Duzce Medical Journal

2026;28(1):28-34
https://doi.org/10.18678/dtfd.1719528

e-ISSN: 1307-671X
https://dergipark.org.tr/en/pub/dtfd

Research Article

A Study on Social Media Addiction: The Roles of Personality, Internet Use, and Platform Preference

Ayşegül Barak Özer[1*], Aslı Enzel Koç[2], Çiçek Hocaoğlu[3]

[1] Department of Psychiatry, Niğde Ömer Halisdemir University, Training and Research Hospital, Niğde, Türkiye. ror.org/03ejnre35

[2] Department of Psychiatry, Sivas Cumhuriyet University, Faculty of Medicine, Sivas, Türkiye. ror.org/04f81fm77

[3] Department of Psychiatry, Recep Tayyip Erdoğan University, Faculty of Medicine, Rize, Türkiye. ror.org/0468j1635

*Corresponding author: ayseguulbarak@gmail.com

Received: 16.06.2025
Revision: 27.01.2026
Accepted: 10.02.2026
Online: 25.04.2026

ABSTRACT

Aim: This study aimed to determine the relative contributions of personality traits, internet addiction, and social media platform preferences to social media addiction, within the framework of the big five personality model.

Material and Methods: Data were collected from 335 participants via an online survey. Participants completed the ten-item personality inventory (TIPI), the Bergen social media addiction scale (BSMAS), and the internet addiction test scale (IATS). Platform usage was also recorded. Robust regression analyses were conducted sequentially in three models to assess the incremental effects of personality traits, internet addiction, and platform usage.

Results: Neuroticism was positively (β=0.477, p=0.004) and conscientiousness was negatively (β=-0.480, p=0.013) associated with social media addiction in the first model. When IATS was included, the model's explanatory power increased (R^2=27.3%), while the relationships between personality traits and social media addiction weakened. In the final model, which replaced IATS with social media platform variables, neuroticism (β=0.319, p=0.044) remained positively associated, whereas conscientiousness (β=-0.446, p=0.017) and extraversion (β=-0.360, p=0.033) showed negative associations. Among platforms, Instagram (β=2.646, p<0.001), TikTok (β=2.995, p=0.002), and Snapchat (β=2.652, p=0.022) were significantly related to higher social media addiction scores.

Conclusion: The findings suggest that personality traits play a limited role in explaining social media addiction, whereas the type of platform used appears more influential. These results highlight the importance of integrating platform-specific dynamics with individual characteristics when understanding social media addiction.

Keywords: Social media addiction, personality traits, internet addiction, social networking sites, big five model.

INTRODUCTION

Technology addiction has been a subject of research for quite some time, especially as internet usage has been integrated into daily life since the 1990s. The concept of internet addiction has been subject to growing critique within academic discourse, with scholars identifying several key limitations. Critics emphasize the lack of focus on specific problematic online behaviors, such as gaming or social networking sites (SNSs), as well as the failure to adequately differentiate between addiction to the internet itself and addiction to activities conducted on it (1). This ambiguity is also evident in the Diagnostic and Statistical Manual for Mental Disorders (DSM-5), which has included internet gaming disorder (IGD) as a condition requiring further study, while broader internet-related behaviors like compulsive social media use, online shopping, and pornography consumption exhibit similar addictive tendencies (2,3). Moreover, the delimitation of excessive use presents significant challenges in an era constant online presence is increasingly normalized. Additionally, the conceptual separation between the internet and the devices facilitating access, such as smartphones, tablets, and computers, is questioned, given the inseparable nature of these technologies in online behaviors. These critiques highlight the necessity for a more precise and contextually informed framework to understand and address internet-related addictions (1).

SNS addiction is considered a subtype of internet addiction. The growing popularity of SNSs and the increasing time users dedicate to them have contributed to the recognition of SNS addiction as a specific form of internet addiction. Globally, SNS usage is on the rise, particularly among youth who rely on these platforms as primary communication tools. The versatility of SNS applications further boosts their widespread appeal (4). Research investigating the role of SNSs in fulfilling individual needs and their potential to foster addiction has predominantly focused on younger users, particularly college students. While these findings offer valuable insights, they reinforce the assumption that SNSs are primarily utilized by younger demographics, resulting in a limited understanding of how other age groups interact with and are affected by these platforms. Recent research on older adults highlights the distinct motivations and engagement patterns associated with Facebook and Instagram use, offering new insights into SNS usage across generations (5).

One of the key aspects to consider when explaining internet and SNS addiction is the role of predisposing factors. Previous research on behavioral addictions has examined various factors influencing these addictions, with a particular focus on personality traits (1,6). The Big Five model, proposed by McCrae and Costa (7) in the 1980s, is

Cite as: Barak Özer A, Enzel Koç A, Hocaoğlu Ç. A study on social media addiction: the roles of personality, internet use, and platform preference. Duzce Med J. 2026;28(1):28–34. doi:10.18678/dtfd.1719528.

