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Research Paper

Relationship between Social Media Addiction, Personality, and Self-esteem: Unraveling Generational Differences

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ABSTRACT

The aim of the study was to assess the relationship between social media addiction with personality and self-esteem. It also compared the level of social media addiction between young adults and middle-aged adults and between males and females. The sample consisted of 320 participants in the age range of 18-25 and 40-50 years. Social Media Addiction Scale, Big Five Inventory (BFI) and Rosenberg Self-Esteem Scale were used. There was a significant correlation between social media addiction and the three dimensions of Big Five inventory. Low self-esteem was related to higher scores on social media addiction. Significantly higher levels of social media addiction were found among young adults compared to middle-aged adults. No significant gender differences were found on most of the dimensions of social media addiction. Various stakeholders, like academicians, educators, and healthcare professionals, can get useful insights into the phenomenon of social media by using the findings of the study.

Keywords: *Age Group, Gender, Personality, Self-Esteem, Social Media Addiction*

*"**Technology** is not good or bad, for it knows no ethics and principles. The problem is not technology, nor is it the capitalist tendency. The real disease is human recklessness, which is rampant in modern society. Your phone is not ruining your peace, you yourself are doing it all." — Abhijit Naskar, Mucize Insan: When the World is Family (Naskar, 2021).*

The bulletin board system (BBS), which was first used in 1978, was the start of social networking. SixDegrees.com was the first meaningful social networking site (SNS) created in 1997. SNSs are web-based systems that enable users to create a public or semi-public profile within a confined system, identify other users with whom they are connected, and then browse and navigate through a list of their connections as well as those made by others (Boyd & Ellison, 2007; Madaiah et al., 2016).

The term 'social media' refers to "Internet-based tools that are founded on the principles of Web 2.0" (Donath & Boyd, 2004). According to Oxford languages dictionary, "Web 2.0 was the second stage of development of the internet, characterized by the change from static web pages to dynamic or user-generated content and the growth of social media". There is a

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transformation from a passive consumer of content to an active production, collaboration, and sharing of content (Hawi & Samaha, 2019; Kuss & Griffiths, 2017; Purnama et al., 2021). Facebook, Instagram, Twitter, Snapchat, YouTube, blogging sites, social gaming platforms and many others are examples of social media platforms.

According to Petrosyan (2024), there are 5.35 billion internet users worldwide. Of these, 5.04 billion, or 62.3 percent of the world's population, were social media users. India was home to 462 million social media users in January 2024, equating to 32.2 percent of the total population. More Indians are adopting the digital lifestyle as data packs become more affordable and the internet becomes more accessible. India had the highest social media accounts per person (11.5) compared to worldwide (8.4).

COVID-19 pandemic led to an unprecedented surge in the use of social media, which has long-term consequences for future use as well (Aggarwal et al., 2022). The popularity of social media among the masses has generated prolific research in the past two decades (Ali et al., 2019; Duggan et al., 2015). Meta-analytical study by Cheng et al. (2021) involving 34,798 respondents from 32 nations across seven geographical regions revealed that the prevalence of social media addiction in collectivist countries (31 percent) was shown to be two times higher than in individualist countries (14 percent). Individualist countries' citizens tend to see themselves as separate from others, whereas collectivist countries' citizens see themselves as vital parts of their social networks (Markus & Kitayama, 2001). Koreans were more interested in 'social support and social interactions,' while Americans were more interested in 'entertainment' (Kim, et al., 2011). These cross-cultural studies revealed differences in use, motivations, and online behavior across different cultural contexts.

Different social media sites may have different uses (Kirkaburun et al., 2019). However, excessive, problematic, and pathological usage of social media can lead to personal, social, vocational, and educational problems (Griffiths et al., 2014; Sahin, 2018). Some of the negative aspects include multitasking, reduced real human contact, reduced communication skills, reduced learning and research capabilities, reduced command of language due to use of abbreviations, jargons, slangs, and reliance on autocorrect, grammar, and spell check features, wastage of time, loss of motivation due to dependence on a virtual environment instead of gaining practical knowledge from the real world (Milani et al., 2009; Sheldon et al., 2021).

In a study on the effect of social networking sites (SNS) on 408 medical college students from Bangalore, India, (Madaiah et al., 2016), majority of participants (67.2 percent) reported using social media on a daily basis. Chatting was the most popular activity (77.9 percent), followed by posting images (41.9 percent), 28.4 percent becoming frustrated, and 23.5 percent experiencing mood changes as a result of using social media. Excessive use of social media causes headaches, vision problems, and low academic performance in the majority of participants. Other consequences include poor quality of sleep, backache (Madaiah et al., 2016), detrimental impact on relationships, and hampered well-being (Kaplan, & Haenlein, 2010; Milani et al., 2009). Not being able to access the mobile phones and internet causes a panic reaction among children and adults. Moreover, they are not able to remain away from the internet for a longer period of time (Purnama et al., 2021).

Andreassen and Pallesen (2014, p. 4054) defined social media addiction as "being overly concerned about social network sites (SNSs), to be driven by a strong motivation to log on

to or use SNSs, and to devote so much time and effort to SNSs that it impairs other social activities, studies/job, interpersonal relationships, and/or psychological health and well-being." Social media addiction, problematic social media use, and compulsive social media use are sometimes used interchangeably to describe the phenomenon of maladaptive social media use (Klobas et al., 2018; Tarafdar et al., 2020). However, "Problematic social media use" is a broader term which can include unlawful, unethical, or socially undesirable online actions (e.g., cyberstalking, cyberbullying, propagate scams and incorrect information) (Sun & Zhang, 2021).

