

The Relationship between Social Media Addiction, Self-Esteem and Body Image Concerns among Female College Students

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Abstract



The present research study examined the relationship between Social Media Addiction, Self-Esteem and Body Image concerns among undergraduate college students in Pakistan. A survey method was used. The sample was composed of (N=250) college students. Social Media Addiction Scale - Student Form developed by Cengiz Sahin (2018), Rosenberg Self-Esteem Scale developed by Morris Rosenberg (1965) were used to collect information and Body Image was measured by Body Esteem Scale for Adolescents and Adults developed by Mendelson, B. K., White, D. R., & Mendelson, M. J, (2001). Descriptive statistics were used to evaluate the data, whereas inferential statistics were used to test the hypothesis. Correlational study revealed a slight positive association across social media addiction and self-esteem, which was not statistically significant. A slight, non-significant negative relationship was discovered among social media addiction and body image. However, there was a strong negative link with self-esteem and body image among female undergraduate college students. Such findings may bring more understanding into the field of study on social media dependency, as well as significant details for clinical interventions.

Keywords: Concerns, Social Media Addiction, Self-Esteem, Body Image

Introduction

Social media has evolved into a dominant platform for communication especially among students and young people, due to its instant accessibility and broad functionality (Kose & Doğan, 2019). Prolonged use of social media sites has the potential for an addiction, characterized by irrational usage beyond reasonable limits, disrupting daily life (Hou et al., 2019; Andreassen, 2015). Generation Y, as "digital natives" is particularly susceptible, with social media deeply integrated into health, family, and professional domains (Bennett et al., 2008; O'Keeffe & Clarke-Pearson, 2011).

Studies have identified patterns of excessive use that meet behavioral addiction criteria often disrupting daily functioning (Hou et al., 2019). Digital natives show deep integration of social media across multiple life domains, though this frequently correlates with impairments in occupational, educational, and social functioning (Bennett et al., 2008). A model I-PACE helps explain why some people keep using the internet in extreme ways, this model provides a theoretical framework for understanding (Sun & Zhang, 2021). Pandemic-era studies document significant increases in problematic use associated with elevated anxiety and depression symptoms (Alimoradi et al., 2022). Despite not being formally recognized in diagnostic manuals like DSM-5-TR or ICD-11, social media addiction is associated with behavioral addiction traits including neglect of real-world responsibilities (Andreassen & Pallesen, 2014; Zivnuska et al., 2019).

Psychological research conceptualizes self-esteem as a multidimensional construct representing global self-worth evaluations (Branden, 2001). Developmental theories emphasize its formation through social interactions (Erikson, 1963). Empirical evidence links higher self-esteem with better mental health outcomes, while lower self-esteem associates with psychosocial difficulties (Orth et al., 2012). Social media engagement creates complex effects, with users often experiencing diminished self-worth through upward comparisons (Vogel et al., 2014). Adolescents experiencing lower self-esteem demonstrate heavier platform engagement patterns (Acar et al., 2022).

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Body image incorporates cognitive, affective, and behavioral components related to physical appearance (Prnjak et al., 2022). Studies have had document how media-promoted beauty ideals contribute to widespread dissatisfaction, particularly among women (Grabe et al., 2008). Sociocultural pressures, particularly media-promoted ideals of thinness and muscularity contribute to widespread body dissatisfaction, especially among women (Grogan, 2021; Qutteina et al., 2019). Visual social platforms amplify concerns through exposure to unrealistic appearance standards (Tiggemann & Slater, 2013). Research identifies associations between social media usage and body image conflicts (Kaewpradub et al., 2017).

Evidence confirms negative associations between social media addiction and self-esteem (Andreassen et al., 2017). Individuals experiencing lower self-esteem show greater vulnerability to compulsive use patterns (Bergagna & Tartaglia, 2018). Social comparison theory explains how exposure to idealized online content affects self-evaluation (Hawi & Samaha, 2017). Developmental studies indicate these effects may be particularly strong during adolescence (Cingel et al., 2022).