This is an open access paper distributed under the terms and conditions of the Creative Commons Attribution-NonCommercial 4.0 International License.

a widely used framework for assessing personality, comprising five dimensions: extraversion (e.g., sociable, talkative, optimistic, energetic), agreeableness (e.g., altruistic, warm, considerate), conscientiousness (e.g., responsible, disciplined, organized, punctual), neuroticism (e.g., anxious, insecure, emotionally unstable), and openness (e.g., imaginative, curious, open to new ideas). A review reported correlational effect sizes between internet addiction and the big five personality traits, identifying neuroticism as the only trait positively associated with internet addiction (8). However, despite this established link, SNS addiction, as a subtype of internet addiction, does not demonstrate a similarly clear relationship with neuroticism in the literature (9). Furthermore, findings on social media addiction remain inconsistent, with some studies indicating a strong correlation between extraversion and increased social media use and addiction. Conversely, individuals with social anxiety, traits characteristically divergent from extraversion, often find online interactions particularly appealing, underscoring the intricate interplay of personality traits in shaping social media behavior (6).

Despite the extensive research on internet addiction, the role of personality traits in SNS addiction remains underexplored, particularly in relation to platform-specific engagement. This study aimed to enhance the understanding of internet and social media addiction by addressing some of the theoretical ambiguities and criticisms in the literature. It examined the relationship between personality traits, as outlined in the big five model, addiction tendencies, and social media platform preferences. Unlike previous studies, it did not impose strict age or demographic limitations, offering a broader perspective on the subject. In this study, we hypothesized the following:

1. Individuals with higher neuroticism scores will exhibit higher levels of SNS addiction due to their reliance on online social interactions for emotional regulation.
2. Individuals with higher extraversion scores will demonstrate more frequent social media engagement, given their stronger tendency toward social interaction and expression.
3. Visually and interaction-oriented platforms will be associated with higher levels of social media addiction compared to text-based or communication-focused platforms.

MATERIAL AND METHODS

Study Design and Participants

A priori power analysis was conducted using G*Power version 3.1.9.7 to determine the required sample size for the multiple regression analysis, including 13 independent variables. The expected effect size was set at $f^2=0.084$, with $\alpha=0.05$ and desired statistical power=0.95. According to this analysis (Fixed model, R^2 deviation from zero), the minimum required sample size was calculated as n=328. This analysis was based on the coefficient of determination (R^2) reported in the reference study by Jaradat and Atweh (3), ensuring that the effect size and model parameters were defined in a statistically realistic manner. Participants were recruited through snowball sampling by sharing the survey link on email, WhatsApp, Instagram, and Telegram. Data were collected via Google Forms between 01.01.2025 and 15.02.2025. Although no predefined age limit was initially applied, the consent form specified participation for individuals aged 18 and above, and an age-check item was included. During screening, 11 participants under 18 were excluded, resulting in a final sample of 335 adults. All items were mandatory to avoid missing data, and participants provided electronic informed consent before starting the survey. This study was approved by the Ethics Committee for Non-Interventional Clinical Research of Sivas Cumhuriyet University and was deemed ethically appropriate (Decision No: 2024-11/36, Date: 21.11.2024).

Data Collection Tools

Socio-Demographic Information

The survey included questions about gender, age, educational level, and social media preferences to create a comprehensive socio-demographic profile of the respondents.

Ten-Item Personality Inventory (TIPI)

One of the scales developed based on the five-factor personality model is the ten-item personality inventory (TIPI), created by Gosling et al. (10) to evaluate five core personality traits: conscientiousness, neuroticism, openness to experience, agreeableness, and extraversion. The TIPI consists of 10 items, with each trait represented by two items, and responses are collected using a 7-point Likert scale. Atak (11) conducted the Turkish adaptation and validation of the TIPI using data from university students and individuals from various age groups. In the Turkish version, factor loadings ranged from 0.67 to 0.86, and items 2, 4, 6, 8, and 10 are reverse-coded. Scoring is conducted by summing the responses for each trait, and the dominant personality trait is identified based on the highest-scoring dimension. The TIPI was preferred in this study because it allows for a quick and practical assessment of personality traits without causing participant fatigue or loss of attention, which is particularly important in online data collection. Compared to longer instruments such as the big five inventory (BFI), it reduces cognitive effort and completion time, making it more suitable for large-scale behavioral research. Although the TIPI offers a brief assessment of the big five traits and may not capture the full complexity of each dimension, its short form provides a balanced compromise between measurement accuracy and participant engagement.

