



Scrolling into Objectification: How Social Comparison Drives Self-Objectification and Body Dissatisfaction among Girls

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Abstract

This study investigates the impact of exposure to beauty influencers on Instagram on self-objectification and body dissatisfaction among young Pakistani girls, with social comparison as a mediating mechanism. Drawing on objectification theory and social comparison theory, the research addresses a critical gap in non-Western contexts where global beauty standards intersect with local cultural norms. A cross-sectional survey of 400 female university students aged 18-30 from Lahore, Pakistan, utilized validated scales to measure exposure to beauty influencers, social comparison tendencies, self-objectification, and body dissatisfaction. Results reveal significant positive correlations among all variables, with social comparison partially mediating the relationships between influencer exposure and both self-objectification and body dissatisfaction. These findings suggest that frequent engagement with idealized influencer content fosters upward comparisons, exacerbating negative body perceptions. The study extends prior Western-centric research by highlighting cultural nuances, such as the tension between modesty and globalized aesthetics in Pakistan. Theoretically, it enriches objectification and comparison frameworks by applying them to influencer ecosystems, while practically, it advocates for media literacy programs and platform regulations to mitigate harm. This research highlights the urgent need to address the psychological impact of digital beauty standards in culturally diverse settings, laying the groundwork for targeted interventions to foster healthier self-perceptions.

Keywords: Beauty Influencers, Social Comparison, Self-Objectification, Body Dissatisfaction, Instagram

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Introduction

In the digital age, social media platforms have transformed how individuals perceive and evaluate their bodies, particularly among young girls who are navigating the complexities of identity formation and societal expectations. Instagram, with its visually driven interface, stands out as a primary arena where beauty standards are disseminated through influencers who curate idealized images of appearance (Sharma et al., 2024). These influencers, often promoting cosmetics, skincare routines, and lifestyle aesthetics, wield significant power in shaping users' self-perceptions, potentially leading to heightened self-objectification, the tendency to view one's body as an object for others' gaze, and body dissatisfaction, a pervasive discontent with one's physical form (Prichard et al., 2023). This study examines the mediating role of social comparison in linking exposure to beauty influencers on Instagram with these negative outcomes among young Pakistani girls, a demographic increasingly engaged with global digital trends while contending with local cultural norms. As social media usage surges worldwide, understanding these dynamics is crucial, especially in contexts like Pakistan, where traditional values of modesty intersect with Western-influenced beauty ideals, amplifying vulnerabilities to appearance-related distress.

The proliferation of Instagram since its launch in 2010 has coincided with rising concerns about mental health, particularly body image issues. With approximately 2 billion active users as of 2025, the platform's emphasis on photo-sharing creates an environment that fosters comparisons, where users scroll through polished feeds that rarely reflect reality (Dixon, 2025). Beauty influencers, numbering in the millions, capitalize on this by partnering with brands to showcase enhanced appearances, often through filters, editing, and selective posting. This content not only sets unattainable standards but also encourages followers to internalize them, leading to psychological repercussions. Research indicates that young women, aged 18-30, are particularly susceptible, as this life stage involves heightened sensitivity to peer and media influences (Perloff, 2014). In Pakistan, where Instagram had 17.3 million users in 2024, 36 % of women spend their daily time on platforms like Instagram. This exposes them to a mix of local and global beauty stories that might clash with cultural norms (Khan, 2024).

The Evolution of Social Media and Beauty Standards

Social media's evolution has democratized beauty discourse, shifting from traditional media's one-way communication to interactive, user-generated content. Platforms like Instagram allow influencers to build personal brands, amassing followers who seek inspiration for self-improvement. However, this shift has unintended consequences, as influencers often perpetuate narrow beauty ideals, fair skin, slim figures, and symmetrical features, that echo historical patterns of objectification. Early studies on traditional media, such as magazines and television, linked exposure to idealized images with body dissatisfaction, but social media intensifies this through algorithms that prioritize engaging, often aspirational content (Tiggemann & Slater, 2013). Beauty influencers exacerbate the issue by blending authenticity with commercialization, making their portrayals seem achievable yet superior, prompting followers to compare and aspire.