Problematic internet use such as social media addiction (SMA), compulsive shopping, compulsive gambling, compulsive theft, compulsive sexual activities, are all phenomenologically and neurobiologically similar to substance use disorders (Grant & Chamberlain, 2016). Although SMA is not included in the Diagnostic and Statistical Manual of Mental Disorders V (DSM-5) (Kirkaburun et al., 2019; Kose & Dogan, 2019), some people report an uncontrollable urge to use it and become addicted. Griffiths (2005) identified various behaviors as potentially addictive which do not include substance abuse, such as internet, gaming, gambling, sex, and exercise. These addictions share components like salience, conflict, mood modification, withdrawal, tolerance, and relapse. As a result, excessive and compulsive social media use can be classified as a behavioral addiction (Andreassen et al., 2013).

Social Media, Personality, and Self-Esteem

The Big five factor model of personality includes five personality dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness (McCrae & John, 1992). Most of the studies found significant correlations between social media addiction and various personality traits. Neuroticism was positively related (Andreassen et al., 2013), and agreeableness, conscientiousness, and openness were negatively related (Andreassen et al.,2013; Hawi & Samaha, 2019; Kose & Dogan., 2019) with social media addiction. Extraversion was either positively correlated (Andreassen et al., 2013) or there was no relationship (Tang et al., 2016). However, for emotional stability, negative correlation was observed (Hawi & Samaha, 2019; Kircaburun & Griffiths, 2018).

A person's perceptions and feelings about his or her own value and worth are referred to as self-esteem, which is a part of self-concept and is characterized as either a generally positive or negative attitude toward oneself (Martin-Albo et al., 2007; Rosenberg, 1965). Addiction also has a detrimental influence on identity development since addicts frequently compare themselves to others unfavorably (Sheldon et al., 2021; Stefanone et al., 2011). Several researchers have reported that lower levels of self-esteem were associated with higher levels of social media addiction (Andreassen et al., 2017; Błachnio et al., 2016; Kose & Dogan, 2019).

Gender and Age

Globally, 46.5 percent users of social media are females and 53.5 percent are males (Chaffey, 2024). However, in South Asia, only 27 percent of users of social media were female, compared to 73 percent of males. There is a gender imbalance in South Asian countries pertaining to internet accessibility. While many variables contribute to the digital gender gap, the most convincing causes are economic and sociocultural constraints (Keelery, 2021).

The age groups with the greatest rates of feeling "slightly" addicted to social media are 18 to 22 years old (40 percent), followed by 23 to 38 years old (37 percent). Research studies show that the SMA peaks in young adulthood, it is lower in adolescence as well as middle age adults (Abbasi, 2019; Monacis et al., 2017).

Rationale for the Present Study

Our private moments are being exposed to the world. We also lead two separate lives, one of which is the created and embellished representation of our lives that is displayed on social media platforms, while the reality may be very different. We are also constantly comparing our lives to those of our online friends, and since their lives are more for seeking popularity/flaunting than true, we might not live up to their unreasonable ideals. Whether they are young adults or middle-aged individuals, social media and social networking sites in general have a significant influence on people. SMA and its effects have long been a topic of discussion.

Objectives

- To study the relationship between SMA and personality.
- To study the relationship between SMA and self-esteem.
- To compare the level of SMA between young adults and middle-aged adults.
- To compare the level of SMA between males and females.

Hypotheses

- There will be a significant relationship between SMA and personality
- There will be a significant relationship between SMA and self-esteem
- There will be a significant difference in the level of SMA between young adults and middle-aged adults
- There will be a significant difference in the level of SMA between males and females

METHODOLOGY

An ex-post facto, cross-sectional and correlational research design was used in the present study. Relationship between personality traits and self-esteem with SMA was explored. Age and gender were the independent variables and SMA was the dependent variable.

Sample

The were selected from two different age groups using convenience and purposive sampling. Group 1 consisted of people from 18-25 years *(M* = 20.70, *SD* = 1.90) and Group 2 consisted of people from 40-50 15years *(M* = 45.55, *SD* = 3.22). An equal number of males and females from both the age groups were selected. Participants using social media and fluent in English language was the inclusion criteria. Demographic characteristics of the participants are given in Table 1.

Table No. 1 Demographic Characteristics of Participants.

