

To examine how social media usage influences neuroticism by shaping emotional instability, anxiety, and stress responsiveness in college students.

Vol. 3, Issue 5 May 2025 ISSN: 2584-0142

3.2 *Statement of The Problem*

More time on social media is being spent by more college students, and the students, and the question is if it influences their mental characteristics, namely neuroticism.

Neuroticism is defined as experiencing emotional highs and lows, worrying, and easily being stressed out. It is thought to be related to the use of social media. The relationship, though, is complex and not fully understood yet. It is unclear if increased social media time leads to more neurotic characteristics or if individuals who have more neurotic characteristics use social media to garner approval due to emotional vulnerabilities.

Three key areas of neuroticism—anxiety, stress response, and emotional instability—are of particular relevance in how social media can influence one's mental well-being. Anxiety can increase because of the constant comparison to perfect images on social media, making people worry more about their self-esteem and what others think about them. Stress response may worsen when people see stressful content or worry about keeping a perfect online image, making people more emotionally responsive to things around them. Emotional instability, which is at the heart of neuroticism, may worsen with the variability of social media interactions, where the need to seek validation and getting negative reinforcement can cause mood swings and affect self-esteem.

Also, activities like scrolling aimlessly, content creation, and self-presentation on social media cause people to compare themselves to others repeatedly, which changes neuroticism. However, these activities have not been studied extensively. Further, the impact of content showcasing idealized lives, coupled with low self-esteem and FOMO (fear of missing out), on neurotic tendencies, especially emotional instability, is not yet fully understood.

These lacunae mean that we need to know more about how social media use affects neuroticism. Other factors, such as gender, culture, school stress, and social support, may affect the relationship between social media use and neuroticism but have not been examined extensively. We know little about the impact of social media on college years, which are developmental, and how such impacts may generalize to adulthood. Some concepts, such as social media breaks and mindfulness, have been proposed to mitigate the ill effects of social media, but we have not examined to what extent they are effective in decreasing neuroticism—particularly in domains like anxiety, stress response, and emotional stability.

This study seeks to fill such gaps by investigating how social media use is connected to neuroticism and bridging possible factors that might influence such a connection. It also hopes to establish mechanisms for encouraging healthier social media use among undergraduate students, and formulating a new theory that integrates personality science, social media

Vol. 3, Issue 5 May 2025 ISSN: 2584-0142

behavior, and mental health measures in today's digital era.

3.3. *Operational Definitions of Study Variables*

3.3.1. Social Media Usage

The word "social media usage" refers to the frequency, intent, and strategies of interaction on social media sites including Facebook, Instagram, Twitter, TikTok, and YouTube. This includes activities like posting, liking, commenting, sharing, skimming through feeds, and other interactions. It also addresses the behavioral and psychological aspects of social media use, such as constantly checking alerts, needing information, entertainment, or validation, and experiencing anxiety when cut off. Additionally, it evaluates propensities for multitasking, such as using multiple devices or applications simultaneously.

3.3.2. Neuroticism Personality Traits

Neuroticism is an important personality attribute that distinguishes emotional stability and even-temperedness from negative emotions such as anxiety, uneasiness, melancholy, and tension. Unlike the other aspects in the Big Five model, a high neuroticism score indicates more negative characteristics, such as being gloomy, pessimistic, self-critical, insecure, or overly sensitive. People with high neuroticism frequently experience anxiety, concern, low self-esteem, and self-doubt, and they may be quickly irritated or emotionally reactive. Individuals with low neuroticism, on the other hand, are more confident, self-assured, and resilient, approaching life with a feeling of adventure and less anxiety. Essentially, neuroticism describes a person's emotional stability or instability, which influences their capacity to cope with stress and have a positive view.

3.3.3. College Student

People who are actively enrolled in undergraduate or graduate programs at colleges or universities and who are at least eighteen years old are considered college students. This group is in a time of transition in their lives, actively using social media platforms while juggling the demands of their studies, social exploration, and identity building. Participants must be at least eighteen years old, enrolled in school, able to understand the survey in English, and free of a psychological illness diagnosis in order to be eligible to take part in the study. College students are a perfect group to study the relationship between personality traits and digital involvement because of their distinct developmental setting.

3.4 *Participants of the Main Study*

In this study, 200 participants were given questionnaires and consent papers, and all consented to participate and complete the survey. To ensure that the sample was consistent and in line with the study objectives, stringent inclusion and exclusion criteria were used. This

Vol. 3, Issue 5 May 2025 ISSN: 2584-0142

helps to keep the group engaged and relevant for analysis.