Bergen Social Media Addiction Scale (BSMAS)

The Bergen social media addiction scale (BSMAS), developed by Andreassen et al. (12), was utilized to measure participants' social media addiction levels. The scale comprises six items that reflect core addiction elements, including salience, mood modification, tolerance, withdrawal, conflict, and relapse. Each item assesses experiences over a 12-month time frame and is rated on a 5-point Likert scale, ranging from 1 (very rarely) to 5 (very often). The total score ranges from 6 to 30, with higher scores indicating a greater tendency toward social media addiction (12). The Turkish adaptation of the BSMAS was obtained from Demirci (13), and its reliability analysis yielded a Cronbach's alpha value of 0.79, indicating acceptable internal consistency.

Internet Addiction Scale (IATS)

The internet addiction scale (IATS), developed in Turkish by Kayri and Günüç (14), assesses internet addiction using 35 items distributed across four sub-factors: withdrawal,

controlling difficulty, disorder in functionality, and social isolation. The scale uses a 5-point Likert-type format ranging from 1-Strongly Disagree to 5-Strongly Agree. It demonstrated high internal consistency, with a Cronbach's alpha coefficient of 0.94. Higher scores on the IATS indicate greater levels of internet addiction, providing a reliable and multidimensional measure of problematic internet use (14).

Statistical Analysis

Data were analyzed using R software version 4.4.1 and IBM SPSS Statistics version 23. The Kolmogorov-Smirnov test was used to assess the normality of data distribution. Non-normally distributed continuous data were presented as median, 25^{th}-75^{th} percentile, and minimum-maximum. For variables that did not follow a normal distribution, the Mann-Whitney U test was applied to compare two groups. Relationships between non-normally distributed continuous variables were examined using Spearman's rho correlation analysis with false discovery rate correction. To identify the independent variables associated with the non-normally distributed dependent variable, a robust regression analysis was performed using the MASS package in R, using Huber's method with Huber's tuning constant set to 1.345 and the MAD scale factor set to 0.6745. Regression analyses were performed using robust regression, and no variable elimination procedure was applied. Predictors were entered hierarchically in pre-specified blocks. Model 1 included the big five personality dimensions as relatively stable individual characteristics. Model 2 added IATS because it represents a behavioral pattern that may be directly related to social media addiction. Model 3 included social media platform use indicators together with the personality dimensions to examine the association between platform use and BSMAS after accounting for personality characteristics. A p-value <0.05 was considered statistically significant.

RESULTS

The participants consisted of 197 (58.8%) females and 138 (41.2%) males. Regarding educational level, the largest group held a bachelor's degree, 165 (49.3%), followed by a master's degree, 68 (20.3%). High school graduates accounted for 49 (14.6%) of the sample, those with an associate degree comprised 29 (8.7%), and participants with less than a high school education made up 24 (7.2%). Details of the sociodemographic and platform usage data are presented in Table 1.

When examining participants' preferences for social media platforms, WhatsApp was the most frequently used platform, reported by 267 (79.7%) participants, followed by Instagram, 236 (70.4%), and YouTube, 163 (48.7%). Other platforms included Twitter, 84 (25.1%), Facebook, 43 (12.8%), TikTok, 24 (7.2%), and Telegram, 26 (7.8%). Snapchat was the least preferred platform, reported by 14 (4.2%) participants.

The descriptive analysis of the five personality traits indicated that agreeableness had the highest mean score (7.69±1.47), followed by conscientiousness (7.46±1.64) and extraversion (7.31±1.76). Openness to experience showed a mean score of 6.70±1.74, while neuroticism had the lowest mean score (5.78±1.65). The BSMAS had a median score of 14 (range, 6-30), while the IATS total score had a median of 77 (range, 35-175).

Gender-based comparisons using the Mann-Whitney U test revealed a significant difference in BSMAS scores between female and male participants (p=0.006), with a median of 15 (range, 6-30) in females and 13 (range, 6-24) in males. However, no significant gender difference was observed in IATS scores (p=0.583). The median was 77 (range, 35-175) for females and 76 (range, 35-175) for males. Detailed descriptive statistics are provided in Table 2.

Table 1. Demographic characteristics of the participants.

	(n=335)
Gender, n (%)	
Female	197 (58.8)
Male	138 (41.2)
Age, n (%)	
18-35 years	201 (60.0)
35-45 years	87 (26.0)
45-65 years	46 (13.7)
>65 years	1 (0.3)
Marital status, n (%)	
Single	81 (24.2)
In a relationship	51 (15.2)
Married	194 (57.9)
Divorced	9 (2.7)
Educational level, n (%)	
Less than high school	24 (7.2)
High school	49 (14.6)
Associate degree	29 (8.7)
Bachelor's degree	165 (49.3)
Master's degree	68 (20.3)

Table 2. Comparison of BSMAS and IATS scores by gender.