Characteristic	*n*	Percent
Gender		
Males	160	50.0
Females	160	50.0
Age		
18-25 years	160	50.0
40-50 years	160	50.0

Characteristic	*n*	Percent
Education		
High School	94	29.4
Graduates	136	42.5
Post-graduates or above	90	28.1
Occupation		
Student	134	41.9
Homemaker	45	14.1
Employed	132	41.2
Self-employed	8	2.5
Retired	1	0.3
Annual Family Income		
Below 5 lakhs	58	18.1
Between 5-15 lakhs	176	55.0
Above 15 lakhs	86	26.9
Residence		
Urban	277	86.6
Semi-urban	34	10.6
Rural	9	2.8
Relationship Status		
Single	122	38.1
Married	153	47.8
In a relationship	45	14.1

Instruments

Three measures were used in this study,

1. **Adapted version of Social Media Addiction Scale:** Social Media Addiction Scale developed by Şahin (2018), is a 5-point Likert type scale that consists of 29 items and 4 sub-dimensions - virtual tolerance (people who spend too much time on social media and have a desire to be notified of anything immediately), virtual communication (people who prefer to use social media platforms to communicate with people rather than interacting with them face-to-face), virtual problem (people who have a tendency to ignore and procrastinate day-to-day essential tasks and functions in order to be active on social media leading to detrimental impact on physical and mental health), and virtual information (people who have the desire to stay continuously connected on social media in order to stay updated about information and events related to work or family/friends or any significant events of interest). The scores on the scale range from 29 to 145. The higher scores imply that the individual considers themself to be a "social media addict". Internal consistency coefficient (Cronbach's alpha) was found to be .93 for the whole scale and .81 to .86 for the sub-factors. Test-retest coefficient was found to be .94. Content validity was established by 6 experts from various fields. For the present study, in items 15 and 28, the word 'homework' was replaced by 'work' as the participants consisted of middle aged and young adults. Cronbach alpha for the adapted version was found to be .90 by the authors of the present study (n = 320).
2. **Big Five Inventory (BFI):** The Big Five Inventory (BFI) by John et al. (1991) is a self-report scale that is designed to measure the big five personality traits (extraversion, agreeableness, conscientiousness, neuroticism, and openness). It is a 5-point Likert type scale that consists of 44 items in total. The five-factor theory is a comprehensive measure of personality based on empirical evidence. The mean

reliability coefficients for all the extracted factors of BFI was .83. Across all 5 factors, the mean of the convergent validity correlations across instruments (Trait descriptive Adjectives and NEO-FFI) was .75. It is important to note that each of the five personality factors represents a range between two extremes.

3. **Rosenberg Self-Esteem Scale:** The Rosenberg Self-Esteem scale (Rosenberg, 1965) is a 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. The scale is believed to be unidimensional. All items are answered using a 4-point Likert scale format, ranging from strongly agree to strongly disagree. The score ranges from 0 to 30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem. It presented high internal reliability (alpha = .92), coefficient of validity was at least 0.90 (Rosenberg, 1989).

Procedure

A Google form was prepared which consisted of five parts. The first part contained a small brief about the present study, along with a consent form and selection criteria questions. The second part consisted of filling in demographic details. Subsequent parts consisted of questions from Big Five Inventory, Social Media Addiction Scale and the Rosenberg Self-Esteem Questionnaire. Participants were assured of their confidentiality and anonymity of their responses. Approximately 450 participants were sent the Google form, of which 332 filled the survey, yielding 73.8 percent response rate. 12 forms were rejected as they were incomplete. Thus, the final sample size for the study was 320.

In order to understand the relationship of SMA with personality and self-esteem, Pearson's correlation between these variables were computed using SPSS version 21. Factorial analysis of variance was conducted to compare the level of SMA between the two different age groups and genders.

RESULTS

Table No. 2 Descriptive statistics and correlations for study variables (n = 320).

Variable		***M***	***SD***	**Social Media Addiction**				
				VT	**VC**	**VP**	**VI**	**TS**
Social Media Addiction	Virtual Tolerance	14.08	3.93	-				
	Virtual Communication	23.53	5.23	.61**	-			
	Virtual Problem	20.60	5.41	.58**	.65**	-		
	Virtual Information	18.24	4.04	.47**	.51**	.54**	-	
	Total Score	76.46	15.33	.79**	.86**	.87**	.75**	-
Personality	Extraversion	3.26	0.70	-.06	-.11	-.15**	.08	-.09
	Agreeableness	3.84	0.55	-.09	-.23**	-.22**	-.15**	-.22**
	Conscientiousness	3.60	0.67	-.25**	-.24**	-.36**	-.15**	-.31**
	Neuroticism	2.96	0.78	.23**	.25**	.27**	.12*	.27**
	Openness	3.66	0.47	.02	-.02	-.02	.08	.01
Self-esteem		19.66	4.90	-.26**	-.23**	-.31**	-.05	-.27**

*p<0.05. **p<0.01

Table 2 presents mean and standard deviation of all relevant variables. 40 correlation coefficients have been provided. Of these, 30 are relevant to the present study, including correlation between five personality traits and self-esteem with four dimensions of SMA and total score on SMA.

Table No. 3 Factorial analysis of variance to examine age and gender differences in SMA