Visual platforms show strong associations with body image concerns (Al-Menayes, 2015). Frequent engagement correlates with heightened appearance comparison tendencies (Tiggemann & Slater, 2013). While some studies report modest effects, like in Delgado-Rodríguez et al. (2022), most evidence supports significant relationships between addiction severity and negative body evaluation (Colak et al., 2023).

Research documents robust bidirectional relationships within self-esteem and body image (Sanlier et al., 2017). Sociocultural models explain how internalized beauty standards affect self-esteem (Stice, 1994). Longitudinal data indicates body dissatisfaction predicts self-esteem declines (Kapoor et al., 2022). These associations contribute to mental health vulnerability, whereas positive body image acts as a factor of protection (Yiyi et al., 2024).

Rationale

The presented research explores the association between social media addiction, self-esteem along with body image among female college students in Pakistan. Previous researches investigated social media addiction in the context of gender, personality, and mental health, a critical gap remains in understanding its association with self-esteem and body image concerns among college women in Pakistan. Existing studies on body image primarily focus on clinical settings, such as eating disorders and obesity, neglecting typical student populations. Mental health awareness in Pakistan is further challenged by digital influences and body dissatisfaction linked to self-esteem issues. This research aims to provide universities and psychologists with insights to develop prevention programs. Female students report higher body image concerns than males, justifying the focus on this demographic. Pakistani literature lacks investigations into how social media addiction affects self-esteem and body image in female college students, despite rising social media use.

Objectives

1. Explore whether social media addiction is linked to self-esteem in female undergraduate college students.
2. Determine if social media addiction is connected to body image concerns in female undergraduate college students.
3. Assess whether self-esteem influences body image dissatisfaction in female undergraduate college students.

Hypothesis

1. Female undergraduate college students who use social media excessively have worse self-esteem.
2. Female undergraduate college students who frequently use social media are more likely to have a negative perspective on their bodies.
3. Female undergraduate college students with lower self-esteem will report greater dissatisfaction with their body image.

Method

Research Design

This research utilized a survey methodology counted on convenience sampling to ask undergraduates from government colleges about their perceptions.

Sample and Sampling Strategy

The researchers studied how social media addiction, self-esteem and concerns about one’s body image related to one another among female college students (N=250), all between the ages of 18–23. Participants were selected from government graduate colleges in District Multan and Layyah using simple random sampling, based on availability and willingness to participate.

Instruments

Social Media Addiction Scale Student Form (SMAS-SF) 2018

Cengiz Şahin designed SMAS-SF and the questionnaire consists of 29 statements. The scale goes from 1 (strongly disapproving) to 5 (strongly agreed). There are 5 items in the virtual tolerance subscale, 8 in the virtual communication subscale, 8 in the virtual problem subscale and the last 5 form the virtual information subscale. The reliability of measures across all response choices was found to be .93. You can get your highest score as 145, but your lowest could be 29. A high score implies a person is at greater risk to be stated as a “social media addict”. There are no reversed questions for this scale.

Rosenberg Self-Esteem Scale 1965

There are a total of 10 statements on the Rosenberg Self-Esteem Scale. The RSE scale is evaluated by choosing on a scale based on Likert points, 1 indicates strong agreement and 4 indicates severe disagreement with internal reliability of $\alpha = .96$ and high validity. There is a balance of items with positive worded items and negative worded ones, and the score improves when self-esteem grows.

Body Esteem Scale for Adolescents and Adults (2001)

Body Esteem Scale developed by Mendelson, Mendelson, and White that assessed Body Image among the respondents. This scale contains 23-items that are easy to administer that taps three dimensions that are, (a) general feelings about appearance that consist of 10 items and Cronbach’s alpha is .92, (b) weight satisfaction, that consist of 8 items with Cronbach’s alpha is .94 and (c) attributions of positive evaluations about one’s body consist of five items and Cronbach’s alpha is .81, that align closely with the core aspects of body image. The response rating varies from 0 (Never) to 4 (Always), with negative items scored inverted. The larger the score, the more favorable respondent’s body image of themselves on that dimension, and vice versa.

