



Impact of Digitally Edited Social Media Images on Body Image Perception and Self-Esteem among Young Adults

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Abstract: *The study examined the relationship between social media usage patterns on body image perception and self-esteem among young adults, with particular emphasis on social comparison and digital image editing engagement. Using a quantitative cross-sectional research design, data were collected from 132 participants aged between 18 and 25 years through standardized psychological measures assessing social comparison, body shape concerns, image editing behaviors, and self-esteem, along with a demographic questionnaire. Descriptive analyses indicated that most participants reported spending three to four hours daily on social media, with Instagram being the most frequently used platform. Inferential analyses, including chi-square test and analysis of variance, revealed significant associations between social media use and psychosocial outcomes. Greater exposure with digitally edited images were significantly associated with higher levels of social comparison and increased body shape concerns. Differences in self-esteem were observed across levels of editing engagement. Gender differences were observed, with male participants reporting higher body shape concerns and lower self-esteem compared to females. Platform-specific analyses indicated that Snapchat and Facebook users demonstrated significantly greater body shape concerns and lower self-esteem than Instagram and YouTube users. Overall, the findings suggests that digitally edited image engagement may play a meaningful role in shaping young adults' self-perception and psychological well-being. These findings underscore the relevance of media literacy and responsible digital engagement initiatives.*

Keywords: *Digitally Edited Images, Social Media Use, Body Image Perception, Self-Esteem, Social Comparison, Young Adults.*

Introduction: The widespread integration of social media into daily life has changed how individuals perceive, present, and evaluate themselves. Image-based platforms promote frequent sharing of personal photographs, often accompanied by digital enhancement through filters and editing tools. Practices once limited to professional media production are now ingrained in routine online self-presentation. Despite the fact that image editing is commonly framed as creative expression or beautification, psychological research suggests that repeated engagement with digitally altered images may influence self-perception and emotional well-being (Perloff, 2014).

Unlike traditional media, social media primarily exposes users to peer-generated content that appears personal and authentic, despite often being carefully curated. This perceived realism may intensify evaluative processes, particularly those related to appearance. According to social comparison theory, individuals evaluate themselves by comparing personal attributes with others, especially in the absence of objective standards (Festinger, 1954). In visually saturated online environments, such comparisons are frequent and primarily appearance-focused, increasing susceptibility to negative self-evaluation (Vogel et al., 2014).

Empirical research has reliably linked exposure to unrealistic online images with body dissatisfaction, self-objectification, and negative affect (Fardouly et al., 2015; Tiggemann & Slater, 2014). These effects appear to be shaped less by overall time spent on social media and more by the cognitive and emotional processes triggered by visual comparison. Individuals who engage more deeply in appearance-based comparisons tend to report greater body concerns and lower satisfaction with their physical appearance (Myers & Crowther, 2009).

Besides unintentional exposure, recent studies have begun to examine the psychological implications of actively editing one's own images. Photo editing represents a distinct form of digital engagement through which individuals manage self-presentation and negotiate appearance-related standards. While editing may temporarily enhance confidence or perceived attractiveness, it may also reinforce unrealistic ideals and heighten awareness of discrepancies between actual and idealized selves (Fox & Vendemia, 2016). Evidence suggests that frequent editing is associated with increased social comparison and instability in self-evaluative judgements (Ozimek et al., 2023), including that editing behaviors are psychologically meaningful rather than superficial.

Body image, defined as an individual's subjective perception and evaluation of their physical appearance, is particularly sensitive to socially mediated feedback (Cash & Pruzinsky, 2002). Online contexts may intensify this sensitivity by normalizing flawless appearances, even when users are aware that images are digitally enhanced (Fardouly & Vartanian, 2016). Because appearance constitutes a central domain of self-evaluation, disturbances in body image may extend to broader aspects of psychological functioning, including self-esteem.

Self-esteem, understood as the global evaluation of self-worth (Rosenberg, 1965), may be similarly shaped by digitally mediated comparison processes. Social networking environments expose individuals to continuous comparison cues and idealized portrayals of others, which have been linked to reduced self-esteem and negative emotional outcomes, particularly in the context of upward comparison (Orth & Robins, 2014; Valkenburg et al., 2017). However, the specific role of editing engagement in shaping self-esteem remains insufficiently explored.