Variable	***M***	***SD***	***df***	***F* ratio**	***p***	ηp^2
Virtual Tolerance						
Age Group						
Young Adults	15.08	3.91	1	22.38	.00	.07
Middle-aged Adults	13.08	3.70				
Sex						
Males	13.66	3.94	1	3.89	.05	.01
Females	14.49	3.88				
Age*Sex			1	4.13	.04	.01
Virtual Communication						
Age Group						
Young Adults	24.15	5.06	1	4.54	.03	.01
Middle-aged Adults	22.92	5.31				
Sex						
Males	23.97	4.89	1	2.26	.13	.01
Females	23.10	5.23				
Age*Sex			1	3.42	.07	.01
Virtual Problem						
Age Group						
Young Adults	21.72	5.57	1	14.25	.00	.04
Middle-aged Adults	19.49	5.02				
Sex						
Males	20.88	5.54	1	0.85	.36	.00
Females	20.33	5.28				
Age*Sex			1	2.76	.10	.01
Virtual Information						
Age Group						
Young Adults	18.64	4.04	1	3.11	.08	.01
Middle-aged Adults	17.84	4.02				
Sex						
Males	18.61	4.27	1	2.64	.11	.01
Females	17.88	3.79				
Age*Sex			1	0.06	.81	.00
Total Score						
Age Group						
Young Adults	79.58	15.01	1	14.02	.00	.04
Middle-aged Adults	73.33	15.06				
Sex						
Males	77.94	15.18	1	3.18	.08	.01
Females	74.97	15.39				
Age*Sex			1	3.26	.07	.01

Table 3 shows the results obtained from factorial analysis of variance. There was a significant main effect of age of the participants on the virtual tolerance dimension of SMA, $F(1, 318) = 22.38$ ($p < .01$), $\eta^2_p = .07$; on the virtual communication dimension of SMA,

$F(1, 318) = 4.54$ ($p < .05$), $\eta^2_p = .01$; and on the virtual problem dimension of SMA, $F(1, 318) = 14.25$ ($p < .01$), $\eta^2_p = .04$. Likewise, there was a significant effect of age on the total score on SMA, $F(1, 318) = 14.02$ ($p < .01$), $\eta^2_p = .04$. However, the main effect of gender on SMA was found to be significant only on the virtual tolerance dimension, $F(1, 318) = 3.89$ ($p < .05$), $\eta^2_p = .01$. There was a significant interaction effect between age and gender only on the virtual tolerance dimension, $F(1, 318) = 4.13$ ($p < .05$), $\eta^2_p = .01$.

DISCUSSION

The present study helps us understand social media addiction (SMA) and its correlates, namely, the big five personality traits and self-esteem. Also, it has explored differences in SMA across two age groups (young adults and middle-aged adults) and genders (males and females). 30 correlation coefficients have been explained in the light of the proposed hypotheses. Factorial analysis of variance has been used in order to discuss age and gender differences on four dimensions and the total score of SMA.

The **first hypothesis** that there will be a significant relationship between social media addiction and personality showed mixed results. 15 out of 25 correlation coefficients were found to be significant. Neuroticism correlated positively with all the four dimensions and the total score on SMA. Thus, people with neurotic tendencies, such as anxiety, and emotional instability are vulnerable to social media addiction. They may be high on impulsiveness, and thus, may not succeed in inhibiting the tendency to use social media dysfunctionally. Also, social media might help them to alleviate their anxieties temporarily and escape from these uncomfortable feelings while they are online, as explained by self-escape theory by Baumeister (1990).

Conscientiousness, on the other hand, correlated negatively with all four dimensions and the total score on SMA ($p < .01$). Hence, those who are responsible, organized, and do their work systematically are less likely to be addicted to social media. Such people set clear deadlines, will segregate their time judiciously by planning their day, thus they are less vulnerable to use social media excessively.

Agreeableness correlated negatively with all the four dimensions and the total score on SMA. The correlation was significant on three dimensions (virtual communication, virtual problem, and virtual information) and the total score on SMA ($p < .01$). Those who tend to be trustworthy, cooperative, polite, and sympathetic, also reported lower levels of SMA. Such people are likely to be secure within themselves and may have healthy real-life interpersonal relationships. Thus, their need for validation from virtual friends might be low.

No significant correlation was found between extraversion and SMA, except a negative correlation with the virtual problem dimension of SMA. People high on extraversion have good social skills in real life, seek stimulation from the external environment, and feel comfortable interacting with people in person; thus, they may not be vulnerable to SMA as explained by Caplan's Social Skill Model of Problematic Internet Use (Caplan, 2003) and Caplan's Updated Cognitive-Behavioral Model (Caplan, 2010).

There was no significant correlation between openness and SMA. Such people can gratify their needs through sources other than social media as they tend to be imaginative, creative, and intellectual.

Our findings are in line with most of the previous research, positive correlation between social media and neuroticism, and negative correlation with agreeableness and conscientiousness (Rosales et al., 2021; Shivam et al., 2021; Tekin & Turhan, 2021). However, mixed results were reported for extraversion (Rosales et al., 2021; Shivam et al., 2021; Sumaryanti et al., 2020).

The **second hypothesis** was that there will be a significant relationship between social media addiction and self-esteem. Self-esteem correlated negatively with all the four dimensions and the total score on SMA. The correlation was significant on three dimensions (virtual tolerance, virtual communication, virtual problem) and the total score on SMA ($p <$ .01) indicating that people with low self-esteem are more likely to be addicted to social media. People low on self-esteem have negative feelings about their own value and worth. People have a tendency to present themselves in a positive light on social media as compared to their real life. People with low self-esteem, may either compare themselves unfavorably to positive projections of their virtual friends; and also, try to compensate for their feelings of low self-esteem by positively projecting their own virtual lives in order to deal with their self-esteem issues in real life. People with low self-esteem may prefer to engage more in virtual interactions or likely to help them feel safer and in control than face-to-face interactions to deal with real life social situations, which they may find challenging. Uses and gratification theory (Katz et al., 1973) and Needs-Affordances-Features (NAF) model of technology use (Karahanna et al., 2018) are relevant here, as people need to compensate for their feelings of low self-worth by using social media excessively. Previous research has also reported that low self-esteem was correlated with higher SMA (Hawi & Samaha, 2019; Kose & Dogan, 2019; Purnama et al., 2021).

