

Original Research Article

DOI: <https://dx.doi.org/10.18203/2320-6012.ijrms20253158>

The effect of social media on body image, self-esteem, and social appearance anxiety among young adults

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Received: 04 July 2025

Revised: 07 August 2025

Accepted: 02 September 2025

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ABSTRACT

Background: Social media usage is growing rapidly among young adults, influencing body image, self-esteem, and appearance-related anxiety. Aim was to assess the relationship of social media usage with body image, self-esteem, and social appearance anxiety among young adults.

Methods: A cross-sectional study was conducted among 404 college students at Santosh Medical College and Hospital during the M.Sc. Clinical Psychology program. Purposive sampling was used. Tools included the social media use scale, Rosenberg self-esteem scale, body image satisfaction rating scale, and social anxiety questionnaire for adults (SAQ-A30). Data were collected using standardized procedures. Descriptive statistics (mean, standard deviation) were used to assess participant characteristics. Chi-square tests were used to examine the association between social media use and psychological variables. Data were analyzed using SPSS version 23 and MS Excel.

Results: There was a highly significant association between social media usage and all three psychological variables: body image dissatisfaction ($\chi^2=297.99$, $p<0.01$), low self-esteem ($\chi^2=46.57$, $p=0.027$), and social appearance anxiety ($\chi^2=293.43$, $p<0.01$). Social media usage ($\chi^2=302.14$, $p<0.01$) was strongly linked to poorer mental health outcomes.

Conclusions: The study highlights the psychological risks of high social media engagement among young adults. It reveals a significant relationship between social media use and body image dissatisfaction, low self-esteem, and high social appearance anxiety. Media literacy, mental health awareness, and promoting healthy online behaviour are essential for mitigating these effects.

Keywords: Body image, Self-esteem, Social appearance anxiety, Social media

INTRODUCTION

Social media has increasingly influenced young adults' mental health, particularly affecting body image, self-esteem, and social appearance anxiety.¹ Platforms such as Instagram and Facebook often showcase edited, idealized images that create unrealistic beauty standards.² This repeated exposure can lead to body dissatisfaction and pressure to conform.³ Self-esteem, or an individual's sense of worth, may fluctuate based on social media feedback—positive or negative.⁴ Additionally, social appearance anxiety, the fear of being judged based on appearance, is intensified in image-focused digital spaces.⁵ These

concerns highlight the psychological risks associated with excessive social media use.⁶

METHODS

This research used a cross-sectional design to study the connection between body image satisfaction, self-esteem, social media usage, and social anxiety in college students. The sample included 404 students, aged 18 to 26 years, selected using purposive sampling. Students who used social media daily and gave written consent were included. Those with any psychiatric illness or physical disability were not part of the study.

The data was collected from January 2025 to June 2025 in person from students at Santosh Medical College and Hospital, Ghaziabad, Uttar Pradesh, over the course of the M.Sc. Clinical Psychology program. Students from both medical and non-medical backgrounds were part of the sample to include a wide range of participants.

To collect information, the following four tools were used:

Body image satisfaction rating scale (BISRS)

This tool measured how satisfied participants were with their body appearance. Body image is an important part of mental health, especially in the age of social media.¹

Rosenberg self-esteem scale (RSES)

This scale assessed the overall self-esteem of students. It helped to understand how confident or insecure students felt about themselves.²

Social media use scale (SMUS)

This tool measured how often and how much time students spent on social media, and how it affected their thoughts and feelings.³

Social anxiety questionnaire for adults (SAQ-A30)

This questionnaire checked how anxious or uncomfortable participants felt in different social situations.⁴

These tools were selected because they are reliable and commonly used in psychological research. They helped give a complete picture of the students' mental and emotional state. Before collecting data, students were informed about the study and assured that their information would remain confidential. Proper ethical guidelines were followed throughout the study.

Statistical analysis

The study used SPSS version 23 for data analysis, and Microsoft Excel was used to organize the information. To summarize the participants' demographics and scores on different questionnaires- such as the social media use scale, Rosenberg self-esteem scale (RSES), body image satisfaction rating scale, and social anxiety questionnaire for adults (SAQ-A30)- descriptive statistics like the mean and standard deviation were calculated. To check if social media use was related to body image satisfaction, self-esteem, and social appearance anxiety among young adults, Chi-square tests were carried out. These tests helped find important connections between the study variables.

RESULTS

This research was conducted with the aim of assessing the relationship of social media usage with body image, self-

esteem, and social appearance anxiety among young adults. For this purpose, the data was analysed using the Chi-square test.

Table 1: Demographic characteristics of participants (n=404).

Variables	Category	Frequency	Percentage
Age (years)	19–22	220	54.46
	23–26	184	45.54
Gender	Male	198	49.01
	Female	206	50.99
Family type	Nuclear	255	63.12
	Joint	149	36.88

Table 2: Distribution of young adults by social media use scale.

SMUS	Frequency	Percentage
Tie	36	8.9
Image based	82	20.5
Comparison based	83	20.5
Belief based	70	17.3
Consumption	133	32.9
Total	404	100

Participants displayed varied styles of social media usage. The most common was consumption-based (32.9%), followed by comparison-based (20.5%), image-based (20.5%), belief-based (17.3%), and tie usage style (8.9%) (Table 2).

Table 3: Distribution of young adults by body image satisfaction rating scale (BISRS).

BISRS	Frequency	Percentage
High	55	13.6
Low	35	8.7
Moderate	314	77.7
Total	404	100

According to the body image satisfaction rating scale (BISRS), 77.7% of participants reported moderate satisfaction, while 13.6% had high and 8.7% had low satisfaction (Table 3).