Despite growing interest in this area, important gaps remain. Much of existing literature focuses on general social media usage or passive exposure, with limited attention given to editing engagement as a distinct behavioral construct. Furthermore, many studies examine social comparison, body image or self-esteem in isolation, rather than within an integrated framework. Additionally, research in non-Western contexts remains limited, with much of the existing literature originating from Western samples (Mills et al., 2017; Joitsa et al., 2021). Despite cultural differences in beauty norm, self-presentation practices, and social evaluation processes. In countries such as India, where social media use has rapidly expanded in recent years (Kemp, 2023), examining these dynamics within local sociocultural contexts is particularly important.

The present study sought to address these gaps by examining the relationships among engagement in digital image editing, and self-esteem among young adults. By focusing on active image modification rather than general platform use, the study aims to provide a more nuanced understanding of digital self-presentation and its psychological correlates within an Indian context.

Based on existing theory and empirical evidence, it was hypothesized that greater engagement in image editing would be associated with higher levels of social comparison and body shape concerns, as well as significant differences in self-esteem. Additionally, gender differences, age-related variations in editing behavior, and differences based on primary social media platform use were examined.

Method

Participants: The study included 132 young adults between 18 and 25 years of age. Participants were recruited through online distribution of survey link across multiple regions of India. Eligibility criteria required individuals to fall within the specified age range and to be active users of at least one social media platform. Participation was voluntary, and no financial incentives were offered.

The final sample consisted of 63 male participants and 69 female participants. Participants represented varied educational backgrounds, including undergraduate students, graduates, and postgraduates. Demographic diversity was sought to capture a broad range of social media engagement patterns within the target population.

Measures

Demographic Information: Participants provided demographic information including age, gender, educational status, average daily time spent on social media, and primary social media platform used. These variables were included to contextualize digital behavior patterns and to examine potential group differences.

Editing Engagement: Engagement in altering digital images was assessed using a researcher-developed Frequency and Intensity of Editing Scale. The instrument consisted of five items designed to measure how often participants altered their personal images prior to posting on social media. Items capture routine editing behaviors rather than technical proficiency.

Responses were recorded on a five-point Likert scale ranging from Never to Always. Higher scores indicated greater involvement in editing activities. The scale was constructed to capture typical user behavior within contemporary social media environments.

Social Comparison: Social comparison tendencies were measured using a brief researcher-developed Social Comparison Scale. The scale consisted of five items assessing the extent to which participants compared their appearance, lifestyle, and personal attributes with others encountered on social media platforms.

Responses were obtained on a five-point Likert scale. Higher scores indicated high social comparison tendencies. The scale focused specifically on comparison processes occurring within digital contexts.

Body Shape Concerns: Body image-related concerns were measured using the Body Shape Questionnaire – 16 (BSQ-16; Evans & Dolan, 1993). The BSQ-16 is a widely used self-report measure designed to assess dissatisfaction and preoccupation with body shape and weight. Participants rated items on a six-point response format, with higher scores indicating greater body shape concerns.

The instrument has demonstrated strong psychometric properties across diverse populations and is frequently employed in research examining body image disturbances. The BSQ-16 has demonstrated excellent internal consistency in previous research ($\alpha > .90$).

Self-Esteem: Global self-esteem was assessed using the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). The RSES includes ten items measuring overall self-evaluation and perceived self-worth. Participants responded using a four-point Likert scale, with higher scores representing higher self-esteem.

The scale is extensively validated and remains one of the most widely utilized measures of self-esteem in psychological research. The RSES has demonstrated good internal consistency across diverse populations (α ranging from .77 to .88).

Procedure: Data were collected via an online survey administered using convenience sampling. The survey link was sent through digital communication channels to reach eligible participants. Prior to participation, individuals were presented with an informed consent statement outlining the purpose of the study, voluntary nature of involvement, and confidentiality assurances.

Participants completed the questionnaire anonymously in a single session. No personally identifying information was required. The procedure adhered to standard ethical considerations for online behavioural research, including informed consent and data confidentiality. The study complied with institutional ethical guidelines for research involving human participants.

Statistical Analysis: Data analysis was conducted using SPSS version 22. Descriptive statistics were computed to summarize participants' characteristics and variable distributions. Chi-square analyses were employed to examine distributional differences among categorical variables. Independent sample ttests were performed to assess gender-based differences across psychological measures.

One-way analyses of variance (ANOVA) were conducted to evaluate differences across levels of editing engagement, age groups, and primary social media platform usage. Statistical significance was evaluated using conventional alpha criteria.