The **third hypothesis** was that there will be a significant difference in the level of social media addiction between young adults and middle-aged adults. Table 3 shows that young adults were significantly more addicted to social media compared to middle-aged adults on three dimensions (virtual tolerance, virtual communication, and virtual problem) and the total score of SMA. Youngsters, in comparison to the older generations, gain access to social media at a very early age, feeling more comfortable using social media as a means of communication, thus making them more susceptible to social media addiction (Ho et al. 2017; Monacis et al, 2017). Younger people's inability to exercise self-control (Smith, 2018; Telzer et al., 2014), the need for "likes" on social media, and low self-esteem (Kose & Dogan, 2019) contribute to their need to use social media as a coping mechanism. Additionally, middle-aged adults have a stronger sense of responsibility and more developed self-control, which might help them regulate their social media usage more effectively. Furthermore, middle-aged people may use social media more for practical purposes, including keeping in touch with friends and family, than for emotional fulfillment or sociability, which lowers their likelihood of addiction. External variables, such as the necessity to strike a balance between work-life and family-life may also restrict the time available to use social media (Li et al., 2021).

These results can be explained by the Uses and Gratifications Theory (Katz et al., 1973), the Incentive-Sensitization Theory of Addiction (Robinson & Berridge, 1993), and the Dual System Theory (Evans, 2008; Kahneman, 2011), as young adults seek gratifications, are responsive to rewarding stimuli, and have underdeveloped impulse control systems, contributing to their vulnerability to addiction as compared to middle-aged adults. Similar

results have been found in previous studies (Abbasi, 2019; Ho et al., 2017; Li et al., 2021; Monacis et al., 2017)

The **fourth hypothesis** was that there will be a significant difference in the level of social media addiction between males and females. Females scored significantly higher (p = .05) than males on the virtual tolerance dimension of SMA. People with high scores on virtual tolerance dimension are those who spend too much time on social media and have a desire to be notified of anything immediately. Behaviors that force the person into these actions can be explained as social media addiction. Females use social media primarily for information and interpersonal communication, whereas men use it mostly for entertainment and recreation (Noguti et al., 2019). Moreover, women are more likely to be vulnerable to SMA as a means of coping with feelings of loneliness due to the unfulfillment of social needs in real life (Chae et al., 2018), while men are found to be more addicted to internet gaming disorders (Su et al., 2020). Females tend to utilize social media as a tool for engagement and value relationships more than males (Fujimori et al., 2015; Kim et al., 2010). Hence, they are more vulnerable to social media addiction when it comes to interpersonal relationship orientation (Chae et al., 2018). Eagly's (1987) Social Role Theory is relevant here, which posits that there are socially defined roles that are expected of people who occupy a specific role, which can explain women's inclination towards social media as women are expected to reply and comply with the notifications as part of their social roles to maintain interpersonal relationships. This could be linked to traditional gender roles emphasizing relational caregiving. According to Gilligan (1983), women, compared to men, prioritize caring for others and interpersonal relationships. Because of their propensity for connection and compassion, women may feel more pressure to reply quickly when they receive notifications, which could make them more prone to developing a social media addiction.

On the remaining three dimensions and total score, there were no significant gender differences in SMA. Previous research regarding the gender differences in SMA prevalence are mixed. Some studies found that females may be more vulnerable than males in developing SMA (Andreassen et al., 2017; Monacis et al., 2017; Stanculescu & Griffiths, 2022), whereas no significant difference was found between males and females in terms of prevalences of social media addiction in other studies (Arora et al., 2022; Patel et al., 2021; Zam et al., 2022).

The present study provides valuable insights into the relationship between personality traits, self-esteem, and social media addiction. However, the study is not without limitations. Its cross-sectional nature and self-report measures may introduce bias. Longitudinal studies will provide more comprehensive understanding about these relationships. The study's generalizability is limited due to its focus on specific age groups and lack of cultural or socioeconomic variations.

Implications

Understanding the relationship between personality traits and SMA can help in the development of targeted interventions. Strategies focused on enhancing conscientiousness and agreeableness while addressing neurotic tendencies can prove beneficial in the prevention and management of SMA. Low self-esteem was associated with high levels of SMA; interventions aimed at fostering self-esteem can act as a protective factor against SMA. The study also asserts the need to recognize age-related differences, suggesting tailored interventions to address their specific concerns.

CONCLUSION

The present study was aimed at understanding social media addiction (SMA) and its association with personality traits and self-esteem across two different age groups (young and middle-aged adults) and gender. Neuroticism was found to have a positive correlation with SMA, while negative correlations were observed with agreeableness and conscientiousness. No significant relationship was found with extraversion and openness. Self-esteem showed a negative correlation, suggesting that individuals with higher self-esteem are less likely to succumb to SMA. Age-related differences were found, with young adults showing a higher social media addiction compared to middle-aged individuals. Females scored higher on the virtual tolerance, but no significant differences were found in virtual communication, problem-solving, or escapism.