	Female (n=197)	Male (n=138)	p
BSMAS	15 (10-18) [6-30]	13 (9-16) [6-24]	**0.006**
IATS	77 (64-96) [35-175]	76 (65-90) [35-175]	0.583

BSMAS: Bergen social media addiction scale, IATS: internet addiction test scale, descriptive statistics are presented as median (25^{th}-75^{th} percentile) [min-max]

The correlation analysis, conducted using Spearman's rho with false discovery rate correction, revealed that BSMAS scores were moderately and positively correlated with IATS scores (r_s=0.507, p<0.001). Additionally, weak positive correlations were observed between BSMAS and agreeableness (r_s=0.179, p=0.002), neuroticism (r_s=0.178, p=0.001), and conscientiousness (r_s=0.240, p=0.002). In contrast, no significant negative correlations were found after adjustment for multiple comparisons. IATS scores showed weak positive correlations with agreeableness (r_s=0.219, p<0.001) and neuroticism (r_s=0.205, p<0.001). Furthermore, the number of social networking sites used (SNSs No.) demonstrated positive associations with both BSMAS (r_s=0.215, p<0.001) and IATS (r_s=0.202, p<0.001). These results indicate that higher neuroticism, agreeableness, and conscientiousness are weakly associated with increased social media and internet addiction levels (Table 3).

Table 3. Correlation analysis among scale scores.

		BSMAS	IATS	OE	AG	NE	CO	EX
IATS	r_s	0.507						
	p	**<0.001**						
OE	r_s	0.099	0.218					
	p	0.082	**<0.001**					
AG	r_s	0.179	0.219	0.141				
	p	**0.002**	**<0.001**	0.012				
NE	r_s	0.178	0.205	0.085	0.175			
	p	**0.001**	**<0.001**	0.141	**0.002**			
CO	r_s	0.240	0.263	0.306	0.276	0.160		
	p	**0.002**	**<0.001**	**<0.001**	**<0.001**	**0.004**		
EX	r_s	0.191	0.161	0.263	0.176	0.207	0.476	
	p	**<0.001**	**0.004**	**<0.001**	**0.002**	**<0.001**	**<0.001**	
SNSs No	r_s	0.215	0.202	0.068	0.010	0.071	0.037	0.025
	p	**<0.001**	**<0.001**	0.234	0.853	0.218	0.531	0.669

BSMAS: Bergen social media addiction scale, IATS: internet addiction test scale, OE: openness to experience, AG: agreeableness, NE: neuroticism, CO: conscientiousness, EX: extraversion, SNSs No: number of social networking sites used, r_s: Spearman's rho with false discovery rate correction.

The regression analyses were performed using robust regression methods to account for violations of normality and potential outliers. In Model 1, which included only personality traits, the overall model was significant ($F=8.702$, $p<0.001$, $R^2=11.34\%$). Higher neuroticism ($\beta=0.477$, $p=0.004$) was associated with higher levels of social media addiction, whereas higher conscientiousness ($\beta=-0.480$, $p=0.013$) was related to lower levels. In Model 2, when IATS was added, the model's explanatory power increased ($F=21.225$, $p<0.001$, $R^2=27.31\%$). Both neuroticism ($\beta=0.345$, $p=0.025$) and IATS ($\beta=0.081$, $p<0.001$) were significantly related to BSMAS scores, while other traits lost significance. In Model 3, IATS was removed, and social media platform usage variables (Instagram, TikTok, Snapchat, etc.) were added alongside personality traits to explore the specific contribution of platform engagement. The model remained significant ($F=8.055$, $p<0.001$, $R^2=23.98\%$). Neuroticism ($\beta=0.319$, $p=0.044$) was positively associated with BSMAS scores, whereas conscientiousness ($\beta=-0.446$, $p=0.017$) and extraversion ($\beta=-0.360$, $p=0.033$) showed negative associations. Among platform variables, Instagram ($\beta=2.646$, $p<0.001$), TikTok ($\beta=2.995$, $p=0.002$), and Snapchat ($\beta=2.652$, $p=0.022$) were significantly related to higher BSMAS levels. All variance inflation factor (VIF) values were below 10, indicating that multicollinearity was not a concern (Table 4).

These findings demonstrate that neuroticism and engagement with specific platforms, particularly Instagram, TikTok, and Snapchat, are more strongly associated with social media addiction than personality traits alone, and that robust regression yields stable results under non-normal data conditions.