Results: Descriptive and inferential statistical analyses were conducted to examine the relationships among editing engagement, social comparison, body shape concerns, and self-esteem. Data were analyzed using SPSS Version 22.

Descriptive Statistics: Participants were classified into categories based on editing engagement, social comparison, body shape concerns, and self-esteem levels. The distribution of participants across these variables is presented in Table 1.

Table 1: Distribution of Participants across Key Study Variables

Variables	Category	n	%
Editing Engagement	Low	44	33.3
	Moderate	53	40.2
	High	35	26.5
Social Comparison	Low	39	29.5
	Moderate	60	45.5
	High	33	25.0
Body Shape Concern	No concern	55	41.7
	Mild concern	18	13.6
	Moderate concern	14	10.6
	High concern	45	34.1
Self-Esteem	Moderate	107	81.1
	High	25	18.9

Note. N = 132. Percentages may not total 100 due to rounding

Editing Engagement: Participants were grouped into low, moderate, and high editing engagement levels. A chi-square goodness-of-fit test indicated that the observed distribution did not significantly differ from an equal distribution $\chi^2(2, N = 132) = 3.68, p = .159$.

Social Comparison : Analysis of social comparison levels indicated that a greater proportion of participants reported moderate comparison tendencies. A chi-square goodness-of-fit test revealed a significant deviation from an equal distribution, $\chi^2(2, N = 132) = 9.14, p = .010$.

Body Shape Concerns: Participants were distributed across four levels of body shape concerns. The chi-square analyses showed statistically significant differences among categories, $\chi^2(3, N = 132) = 36.79, p < .001$.

Self-Esteem: Self-esteem levels were classified into moderate to high categories. The chi-square test demonstrated a significant difference in distribution, $\chi^2(1, N = 132) = 50.94, p < .001$.

Table 2: Independent Samples t-Test Examining Gender Differences

Variables	Gender	n	M	SD	t	p
Editing Engagement	Male	63	25.39	7.49	1.79	.077
	Female	69	23.03	8.29		
Social Comparison	Male	63	2.17	0.75	3.39	.001
	Female	69	1.75	0.67		
Body Shape Concerns	Male	63	59.13	25.86	3.02	.003
	Female	69	45.87	24.64		
Self-Esteem	Male	63	132.89	38.80	3.15	.002
	Female	69	112.99	33.78		

Note. df = 130. M = mean. SD = standard deviation.

Editing Engagement and Psychological Variables: One-way analyses of variance (ANOVA) were conducted to examine different across editing engagement levels. Significant group differences were observed for social comparison, body shape concerns, and self-esteem. Means and test statistics are presented in Table 3.

Table 3: One-Way Analysis of Variance for Eding Engagement Levels

Variables	Engagement level	n	M	SD	f	p
Social Comparison	Low	44	27.23	10.17	17.69	<.001
	Moderate	53	32.83	7.44		
	High	35	37.57	3.42		
Body Shape Concerns	Low	44	39.36	21.09	50.50	<.001
	Moderate	53	44.11	22.01		
	High	35	80.57	12.53		

Self-Esteem	Low	44	98.75	34.49	57.60	<.001
	Moderate	53	115.06	26.58		
	High	35	163.57	16.55		

Note. $df = (2, 129)$. $M = \text{mean}$. $SD = \text{standard deviation}$

Discussion: The study examined the associations among digital image editing engagement, social comparison tendencies, body shape concerns, and self-esteem among young adults. The findings indicate that engagement in editing behaviors is associated with psychological processes related to self-evaluation in digital environments.

Editing engagement demonstrated a significant relationship with social comparison. Participants reporting higher involvement in editing behaviors exhibited elevated comparison tendencies. This pattern aligns with theoretical frameworks suggesting that digitally mediated environments intensify self-evaluation processes by increasing exposure to idealized representations (Festinger, 1954; Vogel et al., 2014). Editing practices may both reflect and reinforce comparison orientation, as individuals modify self-presentation while simultaneously evaluating their appearance relative to others.

Differences observed across editing engagement levels further indicated that individuals with high editing involvement reported substantially greater body shape concerns. This finding is consistent with prior research linking appearance-focused digital behaviors to heightened body dissatisfaction and self-objectification (Fardouly et al., 2015; Tiggemann & Slater, 2014). Frequent image alteration may lead to attention towards perceived physical imperfections, thereby strengthening concerns related to body evaluation. Editing behaviors may function as both a response to and a contributor to appearance-related anxieties.