Procedure

After obtaining ethical approval and scale permissions, participants voluntarily completed a booklet containing the three scales and a demographic form. The survey, presented in English, assessed social media addiction, self-esteem along with body image. Completion of booklet took 10–15 minutes, with ensured participant confidentiality and protection from any harm.

Analysis

For data analysis, we utilized version 25 of the SPSS statistical package. Descriptive statistics (mean, variance, range) summarized key variables, while inferential statistics included Correlational analysis to examine variable relationships.

Results

The questionnaires were circulated amongst a total of 250 female undergraduate college students chosen from District Multan and Layyah. The study findings on college students are as following,

Table 1
Mean, Standard Deviation, and Range of major study variable (N=250)

	Mean	S.D	Range		Skewness	Kurtosis
			Potential	Actual		
SMA	88.1160	15.4771	43-124	43-81	-0.019	-0.203
SE	23.2680	4.56943	13-61	13-48	3.657	27.907
BI	57.1960	12.5661	30-87	30-57	0.230	-0.713

Note. M=Mean; S.D=Standard Deviation; SMA=Social Media Addiction; SE= Self-Esteem; BI= Body Image

In table 1, the average response for Social Media Addiction is 88.1160, Self-Esteem is 23.2680, and for Body Image is 57.1960. Standard deviation measures the dispersion among data sets. The variance for Social Media Addiction is 15.47, for Self-Esteem is 4.56, and for Body Image is 12.56. Any symmetric metrics should have near to 0% skewness, just as a normal distribution does. Skewed left is indicated by negative skewness values (Social Media Addiction = -0.019) indicate skewed left and positive values (Self-Esteem = 3.657 and Body Image = 0.230) for the skewness indicate skewed right. Skewness direction indicates where extreme values lie: left-skewed

distributions have their atypical values on the lower end (lengthening the left tail), while right-skewed distributions show the opposite pattern with extended upper-end tails. The standard normal distribution displays a kurtosis of three. A "Left-tailed" distribution is indicated by negative kurtosis (Social Media Addiction = -0.203 and Body Image = -0.713). Positive kurtosis (Self-Esteem = 27.907) indicates a "Heavy-tailed" (Table 1).

Table 2

Correlation Coefficient between Social Media Addiction, Self-Esteem, and Body Image among female college students (N=250)

Variables	SMA	SE
SMA		
SE	.100	
BI	-.095	-.240**

Note. ** p<0.01; *p<0.05 N=271.

SMA= Social Media Addiction; SE= Self-Esteem; BI= Body Image

The correlation analysis in Table 2, reveals key relationships between the study variables. A very weak positive association ($r = 0.100$) was found between social media addiction and self-esteem, contradicting the initial hypothesis that predicted an inverse relationship. Similarly, social media addiction showed a minimal negative correlation with body image ($r = -0.095$), suggesting only a slight tendency for higher addiction levels to coincide with poorer body image. The somewhat moderate negative correlation was the most noteworthy findings ($r = -0.240$, $p < 0.01$) between self-esteem and body image, which was statistically significant. This suggests that decreased self-esteem is significantly related with poor body image evaluations among respondents. While social media addiction demonstrated negligible direct effects, the connection between self-esteem and body image highlights the psychological interplay shaping students' self-perception. These results contribute to understanding how these variables interact in a non-Western, educational context (Table 2).

Discussion

This study investigated the potential link between social media addiction, self-esteem, along with body image amongst Pakistani female undergraduate college students, offering insights distinct from Western-focused research. Contrary to expectations, results revealed a weak positive connection between social media addiction and self-esteem, indicating that increased social media use did not strongly correlate with lower self-esteem in this sample. This is in accordance with prior investigations indicating that some users engage compulsively with social media to boost self-esteem (Andreassen, 2015; Malik & Khan, 2015). Active interactions and positive feedback on platforms may even enhance self-esteem (Valkenburg et al., 2021).