REFERENCES

Abbasi, I. S. (2019). Social media addiction in romantic relationships: Does user's age influence vulnerability to social media infidelity? *Personality and Individual Differences*, *139*, 277 –280. https://doi.org/10.1016/j.paid.2018.10.038.

Aggarwal, K., Singh, S. K., Chopra, M., & Kumar, S. (2022). Role of social media in the COVID-19 pandemic. *Data Mining Approaches for Big Data and Sentiment Analysis in Social Media*, 91–115. https://doi.org/10.4018/978-1-7998-8413-2.ch004.

Ali, I., Danaee, M., & Firdaus, A. (2019). Social networking sites usage and needs scale (SNSUN): a new instrument for measuring social networking sites' usage patterns and needs. *Journal of Information and Telecommunication*, *4*(2), 1–24. https://doi.org/10 .1080/24751839.2019.1675461.

Andreassen, C. S., Griffiths, M. D., Gjertsen, S. R., Krossbakken, E., Kvam, S., & Pallesen, S. (2013). The relationships between behavioral addictions and the five-factor model of personality. *Journal of Behavioral Addictions*, *2*(2), 90–99. https://doi.org/10.1556/jb a.2.2013.003.

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*(64), 287–293. https://doi.org/10.1016/j.addbeh.2016.03.006.

Andreassen, C., & Pallesen, S. (2014). Social network site addiction - An overview. *Current Pharmaceutical Design*, *20*(25), 4053–4061. https://doi.org/10.2174/1381612811319999 0616.

Arora, S., Kumar, M., & Piplani, K. (2022). Social media addiction: Risk of addiction in India measured through Bergen social media addiction scale (BSMAS). *Management Dynamics*, *22*(2), 101–113. https://doi.org/10.57198/2583-4932.1308.

Baumeister, R. F. (1990). Suicide as escape from self. *Psychological Review*, *97*(1), 90–113. https://doi.org/10.1037/0033-295X.97.1.90.

Błachnio, A., Przepiorka, A., & Pantic, I. (2016). Association between Facebook addiction, self-esteem and life satisfaction: A cross-sectional study. *Computers in Human Behavior*, *55*(Part B), 701–705. https://doi.org/10.1016/j.chb.2015.10.026.

Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, *13*(1), 210–230. https://doi.org/10.1111/ j.1083-6101.2007.00393.x.

Caplan, S. E. (2003). Preference for online social interaction. *Communication Research*, *30*(6), 625–648. https://doi.org/10.1177/0093650203257842.

Caplan, S. E. (2010). Theory and measurement of generalized problematic Internet use: A two-step approach. *Computers in Human Behavior*, *26*(5), 1089–1097. https://doi.org/10.101 6/j.chb.2010.03.012.

Chae, D., Kim, H., & Kim, Y. A. (2018). Sex differences in the factors influencing Korean college students' addictive tendency toward social networking sites. *International Journal of Mental Health and Addiction*, *16*(2), 339–350. https://doi.org/10.1007/s11469-017-9778-3.

Chaffey, D. (2024, February 1). *Global Social Media Research Summary 2024 [Jan 2024]*. Smart Insights. https://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/.

Cheng, C., Lau, Y., Chan, L., & Luk, J. W. (2021). Prevalence of social media addiction across 32 nations: Meta-analysis with subgroup analysis of classification schemes and cultural values. *Addictive Behaviors*, *117*(106845), 106845. https://doi.org/10.1016/j.addbeh.2021.106845.

Donath, J., & Boyd, D. (2004). Public displays of connection. *BT Technology Journal*, *22*(4), 71–82. https://doi.org/10.1023/b:bttj.0000047585.06264.cc.

Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2015). Social media update 2014. http://www.pewinternet.org/2015/01/09/social-media-update-2014.

Eagly, A. H. (1987). Sex differences in social behavior: A social-role interpretation. *Contemporary Sociology*, *18*(3), 343. https://doi.org/10.2307/2073813.

Evans, J. St. B. T. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annual Review of Psychology*, *59*(1), 255–278. https://doi.org/10.1146/annurev.psych.59.103006.093629.

Fujimori, A., Yamazaki, T., Sato, M., Hayashi, H., Fujiwara, Y., & Matsusaka, T. (2015). Study on influence of internal working models and gender differences on addiction of social network sites in Japanese university students. *Psychology*, *06*(14), 1832–1840. https://doi.org/10.4236/psych.2015.614179.

Gilligan, C. (1983). 2. Do the social sciences have an adequate theory of moral development? *Columbia University Press EBooks*, 33–51. https://doi.org/10.7312/haan92854-005.

Grant, J. E., & Chamberlain, S. R. (2016). Expanding the definition of addiction: DSM-5 vs. ICD-11. *CNS Spectrums*, *21*(4), 300–303. https://doi.org/10.1017/s1092852916000183.

Griffiths, M. D. (2005). A components model of addiction within a biopsychological framework. *Journal of Substance Use*, *10*, 191–197. https://doi.org/10.1080/14659890500114359.

Griffiths, M. D., Kuss, D. J., & Demetrovics, Z. (2014). Social networking addiction. *Behavioral Addictions*, 119–141. https://doi.org/10.1016/b978-0-12-407724-9.00006-9.