Self-esteem differences across engagement levels revealed a notable pattern. Participants in the high editing group reported higher self-esteem scores relative to those with lower editing involvement. The outcomes suggest that editing behaviors may serve complex psychological functions. While prior studies often emphasize the negative consequences of image manipulation, editing may also operate as a self-presentational strategy aimed at enhancing perceived attractiveness or social confidence (Fox & Vendemia, 2016). The relationship between editing and self-esteem may therefore not be unidirectional but shaped by motivational and contextual factors, including perceived control over self-presentation and social feedback mechanisms.

Gender-based analyses revealed significant differences in social comparison, body shape concerns, and self-esteem. Males reported higher social comparison tendencies and body shape concerns compared to females. These findings diverge from traditional assumptions that body image concerns predominantly affect females and reflect emerging evidence that appearance-related pressures increasingly influence males within social media environments (Fisher et al., 2002). Contemporary digital platforms expose all users to idealized appearance norms, potentially reducing historical gender disparities in body-related evaluations.

The significant distribution patterns observed for body shape concerns and social comparison further underscore the psychological salience of appearance based evaluations among young adults. A substantial proportion of participants reported moderate to high comparison tendencies, supporting arguments that social media environments facilitate persistent evaluative processes. These processes may influence self-perception even in non-clinical populations.

Several mechanisms may account for the observed associations. Social media platforms encourage continuous visual comparison, curated self-presentation, and feedback-seeking behaviors. Editing tools

provide users with capacity to modify appearance-related attributes, potentially shaping how individuals interpret personal and social standards of attractiveness. Over time, these practices may contribute to shifts in body evaluation and self-worth perceptions.

The results extend existing research by emphasizing editing engagement as a distinct behavioral construct rather than solely focusing on time spent on social media. Editing behaviors capture active participation in appearance modification and may reveal psychological processes not fully explained by passive exposure models. Additionally, the study extends existing research within an Indian context, addressing the relative scarcity of empirical investigations outside Western populations.

From a practical standpoint, these findings underscore the value of promoting critical awareness. Media literacy interventions and psychoeducational programs may help individuals develop more adaptive interpretations of online appearance standards. Understanding the psychological correlates of editing engagement may also aid preventive strategies targeting body dissatisfaction and maladaptive comparison behaviors.

Limitations and Future Directions: Several limitations should be considered when interpreting these findings. First, the cross-sectional design restricts conclusions regarding causality. Although significant associations were observed among editing engagement, social comparison, body shape concerns, and self-esteem, the direction of these relationships cannot be determined. Future studies employing longitudinal or experimental designs may clarify the temporal dynamics underlying these variables.

Second, the study relied exclusively on self-report measures, which are inherently susceptible to response biases, including social desirability and subjective inaccuracies. Participants' estimates of editing behavior and social media usage may not fully correspond to actual digital activity. Incorporating objective behavioral indicators, such as usage analytics or screen-time data, may enhance measurement precision in subsequent research.

Third, the sample consisted solely of young adults within a restricted age range, limiting generalizability to other populations. Psychological responses to digitally edited images may differ across developmental stages, particularly among adolescents or older adults. Expanding demographic diversity would strengthen the external validity of future investigations.

Additionally, editing engagement was assessed using a researcher-developed instrument. Although the scale captured relevant behavioral tendencies, further psychometric evaluation and validation would improve its robustness. Further research may benefit from employing standardized or multidimensional measures that distinguish between different motivations and form of image modification.

Cultural and contextual factors also warrant consideration. Participants were drawn from various regions of India; however, sociocultural influences on appearance norms and digital self-presentation were not explicitly examined. Given the diversity of beauty standards and social media practices, future studies may explore cultural moderators shaping the psychological impact of edited imagery.

Notwithstanding these limitations, the findings provide insight into the psychological correlates of digital image editing behaviors. Continued research examining editing engagement alongside social comparison and body image processes may contribute to a more nuanced understanding of self-perception in digitally mediated environments.

Conclusion: The study adds to the existing research on psychological experiences within digitally mediated environments by highlighting the significance of image editing engagement. The findings indicate that editing behaviors are associated with social comparison tendencies, body shape concerns, a self-esteem

among young adults. These results underscore the psychological relevance of active digital self-presentation practices, moving beyond the traditionally examined effects of passive social media exposure.