DISCUSSION

Sociodemographic Variables, Social Media Platforms, and Addictions

This study examines the relationships between social media addiction, personality traits, social media usage preferences, and demographic factors. There is a significant difference in BSMAS scores between male and female participants, indicating that gender plays a role in social media dependency. Female participants had significantly higher median BSMAS scores than males. However, no significant gender difference has been observed in total internet addiction scores, suggesting that while social media addiction may be influenced by gender-related factors, overall internet addiction is likely driven by broader usage patterns that are not necessarily gender-specific. In examining the factors contributing to internet addiction, demographic variables, particularly gender, are often prioritized. While many studies indicate that males have higher internet addiction levels than females, some findings present conflicting results (15). On the other hand, gender differences are observed in different types of technology-related addictions, with females being more prone to social media and online communication addiction, while males are generally more inclined toward internet gaming (16,17). These differences are suggested to stem from variations in individuals' motivations for technology use. However, these patterns may not be consistent in generalized internet addiction, highlighting the need for further investigation (17).

According to the study's findings, females prefer socially interactive platforms such as Instagram (77.8%) and WhatsApp (76.3%). On the other hand, males primarily use WhatsApp (81.3%), followed by Instagram, which has a prevalence rate of 58.3% among them. Kircaburun et al. (18) conducted a study with 1,008 university students and found that Instagram, Facebook, and WhatsApp were more prevalent compared to other social media platforms, and being female was associated with problematic social media use. Previous studies suggest that females use social media more actively than males. They spend more time on image-based platforms such as Instagram, share more videos, upload more selfies, and engage more frequently through comments and likes.

Table 4. Robust regression models predicting social media addiction (BSMAS scores).

Model	Independent variable	β[1] (95% CI)	Std. Error	β[2]	Test statistic	p	VIF	F; p	R^2
1	**Constant**	19.811 (15.249 to 24.373)	2.319		8.541	**<0.001**		F=8.702; p<0.001	11.34%
	OE	-0.020 (-0.339 to 0.300)	0.162	-0.007	-0.122	0.903	1.134		
	AG	-0.365 (-0.741 to 0.010)	0.191	-0.102	-1.912	0.057	1.100		
	NE	0.477 (0.150 to 0.804)	0.166	0.152	2.870	**0.004**	1.068		
	CO	-0.480 (-0.859 to -0.102)	0.192	-0.152	-2.496	**0.013**	1.413		
	EX	-0.303 (-0.648 to 0.042)	0.175	-0.102	-1.729	0.085	1.325		
2	**Constant**	9.676 (4.919 to 14.433)	2.418		4.001	**<0.001**		F=21.225; p<0.001	27.31%
	OE	0.136 (-0.157 to 0.430)	0.149	0.045	0.913	0.362	1.142		
	AG	-0.131 (-0.478 to 0.215)	0.176	-0.037	-0.744	0.457	1.131		
	NE	0.345 (0.044 to 0.646)	0.153	0.109	2.254	**0.025**	1.093		
	CO	-0.319 (-0.667 to 0.029)	0.177	-0.100	-1.806	0.072	1.428		
	EX	-0.245 (-0.560 to 0.069)	0.160	-0.082	-1.535	0.126	1.321		
	IATS	0.081 (0.062 to 0.099)	0.009	0.422	8.553	**<0.001**	1.134		
3	**Constant**	17.830 (13.514 to 22.147)	2.194		8.126	**<0.001**		F=8.055; p<0.001	23.98%
	OE	-0.010 (-0.314 to 0.293)	0.154	-0.003	-0.066	0.947	1.170		
	AG	-0.328 (-0.684 to 0.027)	0.181	-0.093	-1.816	0.070	1.136		
	NE	0.319 (0.008 to 0.629)	0.158	0.102	2.020	**0.044**	1.106		
	CO	-0.446 (-0.813 to -0.080)	0.186	-0.142	-2.395	**0.017**	1.523		
	EX	-0.360 (-0.691 to -0.029)	0.168	-0.121	-2.137	**0.033**	1.409		
	WhatsApp (User)	-0.092 (-1.339 to 1.156)	0.634	-0.007	-0.145	0.885	1.110		
	Instagram (User)	2.646 (1.544 to 3.748)	0.560	0.235	4.722	**<0.001**	1.078		
	YouTube (User)	0.987 (-0.052 to 2.026)	0.528	0.096	1.868	0.063	1.140		
	Twitter (User)	0.718 (-0.430 to 1.866)	0.584	0.060	1.230	0.220	1.034		
	Facebook (User)	-0.357 (-1.869 to 1.156)	0.769	-0.023	-0.464	0.643	1.086		
	TikTok (User)	2.995 (1.068 to 4.923)	0.980	0.156	3.057	**0.002**	1.137		
	Snapchat (User)	2.652 (0.382 to 4.921)	1.154	0.116	2.299	**0.022**	1.102		
	Telegram (User)	-1.596 (-3.527 to 0.334)	0.982	-0.081	-1.626	0.105	1.094		

BSMAS: Bergen social media addiction scale, IATS: internet addiction test scale, OE: openness to experience, AG: agreeableness, NE: neuroticism, CO: conscientiousness, EX: extraversion, [1]: unstandardized beta coefficient, [2]: standardized beta coefficient, 95% CI: bootstrap confidence interval, VIF: variance inflation factor

This may be due to females' greater tendency toward social interaction (19,20). Therefore, these findings indicate that females may have higher levels of problematic social media use compared to males (18).