Hawi, N. S., & Samaha, M. (2019). Identifying commonalities and differences in personality characteristics of Internet and social media addiction profiles: traits, self-esteem, and self-construal. *Behaviour and Information Technology*, *38*(2), 110–119. https://doi.org/10.1080/0144929x.2018.1515984.

Ho, S. S., Lwin, M. O., & Lee, E. W. J. (2017). Till logout do us part? Comparison of factors predicting excessive social network sites use and addiction between Singaporean adolescents and adults. *Computers in Human Behavior*, *75*, 632–642. https://doi.org/10.1016/j.chb.2017.06.002.

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory (BFI)* [Database record]. APA PsycTests. https://doi.org/10.1037/t07550-000.

Kahneman, D. (2011). Thinking, fast and slow. New York, NY: Macmillan. https://doi.org/ 10.5860/choice.49-5972.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, *53*(1), 59–68. https://doi.org/10.1016/j.bushor.2009.09.003.

Karahanna, E., Xu, S. X., Xu, Y., & Zhang, N. (2018). The needs–affordances–features perspective for the use of social media. *MIS Quarterly*, *42*(3), 737-A23. Retrieved from https://www.jstor.org/stable/26635051.

Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *Public Opinion Quarterly*, *37*(4), 509–523. https://doi.org/10.1086/268109.

Keelery, S. (2021). *Number of internet users in India 2010–2040.* Retrieved from Statista. https://www.statista.com/%20statistics/255146/number-of-internet-users-in-india/.

Kim, J. H., Kim, M. S., & Nam, Y. (2010). An analysis of self-construals, motivations, Facebook use, and user satisfaction. *International Journal of Human-Computer Interaction*, *26*(11-12), 1077–1099. https://doi.org/10.1080/10447318.2010.516726.

Kim, Y., Sohn, D., & Choi, S. M. (2011). Cultural difference in motivations for using social network sites: A comparative study of American and Korean college students. *Computers in Human Behavior*, *27*(1), 365–372. https://doi.org/10.1016/j.chb.2010.08.015.

Kircaburun, K., Demetrovics, Z., & Tosuntaş, Ş. B. (2019). Analyzing the links between problematic social media use, dark triad traits, and self-esteem. *International Journal of Mental Health and Addiction*, *17*(6). https://doi.org/10.1007/s11469-018-9900-1.

Kircaburun, K., & Griffiths, M. (2018). Instagram addiction and the big five of personality: The mediating role of self-liking. *Journal of Behavioral Addictions, 7*(1), 158–170. https://doi.org/10.1556/2006.7.2018.15.

Klobas, J. E., McGill, T. J., Moghavvemi, S., & Paramanathan, T. (2018). Compulsive YouTube usage: A comparison of use motivation and personality effects. *Computers in Human Behavior*, *87*, 129–139. https://doi.org/10.1016/j.chb.2018.05.038.

Köse, Ö. B., & Doğan, A. (2019). The relationship between social media addiction and self-esteem among Turkish university students. *Addicta: The Turkish Journal on Addictions, 6*(1), 175–190. https://doi.org/10.15805/addicta.2019.6.1.0036.

Kuss, D., & Griffiths, M. (2017). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, *14*(3), 311. https://doi.org/10.3390/ijerph14030311.

Li, W., Lin, X., Wu, J., Xue, W., & Zhang, J. (2021). Impacts social media have on young generation and older adults. *Advances in Social Science, Education and Humanities Research.* https://doi.org/10.2991/assehr.k.211220.051.

Madaiah, M., Seshaiyengar, C., Suresh, P., Munipapanna, S., & Sonnappa, S. (2016). Study to assess the effects of social networking sites on medical college students. *International Journal of Community Medicine and Public Health*, *3*(5), 1204–1208. https://doi.org/10.18203/2394-6040.ijcmph20161385.

Markus, H. R., & Kitayama, S. (2001). The cultural construction of self and emotion: Implications for social behavior. In S. Kitayama & H. R. Markus (Eds.), *Emotion and culture: Empirical studies of mutual influence* (pp. 89–130). American Psychological Association. https://doi.org/10.1037/10152-003

Martín-Albo, J., Núñez, J. L., Navarro, J. G., & Grijalvo, F. (2007). The Rosenberg self-esteem scale: Translation and validation in university students. *The Spanish Journal of Psychology, 10(2)*, 458–467. https://doi.org/10.1017/s1138741600006727.

McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, *60*(2), 175–215. https://doi.org/10.1111/j.1467-6494.1992.tb00970.x.

Milani, L., Osualdella, D., & Di Blasio, P. (2009). Quality of interpersonal relationships and problematic internet use in adolescence. *Cyberpsychology and Behavior, 12*(6), 681–684. https://doi.org/10.1089/cpb.2009.0071.

Monacis, L., de Palo, V., Griffiths, M. D., & Sinatra, M. (2017). Exploring individual differences in online addictions: The role of identity and attachment. *International Journal of Mental Health and Addiction*, *15*(4), 853–868. https://doi.org/10.1007/s11469-017-9768-5.

Naskar, A. (2021). Mucize Insan: When the world is family. https://www.goodreads.com/quotes/10858761-sonnet-of-technology-technology-is-not-good-or-bad-for.

