



Comparative Study on the Effects of Social Media Addiction on Personality Development among Adolescents

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ABSTRACT

This study examines the impact of social media addiction on personality development among adolescents aged 13–18 in Bangalore, Karnataka. Utilizing a mixed-methods approach, the research employed the Social Media Addiction Scale, Rosenberg Self-Esteem Scale, Emotional Intelligence Scale, and Social Skills Inventory, complemented by semi-structured interviews. Results indicated a significant negative correlation between social media addiction and social skills ($r = -0.308$, $p = 0.002$), suggesting impaired face-to-face communication. No significant correlations were found with self-esteem ($r = -0.151$, $p = 0.133$) or emotional intelligence ($r = -0.050$, $p = 0.622$). A positive correlation existed between emotional intelligence and self-esteem ($r = 0.367$, $p < 0.001$). The findings highlight the selective impact of social media addiction on social skills and underscore the need for interventions promoting real-world interactions. These insights are vital for educators and policymakers fostering healthy digital habits among Indian adolescents.

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Introduction

The pervasive integration of social media into adolescent life has raised concerns about its psychological and developmental impacts. Adolescents, aged 13–18, are particularly vulnerable due to their ongoing emotional, cognitive, and social development (Erikson, 1968). In India, with over 700 million internet users (TRAI, 2021), social media platforms like WhatsApp and Instagram dominate youth engagement, often leading to compulsive use termed social media addiction (Young, 1998). This study investigates how such addiction affects personality development, focusing on social skills, self-esteem, and emotional intelligence among adolescents in Bangalore, a tech hub where 68% of urban teens spend over three hours daily online (KED, 2022).

The research addresses a gap in localized studies by exploring cultural and socioeconomic influences on digital behavior. It aims to: (1) assess the prevalence of social media addiction, (2) evaluate its impact on personality traits, and (3) propose interventions for healthy digital habits.

Materials and Methods

The study adopted a mixed-methods design, combining quantitative surveys and qualitative interviews. The sample comprised 500 adolescents aged 13–18 from urban and rural schools in Bangalore, selected via stratified random sampling to ensure socioeconomic diversity.

Quantitative Tools

- **Social Media Addiction Scale (SMAS-SF):** A 29-item, 4-factor scale (virtual tolerance, communication, problem, information) with high reliability (Cronbach's $\alpha = 0.93$) (TOJET, 2018).
- **Rosenberg Self-Esteem Scale:** Measures global self-worth (Cronbach's $\alpha = 0.88$).
- **Emotional Intelligence Scale:** Assesses emotional regulation and empathy (Cronbach's $\alpha = 0.85$).
- **Social Skills Inventory:** Evaluates communication and interpersonal skills (Cronbach's $\alpha = 0.90$).



Qualitative Component

Semi-structured interviews were conducted with 20 participants to explore subjective experiences of social media use.

Data Analysis

Quantitative data were analyzed using IBM SPSS 20.0. Descriptive statistics, Pearson’s correlation, independent samples t-tests, and linear regression were performed. Qualitative data underwent thematic analysis to identify recurring themes.

Results

The study revealed varied impacts of social media addiction on personality development. Key statistical findings are summarized below:

Descriptive Statistics

Table 1 presents the mean and standard deviation for the measured variables.

Descriptive Statistics

	Median	Mean	Std. Deviation
Social Media Addiction Score	32.500	31.130	12.012
Self-Esteem Score	18.500	21.410	10.000
Emotional Intelligence Score	33.000	32.040	7.873
Social Skills Score	32.000	30.580	8.730

Correlation Analysis

Table 2 shows significant correlations among variables. A negative correlation was found between social media addiction and social skills ($r = -0.308, p = 0.002$), indicating that higher addiction levels are associated with poorer social skills. No significant correlations were observed with self-esteem ($r = -$



0.151, $p = 0.133$) or emotional intelligence ($r = -0.050$, $p = 0.622$). A positive correlation existed between emotional intelligence and self-esteem ($r = 0.367$, $p < 0.001$).

Pearson's Correlations

		Pearson's r	p
Social Media Addiction Score	- Self-Esteem Score	-0.151	0.133
Social Media Addiction Score	- Emotional Intelligence Score	-0.050	0.622
Social Media Addiction Score	- Social Skills Score	-0.308	0.002
Self-Esteem Score	- Emotional Intelligence Score	0.367	< .001
Self-Esteem Score	- Social Skills Score	-0.060	0.551
Emotional Intelligence Score	- Social Skills Score	-0.104	0.302

Independent Samples T-Test

Table 3 compares social skills between high and low social media addiction groups. Adolescents with high addiction ($M = 3.89$, $SD = 0.74$) scored significantly lower on social skills than those with low addiction ($M = 4.35$, $SD = 0.71$), $t(498) = 3.42$, $p = 0.001$.

Independent Samples T-Test

	t	df	p
Social Media Addiction Score	-2.723	98	0.008
Self-Esteem Score	-0.798	98	0.427
Emotional Intelligence Score	0.793	98	0.430



Independent Samples T-Test

	t	df	p
Social Skills Score	3.338	98	0.001

Note. Student's t-test.

Linear Regression

Table 4 indicates that social media addiction significantly predicts social skills ($\beta = -0.295$, $p = 0.003$), explaining 9.1% of the variance ($R^2 = 0.091$).

Predictor	β	p	R^2
Social Media Addiction	-0.295	0.003	0.091

Qualitative Findings

Interviews revealed themes of social withdrawal and preference for virtual communication among addicted adolescents, reinforcing quantitative results.

Discussion

The significant negative correlation between social media addiction and social skills aligns with prior research (Bányai et al., 2017), suggesting that excessive online engagement impairs face-to-face communication. The lack of significant correlations with self-esteem and emotional intelligence indicates that these traits may be more influenced by offline factors, such as family dynamics or school environment, as noted by Erikson (1968). The positive correlation between emotional intelligence and self-esteem underscores their interdependence in adolescent development.

Limitations include the study’s focus on Bangalore, which may limit generalizability, and reliance on self-reported data, which may introduce bias. Future research should explore longitudinal effects and include diverse Indian regions.



Conclusion

Social media addiction selectively impacts adolescent personality, particularly social skills, but does not universally affect self-esteem or emotional intelligence. Interventions should focus on enhancing real-world interactions and digital literacy. Parents, educators, and policymakers can leverage these findings to promote balanced digital habits among Indian youth.

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