A small non-significant negative association emerged between social media addiction with body image ($r = -0.095$), implying minimal impact on body dissatisfaction. While consistent with studies linking social media to body image concerns (Grabe et al., 2008; Karam et al., 2023), the effect was negligible in this context, contrasting with findings from Saud et al. (2019), who found no significant association.

Most notably, a moderate negative correlation was found among self-esteem along with body image ($r = -0.240$, $p < 0.01$), indicating that lower self-esteem predicts poorer body image. This aligns with Pop’s (2016) research on university students and underscores how negative self-perception exacerbates body dissatisfaction (Aggarwal et al., 2023). The study highlights cultural nuances in social media’s psychological effects, suggesting that while social media addiction may not strongly influence self-esteem or body image in Pakistani students, self-esteem remains a critical factor shaping body image perceptions. Further research should explore contextual and demographic moderators in non-Western populations.

Limitations

Our study had certain limitations. The individuals' self-esteem, body image, and social media usage level were all measured using survey responses. One of the serious drawbacks was the lack of diagnostic assessment of students through real-life interviews. Our work was a cross-sectional study. Longitudinal research investigations are thought to be necessary to provide a more complete explanation for the causal hyperlinks between self-esteem and other factors. This study may affect the generalizability of the results because sample of female college students is limited.

Recommendations

Social media addiction is a growing concern with serious repercussions among students significantly impacting their mental health. Research in Pakistan aligns with global trends, showing high prevalence rates but limited awareness and intervention strategies. Being online is considered as safer than prowling the streets, and parents frequently think that using technology at home is acceptable and healthy. The necessity of a defined definition and diagnostic standards for social media addiction is highlighted by this study.

Due to the fact that women's thoughts or concerns regarding their body image and self-esteem may depend on the basis of cultural and national factors, it would be interesting to carry out future studies, which would combine data collection on women's groups from two or more countries and compare the results. Future researches investigate the possibility of body image and media literacy interventions to respond to social media usage likewise, involved a greater and more varied sample to further external validity.

Conclusion

In a nutshell, this study was set out to find out the correlation between social media addiction, self-esteem and body image among female college students. The results have shown that in graduate college students, a very weak positive association was found between social media addiction and self-esteem, social media addiction showed a minimal negative correlation with body image suggesting only a slight tendency for higher addiction levels to coincide with poorer body image. The most notable finding was the moderate negative association between self-esteem with body image, which was statistically significant. Replicating these variables with a wider range of samples should be the goal of future studies.

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Author's Biography and Photos



My name is Maliha Farooq, a research scholar in the Department of Applied Psychology at Women University Multan. I am deeply committed to exploring the complex interplay between self-esteem, body image, and social media use among young women in Pakistan. My research is driven by a strong belief in the power of culturally informed mental health advocacy. I aim to challenge stigma, promote awareness, and contribute to the development of effective, evidence-based strategies that support psychological well-being in underrepresented communities. With a passion for academic inquiry and social impact, I strive to bridge the gap between research and real-world mental health solutions.



I am Dr. Hira Anwar, a lecturer with a passion for teaching and research. Holding a Ph.D., I possess expertise in designing and delivering engaging courses, guiding students to achieve their academic goals. As an active researcher, I contribute to advancing knowledge in my field through publications and presentations. Throughout my academic journey, I've been driven by a passion for learning and a desire to positively impact students' lives. I'm proud of my accomplishments and look forward to continuing to inspire and educate future generations. I am committed to excellence in education and strive to make a lasting impact on the academic community.



I am Pakeeza Firdos, an M.Phil. scholar with a strong passion for research. Throughout my academic journey, I have gained expertise in quantitative research, with a focus on designing and conducting studies, analyzing data, and interpreting results. Beyond academics, I am an avid book reader and take great joy in helping others. These personal interests not only bring me fulfillment but also broaden my perspective and inspire me to make a positive impact. Through my research and writings, I aim to contribute meaningfully to my field and inspire others to pursue their passions. I am excited to share my work and ideas with the academic community.