In our study, the social media platforms most strongly associated with social media addiction were Instagram, TikTok, and Snapchat. In contrast, WhatsApp, YouTube, Twitter, Facebook, and Telegram showed no significant effect on SNS addiction. Although social networking platforms share similarities, each one possesses distinct characteristics, usage patterns, motivations, and user gratifications this, in turn, can affect user behaviors and addiction. Visually-oriented social media platforms such as Instagram, TikTok, and Snapchat primarily emphasize images and videos, often portraying individuals' lives in an unrealistic manner. Unlike Facebook and Twitter, which are more text-based and have the potential to expose users to negative news and content, Instagram is predominantly used for self-expression, while it is noted to be less preferred for interpersonal communication (20-22). Although TikTok and Snapchat were among the least used platforms by participants, they were found to be significant predictors of SNS addiction in the regression analysis. Research on social media addiction has largely focused on platforms like Facebook and Instagram, while TikTok's rapid rise and associated risks have been overlooked. It has been suggested that TikTok addiction is particularly concerning due to its unprecedented user growth and advanced algorithm, which enhances engagement and intensifies addictive behaviors (23). TikTok, due to security and privacy risks and concerns about harming vulnerable groups, is one of the most popular applications that has been intermittently banned by many countries, primarily for political reasons (24). These restrictions and bans have, in turn, also influenced studies related to its addiction. Problematic use is more strongly associated with Snapchat than with Facebook, which may be linked to Snapchat's "snapstreak" feature that rewards daily messaging, likely increasing the time spent on the platform. Unlike Facebook, Snapchat offers gamified messaging features such as the "Snapstreak," which rewards users for consecutive daily interactions with friends. This

mechanism, marked by a flame icon and a running day count, creates a reward-based habit loop that encourages users to maintain uninterrupted streaks. (25,26).

Personality Traits and Social Networking Sites (SNSs) Addiction

In this study, when only personality traits were included in the regression analysis, neuroticism was positively associated with SNS addiction, whereas conscientiousness showed a negative association. The latest meta-analysis supports that higher neuroticism and lower conscientiousness, openness, and agreeableness are associated with problematic social media use. However, it does not support an association between lower extraversion and problematic social media use. The effect sizes for neuroticism and conscientiousness are small to medium, while those for agreeableness and openness are small (27). Another meta-analysis synthesized the relationship between SNS addiction and big five personality traits by extending the research scope to all social media platforms. The results showed that neuroticism had a small to moderate association with SNS addiction, indicating that individuals with higher neuroticism are more prone to social media addiction. Extraversion and openness were not significant predictors of SNS addiction, while agreeableness had a small negative association. Conscientiousness also demonstrated a small association with problematic social media use (28).

The findings of these meta-analyses are partly consistent with our results, as neuroticism remained positively associated and conscientiousness negatively associated with SNS addiction in the personality-only model. When IATS was introduced in Model 2, the model's explanatory power increased (R^2=27.3%), but the effects of personality traits became weaker, suggesting that general internet addiction may partly mediate these associations. In Model 3, IATS was removed, and social media platform usage variables were added alongside personality traits to explore the specific contribution of platform engagement. The final model remained significant (R^2=23.98%), and neuroticism continued to show a positive association with BSMAS scores, whereas conscientiousness and extraversion were negatively related. However, the unstandardized beta coefficients for platform variables (Instagram β=2.646, TikTok β=2.995, Snapchat β=2.652) were notably higher than those of personality traits (ranging from -0.446 to 0.319), suggesting that platform-specific engagement had a stronger relationship with SNS addiction. These comparative coefficient magnitudes suggest that the type of platform used and the extent of engagement with it, has a more pronounced impact on SNS addiction than personality traits alone.