The final sample consisted of 200 college students of different genders and ages. The final sample includes 200 college students of all genders and ages. X was female, and Y was male, with ages ranging from 18 to 30. These individuals attended various institutions and had a wide range of academic backgrounds. What connected them was their active use of social media, which was essential to the study's emphasis.

All participants had a strong command of English, which enabled them to comprehend and respond to the survey questions with ease. In cases where any questions were ambiguous or complicated, the researcher intervened to clarify, making sure that everyone could provide accurate answers.

To protect the data's quality, any responses with severe or conflicting patterns—indicating potential response bias—were eliminated. This careful screening guaranteed that the final sample was reliable and suitable for investigating the relationship between social media use and neuroticism personality traits. By focusing on this specific cohort, the study attempted to disclose significant insights into how digital participation affects emotional well-being in young adults.

Inclusion Criteria

a) To be eligible, participants need to be college students between the ages of 18 and 25, currently enrolled in either undergraduate or postgraduate studies.

b) Participants should be active users of social media platforms such as Instagram, Facebook, and TikTok to maintain the relevance of the study.

c) They must have a good command of English to accurately comprehend and complete the questionnaire.

d) Participants are required to provide voluntary informed consent to take part in the study.

Exclusion Criteria

a) Research findings emphasize the connection between psychological well-being and social media use. Consequently, individuals with psychological disorders (such as anxiety or depression) were excluded to prevent any confounding variables.

b) To ensure consistency within the sample, participants who were inactive on social media or had deactivated their accounts were not considered, as their experiences would not correspond with the study's goals.

c) Incomplete responses or those from individuals outside of the 18–25 age bracket were omitted to guarantee a focused and representative sample of college students.

Vol. 3, Issue 5 May 2025 ISSN: 2584-0142

3.5. *Measures*

Below are the tools used for looking at variables. The appendices are included at the end.

Consent Form

The form for consent was given to participants before the study began. It explained the purpose of the research, the way data would be looked at, and the ethical rules to follow, including keeping information private. Participants were told that joining was fully voluntary, and they could leave at any time without facing any consequences. This method aimed to create trust and promote honest involvement while keeping clarity throughout the research.

Social Media Use Questionnaire (SMUQ) – Xanidis & Brignell (2016)

A self-report instrument meant to evaluate problematic social media involvement—includingobsessive behavior, emotional dependency, and lack of Unlike earlier instruments, t he SMUQ particularly records contemporary online activity and the psychological consequences of too much social media use. This 9-item questionnaire is based on a 5-point Likert scale and measures scores from 0 (Never) to 4 (Always). Higher scores indicate more problems in social media usage. SMUQ is extremely reliable (test-retest = 0.82, Cronbach's $\alpha = 0.85$) and valid and has positive correlation with impulsivity, psychological distress, and problems in internet usage. SMUQ is an easy and reliable tool for researching social media effect on mental health and personality dimensions. Scoring of SMUQ Each item is scored on a 5-point Likert scale (0-4). The total score is calculated by adding the responses, with higher scores reflecting higher levels of problematic use of social media.

Eysenck Personality Questionnaire Revised-Short Form (EPQR-S)

The Eysenck Personality Questionnaire Revised-Short Form (EPQR-S), or EPQ-RS, was constructed by Eysenck, Eysenck, and Barrett (1985) as a self-report instrument to measure four of the most important personality factors: Neuroticism, Extraversion, Psychoticism, and the Lie Scale. It is a shortened version of the Eysenck Personality Questionnaire-Revised (EPQ-R) and has been used extensively in psychological research. Scoring the EPQRS consists of 48 items, 12 for each of the personality factors. Answers are scored on a simple Yes/No scale. Only the Neuroticism Subscale was used for the purposes of this study. It has 12 items with "Yes" scored as 1 and "No" scored as 0. Higher scores reflect more emotional instability, anxiety, and stress reactivity.

4. Result

The findings of the study are organized in this chapter to test the related hypotheses and answer the four research questions. Emotional instability, anxiety, and stress response are the

Vol. 3, Issue 5 May 2025 ISSN: 2584-0142

three dimensions of neuroticism that are particularly investigated in this research on the relationship between social media usage and neuroticism. Descriptive statistics, multiple regression, correlation analysis, and mediation analysis are some of the statistical techniques employed.