The observed relationships suggest that engagement with digitally edited imagery represents an important factor in understanding self-evaluative processes in contemporary digital contexts. Editing behaviors appear intertwined with appearance-based comparisons and body-related perceptions highlighting how technological affordances may shape psychological outcomes. Digital image modification may serve complex psychological functions, reflecting both self-presentational strategies and evaluative pressures.

By examining these dynamics within an Indian sample, the study findings broaden the cultural scope of existing literature and highlight the importance of investigating digital behavior across diverse sociocultural contexts. Given the increasing normalization of image editing technologies, continued empirical attention is warranted to better understand their long-term implications for self-perception and psychological well-being.

Collectively, the results suggest the importance of fostering critical awareness of digitally altered imagery and promoting adaptive engagement with social media environments. Such efforts may support healthier self-evaluations and contribute to more balanced interpretations of online appearance standards.

References

- Cash, T. F., & Pruzinsky, T. (2002). *Body image: A handbook of theory, research, and clinical practice*. Guilford Press.
- Chae, J. (2017). Explaining females' envy toward social media influencers. *Media Psychology*, 21(2), 246–262. <https://doi.org/10.1080/15213269.2017.1328312>
- Evans, C., & Dolan, B. (1993). Body Shape Questionnaire: Derivation of shortened “alternate forms.” *International Journal of Eating Disorders*, 13(3), 315–321. [https://doi.org/10.1002/1098-108X\(199304\)13:3<315::AID-EAT2260130310>3.0.CO;2-3](https://doi.org/10.1002/1098-108X(199304)13:3<315::AID-EAT2260130310>3.0.CO;2-3)
- Fardouly, J., & Vartanian, L. R. (2016). Social media and body image concerns: Current research and future directions. *Current Opinion in Psychology*, 9, 1–5. <https://doi.org/10.1016/j.copsyc.2015.09.005>
- Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: The impact of Facebook on young women's body image concerns and mood. *Body Image*, 13, 38–45. <https://doi.org/10.1016/j.bodyim.2014.12.002>
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140. <https://doi.org/10.1177/001872675400700202>
- Fox, J., & Vendemia, M. A. (2016). Selective self-presentation and social comparison through photographs on social networking sites. *Cyberpsychology, Behavior, and Social Networking*, 19(10), 593–600. <https://doi.org/10.1089/cyber.2016.0248>
- Jiotsa, B., Naccache, B., Duval, M., Rocher, B., & Grall-Bronnec, M. (2021). Social media use and body image disorders: Association between frequency of comparing one's own physical appearance to that of people being followed on social media and body dissatisfaction. *International Journal of Environmental Research and Public Health*, 18(6), 2880. <https://doi.org/10.3390/ijerph18062880>
- Kemp, S. (2023). *Digital 2023: India*. DataReportal. <https://datareportal.com/reports/digital-2023-india>

- Mills, J. S., Musto, S., Williams, L., & Tiggemann, M. (2017). “Selfie” harm: Effects on mood and body image in young women. *Body Image*, 21, 86–92. <https://doi.org/10.1016/j.bodyim.2016.12.004>
- Myers, T. A., & Crowther, J. H. (2009). Social comparison as a predictor of body dissatisfaction: A meta-analytic review. *Journal of Abnormal Psychology*, 118(4), 683–698. <https://doi.org/10.1037/a0016763>
- Orth, U., & Robins, R. W. (2014). The development of self-esteem. *Current Directions in Psychological Science*, 23(5), 381–387. <https://doi.org/10.1177/0963721414547414>
- Ozimek, P., Lainas, S., Bierhoff, H. W., & Rohmann, E. (2023). Self-perceived attractiveness and self-esteem in the context of photo editing and social media use. *Computers in Human Behavior*, 139, 107531. <https://doi.org/10.1016/j.chb.2022.107531>
- Perloff, R. M. (2014). Social media effects on young women’s body image concerns: Theoretical perspectives and research findings. *Sex Roles*, 71(11–12), 363–377. <https://doi.org/10.1007/s11199-014-0384-6>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
- Tiggemann, M., & Slater, A. (2014). NetGirls: The Internet, Facebook, and body image concern in adolescent girls. *International Journal of Eating Disorders*, 47(6), 630–643. <https://doi.org/10.1002/eat.22254>
- Valkenburg, P. M., Peter, J., & Schouten, A. P. (2017). Social media use and its impact on self-esteem and well-being. *Current Opinion in Psychology*, 9, 68–72. <https://doi.org/10.1016/j.copsyc.2016.10.008>
- Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, 3(4), 206–222. <https://doi.org/10.1037/ppm0000047>

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