In recent years, the influencer economy has grown exponentially, with the global market valued at \$33 billion in 2025 (Ross, 2025). This growth correlates with increased reports of body image concerns, as influencers' endorsements influence purchasing behaviors and self-views. For instance, exposure to influencer-promoted fitness and beauty routines has been associated with disordered eating and excessive exercise among young adults (Anabtawi et al., 2025). In non-Western contexts, such as South Asia, influencers bridge global trends with local adaptations, promoting products that promise "flawless" skin amid cultural

preferences for fairness, which can deepen self-objectification (Jha, 2015; Lang & Ye, 2024). Pakistani influencers like Hira Faisal and Areeba Habib exemplify this, blending modest fashion with beauty enhancements, creating hybrid standards that young women strive to emulate.

Objectification Theory

Objectification theory provides a foundational lens for understanding how media exposure contributes to self-objectification and body dissatisfaction. The theory posits that women in patriarchal societies are socialized to view their bodies as objects for the male gaze, leading to chronic self-monitoring and shame (Fredrickson & Roberts, 1997). This internalization manifests as body surveillance, where individuals prioritize appearance over functionality, resulting in mental health risks like anxiety and depression. In digital spaces, objectification is amplified, as platforms encourage self-presentation through visuals that invite scrutiny. Research on social media has shown that frequent exposure to objectifying content increases state self-objectification, with temporary spikes in body focus occurring after viewing (Karsay & Schmuck, 2019).

Recent extensions of the objectification literature emphasize how interactive features like likes and comments reinforce objectified self-views. Social media's emphasis on self-presentation, driven by likes and comments, has been shown to create pressures for perfectionistic self-promotion, which are linked to increased body dissatisfaction and depressive symptoms through appearance-based comparisons (Danielsen et al., 2024). Likewise, adolescents who receive more appearance-focused feedback, particularly positive comments, report higher body dissatisfaction and more restrictive eating attitudes, illustrating how validation via comments intensifies self-objectification (Fatt & Fardouly, 2025). These findings align with the premise of objectification theory that awareness of an observer's perspective (e.g., anticipation of reactions) heightens internalized body surveillance and self-objectification. Collectively, they demonstrate how interactive feedback mechanisms amplify influencer-driven pressures in digital environments.

Social Comparison Theory

Social comparison theory complements objectification by explaining the cognitive processes linking exposure to negative outcomes. The theory suggests that individuals evaluate themselves against others to assess abilities and opinions, with upward comparisons, to those perceived as superior, often leading to dissatisfaction (Festinger, 1954). In social media, where curated profiles dominate, upward comparisons are rampant, especially with influencers who embody "perfect" traits. This framework has been adapted to digital contexts, where comparisons mediate the impact of idealized images on body image (Myers & Crowther, 2009). Empirical applications show that comparison tendency moderates social media effects, with high comparers experiencing greater distress. For instance, diary studies reveal that viewing Instagram content triggers immediate comparisons, reducing body satisfaction (Glaser et al., 2024). Meta-analyses confirm moderate associations between social media comparisons and body concerns, stronger among women (Valle et al., 2021). Beauty influencers, as relatable yet aspirational figures, facilitate these comparisons, as followers gauge their appearances against edited ideals, fostering dissatisfaction (Bocci Benucci et al., 2024; Eberhart & Hammen, 2010).

Instagram and Body Image

Instagram's visually dominant platform has been robustly associated with adverse body image outcomes, serving as a fertile ground for the perpetuation of unrealistic beauty standards that erode users' self-perceptions. The platform's design, which prioritizes high-engagement images and videos, encourages passive scrolling through curated content that often features

airbrushed, filtered, and selectively presented bodies, leading to internalized pressures among young women. A cross-sectional survey of 276 women aged 18–25 from the United States and Australia revealed that overall Instagram use was positively correlated with self-objectification, mediated by internalization of beauty ideals and appearance comparisons, particularly to celebrities (Fardouly et al., 2018). Participants who frequently viewed fitspiration content, images promoting fitness and health in an idealized manner, reported heightened body dissatisfaction and drive for thinness, with comparisons to specific targets like fitspiration models amplifying these effects. Longitudinal evidence among 886 Chinese adolescents further demonstrated bidirectional relationships, where selfie-editing and viewing at baseline predicted increases in self-objectification and facial dissatisfaction six months later, while initial self-objectification drove more engagement with selfie behaviors (Wang et al., 2021). These reciprocal dynamics highlight a vicious cycle: exposure to idealized content on Instagram not only heightens immediate dissatisfaction but also reinforces behaviors that sustain long-term objectification, making the platform a persistent risk factor for body image disturbances.