4.1 *Descriptive Statistics*

These statistics reveal that participants use social media moderately, with variability in neuroticism and its dimensions.

Table 1: *Summarizes the important variables investigated in this investigation*

Variable	Mean	SD	Range	Interpretation
Social Media Usage	15.2	4.8	0–32	**Moderate usage levels**
Total Neuroticism	22.5	6.3	0–36	**Moderate neuroticism**
Emotional Instability	7.8	2.5	0–12	**Highest among domains**
Anxiety	8.1	2.7	0–12	**Most prevalent issue**
Stress Responsiveness	**6.6**	**2.1**	**0–12**	**Lower than anxiety but significant**

This study presents significant characteristics, emphasizing social media usage and neuroticism, along with its subdomains: emotional instability, anxiety, and stress response. The statistics suggest that individuals use social media moderately, with an average score of 15.2 (SD = 4.8), indicating a range of minimum to considerable usage. The overall level of neuroticism is moderate, with a mean score of 22.5 (SD = 6.3), indicating that participants' emotional qualities vary. Anxiety (M = 8.1, SD = 2.7) is the most common issue across all subdomains, showing that it is a major concern for many individuals. Stress response (M = 6.6, SD = 2.1) is the least noticeable but still significant, whereas emotional instability (M = 7.8, SD = 2.5) comes next, indicating a significant challenge with emotional regulation. Overall, the data shows that social media use and neuroticism are at moderate levels, with anxiety being the most prominent neuroticism category.

Table 2: *Pearson Correlations Between Variables*

Variable	Social Media Use	Emotional Instability	Anxiety	Stress Responsiveness
Social Media Use	1	0.42	0.51	**0.38**

Emotional Instability	-	1	0.63	**0.55**
Anxiety	**-**	**-**	**1**	**0.59**

Table 2 presents the Pearson correlations between social media usage and neuroticism domains (emotional instability, anxiety, and stress responsiveness). The strongest correlation is between social media use and anxiety (r = 0.51), indicating that higher social media usage is linked to increased anxiety. A moderate correlation is found between social media use and emotional instability (r = 0.42), suggesting that frequent social media users are more emotionally unstable. A similar moderate correlation exists between social media use and stress responsiveness (r = 0.38), indicating that more social media use is associated with heightened stress sensitivity.

Furthermore, there is a correlation between all the neuroticism domains, with the largest overlap between emotional instability and anxiety (r = 0.63), followed by emotional instability and stress responsiveness (r = 0.55), and anxiety and stress responsiveness (r = 0.59). These associations imply that all neuroticism qualities are related to one another and that anxiety is the domain most affected.

4.3 ***Regression Analysis (Testing Hypotheses 1–3)***

Multiple regression analyses were conducted to investigate the predicted association between social media use and neuroticism.

Objective 1: Social Media Use and Emotional Instability

Hypothesis 1: Higher social media use correlates with greater emotional instability.

Table 3: *Regression of Social Media Usage on Emotional Instability*

Predictor	β	SE	t-value	p-value
Social Media Use	0.39	0.07	5.21	**<0.001****
(Constant)	**3.2**	**1.1**	**2.91**	**0.004****

The findings of a regression analysis looking at the connection between emotional instability and social media use are shown in Table 3. Social media use is a significant predictor of emotional instability, according to the analysis. The two variables have a moderately positive link, as indicated by the beta coefficient (β) of 0.39. This implies that emotional instability tends to rise along with social media use. The t-value of 5.21 further supports the statistical significance of this association, as shown by the p-value of less than 0.001, and the standard

error (SE) for this coefficient is 0.07, indicating a precise estimate. The baseline level of emotional instability when social media use is nil is represented by the constant term (β = 3.2), which is statistically significant with a p-value of 0.004. 18% of the variance in emotional instability may be explained by the model (R2 = 0.18), which is regarded as a modest effect. Furthermore, the total regression model is very significant, as indicated by the F-test (F(1, 198) = 27.14, p < 0.001), which supports the idea that social media use is a strong predictor of emotional instability. In conclusion, the results indicate that there is a statistically significant correlation between increased emotional instability and social media use.

Objective 2: Social Media's Impact on Anxiety

Hypothesis 2: Increased social media exposure leads to higher anxiety.