This study has several limitations. First, the TIPI is a brief instrument that measures personality traits in a limited manner compared to more comprehensive scales. Although short personality inventories offer practical advantages such as ease of administration and reduced participant burden, they present important limitations in terms of content validity. The limited scope of such measures may lead to an underestimation of the true strength of relationships between personality traits and other variables. A recent scoping review by Thørrisen and Sadeghi (29) reported that while the TIPI demonstrates acceptable test-retest reliability, its convergent and structural validity are mixed, and internal consistency is limited due to its brevity. In line with these findings, the present study employed the TIPI to reduce participant fatigue and enable a larger sample size. However, it should be acknowledged that the TIPI may provide only a limited and less precise assessment of personality traits. Second, the cross-sectional design of the study prevents any causal inference, meaning that the relationships observed can only be interpreted as associations rather than directional effects. Additionally, gender was not included in the regression analyses, although social media use may vary by gender. Other potentially confounding variables, such as medication use, disorder duration, and psychiatric comorbidities, were also not controlled for, which may have influenced the observed relationships. Participants were recruited via WhatsApp, email, Telegram, and Instagram through snowball sampling, which may have introduced selection bias and limited the generalizability of the findings within a specific cultural context. Self-reported usage durations were excluded due to recall bias, which may have affected data accuracy. Finally, the study did not explore the specific motives for using different social network platforms, which could further refine the interpretation of platform-related patterns in future research.

CONCLUSION

This study suggests that social media addiction is shaped more by platform design and engagement patterns than by personality traits alone. While higher neuroticism and lower conscientiousness were associated with greater social media addiction, their effects diminished once platform-related factors were considered. Instagram, TikTok, and Snapchat were most strongly linked to higher addiction levels, indicating that visually oriented and interaction-based platforms may foster more compulsive use. Future research should explore how scrolling-based features, such as YouTube Shorts, Instagram Reels, and TikTok's For You Page, contribute to compulsive SNS engagement. Additionally, longitudinal studies are needed to determine the causal relationship between personality traits and SNS addiction. Further investigations should also consider the impact of age and cultural differences in shaping social media usage patterns and addiction risks.

DECLARATIONS

Acknowledgements: The authors do not wish to acknowledge any individual or institution.

Author Contributions: Conceptualization, A.B.Ö., A.E.K., Ç.H.; Methodology, A.B.Ö.; Formal Analysis, A.B.Ö. and A.E.K.; Investigation, A.B.Ö., A.E.K., Ç.H.; Data Curation, A.E.K.; Writing–Original Draft, A.B.Ö., A.E.K., Ç.H.; Writing–Review & Editing, A.B.Ö., A.E.K., Ç.H. All authors have read and approved the final version of the manuscript.

Conflict of Interest: The authors declare no conflict of interest.

Supporting Institutions: This research received no external funding.

Ethical Approval: This study was approved by the Ethics Committee for Non-Interventional Clinical Research of Sivas Cumhuriyet University and was deemed ethically

appropriate (Decision No: 2024-11/36, Date: 21.11.2024). Although the authors are affiliated with different institutions, the online data collection process was conducted entirely by the researcher affiliated with the institution that granted ethical approval. All procedures complied with the ethical standards of the approving committee and the principles of the Declaration of Helsinki.

Plagiarism Statement: This article has been evaluated for plagiarism, and no instances of plagiarism were detected.

Use of Artificial Intelligence (AI) Tools: The authors declare that no AI tools were used in the creation of this article.