Table 4: Distribution of young adults by Rosenberg self-esteem scale (RSES).

RSES	Frequency	Percent
High	68	16.8
Low	155	38.4
Normal	181	44.8
Total	404	100.0

Based on the Rosenberg self-esteem scale (RSES), 44.8% of participants showed normal self-esteem, 38.4% had low, and 16.8% had high self-esteem (Table 4).

Table 5: Distribution of young adults by social anxiety questionnaire for adults (SAQ-A30).

SAQ	Frequency	Percent
High	197	48.8
Moderate	207	51.2
Total	404	100

On the social anxiety questionnaire for adults (SAQ-A30), 51.2% of participants experienced moderate social appearance anxiety, and 48.8% reported it as high (Table 5).

Table 6: Mean and standard deviation of social media, body image, self-esteem and social appearance anxiety among young adults.

Variables	N	Mean	SD
Social media	404	2.84	0.79
Body image	404	53.87	5.90
Self esteem	404	16.19	8.04
Social appearance anxiety	404	89.91	7.04

These scores reflect moderate levels of social media use, average body image satisfaction, lower self-esteem for many, and relatively high social appearance anxiety (Table 6).

DISCUSSION

This study assessed the relationship between social media usage and psychological variables such as body image satisfaction, self-esteem, and social appearance anxiety among young adults.

Demographic characteristics

The sample consisted of 404 young adults aged 19-26 years, with a fairly balanced gender distribution (49.01% males, 50.99% females) and majority from nuclear families (63.12%). Such demographic representation is similar to that reported by Keles et al, who emphasized the importance of balanced samples to fairly understand social media's psychological impact across different groups.⁷ Additionally, Ghai et al highlighted that lack of sample diversity can lead to inconsistent findings across different global contexts.⁸

Social media use styles

Consumption-based social media use was most common (32.9%), indicating passive engagement such as browsing and watching content. This finding aligns with Dhir et al who noted that passive social media consumption can lead to digital fatigue and emotional disengagement.⁹ Comparison-based (20.5%) and image-based (20.5%) use were also prevalent, consistent with Tiggemann et al, who linked comparison-based use to body dissatisfaction and

social appearance anxiety through media internalization processes.³ In contrast, Belief-based use (17.3%) and Tie use (8.9%) were less common but indicate diverse engagement patterns.

Body image satisfaction

Most participants (77.7%) reported moderate body image satisfaction, with fewer reporting high (13.6%) or low (8.7%) satisfaction. This pattern is consistent with Silva and Steins, who found moderate body dissatisfaction common in young adults exposed to social media beauty ideals.¹⁰ Indian studies also support these findings, with Malav reporting increased body dissatisfaction linked to social media use among young Indian adults, and Singh et al emphasizing the influence of social media on body image perceptions in the Indian cultural context.^{11,12} Educational interventions promoting body positivity have been recommended to address these concerns.¹³

Self-esteem levels

A substantial portion of participants reported low self-esteem (38.4%), while 44.8% maintained normal levels. These results mirror findings by Woods and Scott, who observed that greater social media use is associated with lower self-esteem in adolescents.¹⁴ In an Indian sample, Tewari also reported a significant negative correlation between social media engagement and self-esteem among young adults, highlighting similar patterns in the local cultural context.¹⁵

Social appearance anxiety

High (48.8%) and moderate (51.2%) levels of social appearance anxiety were observed, with no participants reporting low anxiety. This finding supports Cash et al who documented elevated appearance-related anxiety linked to social media use.¹⁶ Similarly, Levinson et al found that such anxiety correlates with body dissatisfaction and social withdrawal behaviors.¹⁷

Overall psychological variables

Mean scores revealed moderate social media engagement, average body image satisfaction, relatively low self-esteem, and high social appearance anxiety. These outcomes corroborate earlier research by Fardouly et al, who emphasized the psychological burden of social media on young adults' body image and self-worth.² Holland et al also highlighted the impact of appearance-focused social media use on young adults' mental health.¹⁸

Significant associations

The significant relationships found between social media use and body image satisfaction, self-esteem, and social appearance anxiety confirm the influential role of social media on young adults' psychological experiences. This concurs with Smith et al, who reported similar associations

in comparable populations, underscoring the need for awareness and intervention strategies targeting healthy social media use.¹⁹

This study has certain limitations that should be considered when interpreting the results. First, the cross-sectional design limits the ability to infer causality between social media use and psychological outcomes. Second, data were self-reported, which may introduce response biases such as social desirability or inaccurate self-assessment. Third, the sample was limited to young adults primarily from educational institutions, which may affect the generalizability of findings to broader populations or different age groups.²⁰

CONCLUSION

This study demonstrates that social media significantly impacts young adults' psychological well-being, especially concerning body image satisfaction, self-esteem, and social appearance anxiety. While social media offers opportunities for connection and self-expression, it simultaneously exposes users to unrealistic beauty standards and promotes appearance-based comparisons, often leading to negative self-perceptions. The findings reveal that moderate to high social media use is widespread among young adults and is associated with varied mental health outcomes, including lowered self-esteem and increased social appearance anxiety. This research highlights the complex dual role of social media as both a source of support and psychological risk. By emphasizing the importance of digital literacy and supportive interventions, the study contributes valuable insight into developing strategies that can mitigate social media's adverse effects and promote healthier online behavior, thereby enhancing young adults' emotional well-being.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Badola A, Arora N, Saran B, Priyanka. The effect of social media on body image, self-esteem, and social appearance anxiety among young adults. *Int J Res Med Sci* 2025;13:4159-62.