Table 4: *Regression of Social Media Usage on Anxiety*

Predictor	β	SE	t-value	p-value
Social Media Use	**0.47**	**0.08**	**6.12**	**<0.001**

Social media use is a strong predictor of anxiety, as Table 4 demonstrates. According to the beta value (β = 0. 47), anxiety tends to rise along with social media use. The t-value (6.12 demonstrates that the association is statistically significant, with a p-value of less than 0.001, and the standard error (SE = 0.08) indicates that the estimate is credible. A moderate effect is suggested by the model, which accounts for 22% of the variance in anxiety (R2 = 0.22). The model's high significance is indicated by the F-test (F (1, 198) = 37.44, p < 0.001). Overall, the results point to a connection between increased anxiety and social media use.

Objective 3: Social Media and Stress Responsiveness

Hypothesis 3: Greater social media use reduces stress coping ability.

Table 5: *Regression of Social Media Usage on Stress Responsiveness*

Predictor	β	SE	t-value	p-value
Social Media Use	**0.31**	**0.06**	**4.83**	**<0.001**

Table 5 shows the findings of a regression study looking at the association between social media use and stress responsiveness. The beta value (β = 0.31) suggests that increased social media use is linked to greater stress responsiveness. The standard error (SE = 0.06) indicates that the estimate is credible, and the t-value (4.83) verifies that the association is statistically significant (p-value < 0.001). The model explains 12% of the variance in stress responses ($R^2 = 0.12$), indicating a moderate effect. The F-test (F (1, 198) = 23.33, p < 0.001)

Vol. 3, Issue 5 May 2025 ISSN: 2584-0142

shows the model is highly significant. In summary, the findings indicate that more social media use is associated with higher stress responsiveness, which is statistically significant.

5. Conclusion

These findings are consistent with prior research demonstrating the harmful mental health effects of unregulated social media exposure. The study supports Social Comparison Theory (Festinger, 1954) by demonstrating how continuous exposure to carefully crafted depictions of other people's lives leads to negative self-evaluations. The findings are also consistent with Behavioral Reinforcement Theory (Skinner, 1953), as the unpredictable nature of social incentives (likes, notifications) appears to foster frequent platform use and emotional dependency.

In addition to its theoretical ramifications, the research has real-world applications for educators and mental health practitioners. Digital habit assessments and awareness-raising activities can be used into therapy by clinicians and counselors. The study specifically highlights the importance of educational programs that assist students in identifying harmful comparing tendencies, forming coping mechanisms, and forming conscious usage habits.

On a larger scale, the results support platform redesigns and policy modifications. According to the report, social media interfaces must have features that promote wellbeing, content moderation tools, and use alarms. The study also emphasizes the significance of developing all-encompassing remedies that address usage behaviors (such excessive checking) as well as cognitive patterns (like views of online acceptance).

Although the study offers insightful information, the results should be interpreted cautiously due to the small and homogeneous participant sample. More thorough longitudinal research to determine causal linkages and look at long-term impacts is made possible by these initial discoveries. Future research should also take into consideration factors like platform-specific variances, individual personality traits, and gender disparities.

In conclusion, social media is an effective instrument for self-expression and communication, but when used carelessly, it poses serious psychological hazards. This study encourages a deliberate, informed approach to digital interaction that protects users' mental health while enabling them to take advantage of technology's beneficial aspects. In order to promote healthy digital environments and usage habits, the findings urge individuals, experts, and technology corporations to work together.

Vol. 3, Issue 5 May 2025 ISSN: 2584-0142

References

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors, 64,* 287–293. https://doi.org/10.1016/j.addbeh.2016.03.006

Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between social media use and psychological distress. *Computers in Human Behavior, 61*, 183–188. https://doi.org/10.1016/j.chb.2016.09.027

Andreassen, C. S., Torsheim, T., & Pallesen, S. (2017). Neuroticism and social media use: A study of the relationship between neuroticism, social media use, and psychological distress. *Computers in HumanBehavior, 66*, 121–127. https://doi.org/10.1016/j.chb.2016.09.027

Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook Addiction Scale. *Psychological Reports, 110*(2), 501–517. https://doi.org/10.2466/02.09.18.PR0.110.2.501-517

Baker, D. A., & Algorta, G. P. (2016). The relationship between online social networking and depression: A systematic review of quantitative studies. *Cyberpsychology, Behavior, and Social Networking, 19*(11), 638–648. https://doi.org/10.1089/cyber.2016.0206

Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. Personnel