Noguti, V., Singh, S., & Waller, D. S. (2019). Gender differences in motivations to use social networking sites. *Gender Economics*, 676–691. https://doi.org/10.4018/978-1-5225-7510-8.ch033.

Patel, V., Chaudhary, P., Kumar, P., Vasavada, D., & Tiwari, D. (2021). A study of correlates of social networking site addiction among the undergraduate health professionals. *Asian Journal of Social Health and Behavior*, *4*(1), 30. https://doi.org/10.4103/shb.shb_1_21.

Petrosyan, A. (2024, January 31). *Global digital population 2023*. Retrieved from Statista website: https://www.statista.com/statistics/617136/digital-population-worldwide/.

Purnama, H., Darmawati, I., & Mulyatin, W. (2021). Social media addiction and the association with self-esteem among adolescents in rural areas of Indonesia. *KnE Life Sciences*, 671–679. https://doi.org/10.18502/kls.v6i1.8741.

Robinson, T. E., & Berridge, K. C. (1993). The neural basis of drug craving: An incentive-sensitization theory of addiction. *Brain Research Reviews*, *18*(3), 247–291. https://doi.org/10.1016/0165-0173(93)90013-p.

Rosales, F. L., Guajardo, J. R. B., & Medrano, J. L. J. (2021). Addictive behavior to social networks and five personality traits in young people. *Psychological Studies, 66*(1), 92-96. https://doi.org/10.1007/s12646-020-00591-7.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rosenberg, M. (1989). *Society and the adolescent self-image. (Rev. ed.)*. Middeltown, CT: Wesleyan University Press.

Sahin, C. (2018). Social media addiction scale-student form: The reliability and validity study. *Turkish Online Journal of Educational Technology - TOJET*, *17*(1), 169–182. https://eric.ed.gov/?id=EJ1165731.

Sheldon, P., Antony, M. G., & Sykes, B. (2021). Predictors of problematic social media use: Personality and life-position indicators. *Psychological Reports*, *124*(3), 1110–1133. https://doi.org/10.1177/0033294120934706.

Shivam, S., Chaudhari, B., Chaudhury, S., & Saldanha, D. (2021). Parenting style and personality correlates of internet addiction: A cross-sectional study. *Medical Journal of Dr. D.Y. Patil Vidyapeeth*, *14*(2), 143–154. 10.4103/mjdrdypu.mjdrdypu_329_19.

Smith, K. (2018). Sex and drugs and self-control: how the teen brain navigates risk. *Nature*, *554*(7693), 426–428. https://doi.org/10.1038/d41586-018-02170-3.

Stănculescu, E., & Griffiths, M. D. (2022). Social media addiction profiles and their antecedents using latent profile analysis: The contribution of social anxiety, gender, and age. *Telematics and Informatics*, *74*, 101879. https://doi.org/10.1016/j.tele.2022.101879.

Stefanone, M., Lackaff, D., & Rosen, D. (2011). Contingencies of self-worth and social networking-site behavior. *Cyberpsychology, Behavior, and Social Networking, 14*(1-2), 41–49. https://doi.org/10.1089/cyber.2010.0049.

Su, W., Han, X., Yu, H., Wu, Y., & Potenza, M. N. (2020). Do men become addicted to internet gaming and women to social media? A meta-analysis examining gender-related differences in specific internet addiction. *Computers in Human Behavior*, *113*, 106480. https://doi.org/10.1016/j.chb.2020.106480.

Sumaryanti, I. U., Azizah, S., Diantina, F. P., & Nawangsih, E. (2020). Personality and social media addiction among college students. *Proceedings of the 2nd Social and Humaniora Research Symposium (SoRes 2019)*. https://doi.org/10.2991/assehr.k.200225.079.

Sun, Y., & Zhang, Y. (2021). A review of theories and models applied in studies of social media addiction and implications for future research. *Addictive Behaviors*, *114*(1). https://doi.org/10.1016/j.addbeh.2020.106699.

Tang, J.-H., M.-C. Chen, C.-Y. Yang, T.-Y. Chung, and Y-A. Lee. (2016). "Personality traits, interpersonal relationships, online social support, and Facebook addiction". *Telematics and Informatics, 33*(1), 102–108. https://doi.org/10.1016/j.tele.2015.06.003.

Tarafdar, M., Maier, C., Laumer, S., & Weitzel, T. (2020). Explaining the link between technostress and technology addiction for social networking sites: A study of distraction as a coping behavior. *Information Systems Journal*, *30*(1). https://doi.org/10.1111/isj.12253.

Tekin, O. A., & Turhan, A. A. (2021). Does social media addiction differ by personality traits? A study on undergraduate tourism students. *Journal of Tourism and Services*, *12*(22), 23–41. https://doi.org/10.29036/jots.v12i22.220.

Telzer, E. H., Fuligni, A. J., Lieberman, M. D., & Galvan, A. (2014). Neural sensitivity to eudaimonic and hedonic rewards differentially predict adolescent depressive symptoms over time. *Proceedings of the National Academy of Sciences*, *111*(18), 6600–6605. https://doi.org/10.1073/pnas.1323014111.

Zam, S., Dendup, T., & Tenzin, K. (2022). Social media addiction and self-esteem in relation to gender of students. *Bhutan Journal of Research and Development*, *11*(1). https://doi.org/10.17102/bjrd.rub.11.1.028.

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