REFERENCES

1. Marciano L, Camerini AL, Schulz PJ. Neuroticism in the digital age: a meta-analysis. Comput Hum Behav Rep. 2020;2:100026. doi:10.1016/j.chbr.2020.100026.
2. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Washington, DC: American Psychiatric Publishing; 2013.
3. Jaradat MIR, Atyeh AJ. Do personality traits play a role in social media addiction? Key considerations for successful optimized model to avoid social networking sites addiction: a developing country perspective. International Journal of Computer Science and Network Security. 2017;17(8):120-31.
4. Kuss DJ, Griffiths MD. Online social networking and addiction--a review of the psychological literature. Int J Environ Res Public Health. 2011;8(9):3528-52. doi:10.3390/ijerph8093528.
5. Sheldon P, Antony MG, Ware LJ. Baby boomers' use of Facebook and Instagram: uses and gratifications theory and contextual age indicators. Heliyon. 2021;7(4):e06670. doi:10.1016/j.heliyon.2021.e06670.
6. Pellegrino A, Stasi A, Bhatiasevi V. Research trends in social media addiction and problematic social media use: a bibliometric analysis. Front Psychiatry. 2022;13:1017506. doi:10.3389/fpsyt.2022.1017506.
7. McCrae RR, Costa PT Jr. Validation of the five-factor model of personality across instruments and observers. J Pers Soc Psychol. 1987;52(1):81-90. doi:10.1037//0022-3514.52.1.81.
8. Kayiş AR, Satici SA, Yilmaz MF, Şimşek D, Ceyhan E, Bakioğlu F. Big five personality trait and internet addiction: a meta-analytic review. Computers in Human Behavior. 2016;63:35-40. doi:10.1016/j.chb.2016.05.012.
9. Liu D, Campbell WK. The big five personality traits, big two metatraits, and social media: a meta-analysis. Journal of Research in Personality. 2017;70:229-40. doi:10.1016/j.jrp.2017.08.004.
10. Gosling SD, Rentfrow PJ, Swann Jr WB. A very brief measure of the big five personality domains. Journal of Research in Personality. 2003;37(6):504-28. doi:10.1016/S0092-6566(03)00046-1.
11. Atak H. The Turkish adaptation of the ten-item personality inventory. Noro Psikiyatr Ars. 2013;50(4):312-9. doi:10.4274/npa.y6128.
12. Schou Andreassen C, Billieux J, Griffiths MD, Kuss DJ, Demetrovics Z, Mazzoni E, et al. The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: a large-scale cross-sectional study. Psychol Addict Behav. 2016;30(2):252-62. doi:10.1037/adb0000160.
13. Demirci İ. Bergen Sosyal Medya Bağımlılığı Ölçeğinin Türkçeye uyarlanması,depresyon ve anksiyete belirtileriyle ilişkisinin değerlendirilmesi [The adaptation of the Bergen social media addiction scale to Turkish and its evaluation of relationships with depression and anxiety symptoms]. Anadolu Psikiyatri Derg. 2019;20(Suppl 1):15-22. Turkish. doi:10.5455/apd.41585.
14. Kayri M, Günüç S. The adaptation of internet addiction scale into Turkish: the study of validity and reliability. Ankara University, Journal of Faculty of Educational Sciences. 2009;42(1):157-75. doi:10.1501/Egifak_0000001142.
15. Anderson EL, Steen E, Stavropoulos V. Internet use and problematic internet use: a systematic review of longitudinal research trends in adolescence and emergent adulthood. Int J Adolesc Youth. 2017;22(4):430-54. doi:10.1080/02673843.2016.1227716.
16. Kuss DJ, Griffiths MD. Internet addiction in psychotherapy. London: Palgrave; 2015.
17. Su W, Han X, Yu H, Wu Y, Potenza MN. Do men become addicted to internet gaming and women to social media? A meta-analysis examining gender-related differences in specific internet addiction. Computer in Human Behavior. 2020;113:106480. doi:10.1016/j.chb.2020.106480.
18. Kircaburun K, Alhabash S, Tosuntaş ŞB, Griffiths MD. Uses and gratifications of problematic social media use among university students: a simultaneous examination of the big five personality traits, social media platforms, and social media use motives. Int J Ment Health Addiction. 2020;18:525-47. doi:10.1007/s11469-018-9940-6.
19. Choi TR, Sung Y, Lee JA, Choi SM. Get behind my selfies: the big five traits and social networking behaviors through selfies. Pers Individ Dif. 2017;109:98-101. doi:10.1016/j.paid.2016.12.057.
20. Sheldon P, Bryant K. Instagram: motives for its use and relationship to narcissism and contextual age. Computer in Human Behavior. 2016;58:89-97. doi:10.1016/j.chb.2015.12.059.
21. Alhabash S, Ma M. A tale of four platforms: motivations and uses of Facebook, Twitter, Instagram, and Snapchat among college students. Social Media + Society. 2017;3(1):1-13. doi:10.1177/2056305117691544.
22. Fatuma D. The relationship between social media and anxiety. Research Invention Journal of Current Issues in Arts and Management. 2024;3(2):102-7.
23. Smith T, Short A. Needs affordance as a key factor in the likelihood of problematic social media use: validation, latent profile analysis and comparison of TikTok and Facebook problematic use measures. Addict Behav. 2022;129:107259. doi:10.1016/j.addbeh.2022.107259.
24. Clausius M. The banning of TikTok, and the ban of foreign software for national security purposes. Wash U Global Stud L Rev. 2022;21(2):273-92.
25. Burke B. Gamify: how gamification motivates people to do extraordinary things. New York: Routledge; 2016.
26. Meshi D, Turel O, Henley D. Snapchat vs. Facebook: differences in problematic use, behavior change attempts, and trait social reward preferences. Addict Behav Rep. 2020;12:100294. doi:10.1016/j.abrep.2020.100294.
27. Meynadier J, Malouff JM, Schutte NS, Loi NM. Meta-analysis of associations between five-factor personality traits and problematic social media use. Curr Psychol. 2024;43:23016-35. doi:10.1007/s12144-024-06052-y.
28. Huang C. Social media addiction and personality: a meta-analysis. Asian J Soc Psychol. 2022;25(4):747-61. doi:10.1111/ajsp.12531.
29. Thørrisen MM, Sadeghi T. The Ten-Item Personality Inventory (TIPI): A scoping review of versions, translations and psychometric properties. Front Psychol. 2023;14:1202953. doi:10.3389/fpsyg.2023.1202953.