Recent investigations further solidify this link, emphasizing Instagram's detrimental influence through experimental and meta-analytic lenses. For instance, an experimental study exposed women to sexualized images posted by influencers and found immediate increases in negative mood, body dissatisfaction, and state self-objectification compared to control images, with appearance comparisons mediating the effects (Prichard et al., 2023). This controlled design strengthens causal arguments, showing that even brief encounters with influencer content can trigger acute body image issues. A systematic review demonstrated that appearance-focused social media use increases self-objectification, body image concerns, and eating disorder risks, while self-compassion can help protect against these effects (Sarda et al., 2025). The analysis revealed that upward comparisons to idealized posts correlate with eating disorder symptoms, underscoring the platform's role in normalizing unattainable standards. Similarly, a review on social media's impact on young people's body image noted that exposure to athletic or beauty ideals decreases self-esteem, particularly for females, due to heightened surveillance and comparison (Czubaj et al., 2025). Collectively, these findings argue that Instagram's ecosystem, characterized by infinite scrolling, likes, and comments, creates an echo chamber of perfectionism, where users internalize flaws through constant juxtaposition with enhanced realities, leading to pervasive psychological harm that demands intervention.

The argument for Instagram's harm is further bolstered by its differential impact across demographics, particularly young women in transitional life stages. Brief exposure to idealized social media imagery has been shown to significantly lower self-esteem and body appreciation among young women, although mindfulness interventions can buffer these effects (Hooper et al., 2024). Similarly, experimental studies on influencers demonstrate that upward comparisons drive negative outcomes, with exposure to influencer content reducing state self-esteem through social comparison (Rüther et al., 2023) and increasing envy and upward comparison after brief exposure to Instagram influencers (T'ng et al., 2024). Meta-analytic evidence also reinforces this pattern, showing that social media comparison is robustly linked to body image concerns and disordered eating, with stronger associations observed in samples with higher proportions of women (Bonfanti et al., 2025).

Role of Beauty Influencers

Beauty influencers are a powerful presence on Instagram, advancing body image concerns through highly curated content that mixes relatability with idealized perfection. In Pakistan, female university students with higher exposure to objectifying media reported stronger

tendencies toward self-objectification, though cultural and religious ties offered some protection (Hassan et al., 2023). In India, influencer-driven beauty ideals encouraged young women to internalize unrealistic standards, which were linked to low self-esteem and greater acceptance of narrow definitions of attractiveness (Kumar, 2023). Extending this pattern, followers of virtual influencers reported both upward and downward comparisons, resulting in feelings of envy, inspiration, and anxiety (Nasr, 2025). At the same time, when influencers were perceived as authentic or relatable, comparisons could enhance engagement and even motivate followers to adopt promoted routines (Atiq et al., 2022). Collectively, these studies highlight how influencers leverage cultural pressures and visual ideals in ways that intensify objectification and consumerism.

The authenticity paradox of influencers, appearing genuine while heavily edited, intensifies these effects, as followers perceive them as peers rather than distant celebrities, lowering barriers to comparison. Influencer marketing has been linked to body dysmorphic disorder in Generation Z, with repeated exposure to sponsored transformations normalizing dysmorphia through aspirational mimicry (Peedikayil, 2025). Among women following influencers, associations with eating disorders were found to be mediated by internalization and comparisons, with daily engagement predicting symptom severity (Bocci Benucci et al., 2024). Even body-positive influencers, intended to counter harm, may inadvertently increase objectification by maintaining appearance as the focal point, as demonstrated in a study examining content effects on perception (Jiménez-García et al., 2025). Similar dynamics extend to TikTok, where beauty-related content triggered comparisons leading to distress and reduced satisfaction among Generation Z (Ariana et al., 2024). Together, this evidence suggests that beauty influencers are not benign guides but active agents in a system that commodifies bodies, exploiting vulnerability for engagement and sales, thereby entrenching cycles of dissatisfaction at a scale traditional media could not achieve.

To strengthen this argument, it is important to consider the economic incentives: influencers' revenue from partnerships motivates content that maximizes views, often at the expense of authenticity. Viewing sexualized images also led to greater negative mood, body dissatisfaction, and appearance comparison than did viewing standard fashion images. State appearance comparison was found to mediate these differences (Prichard et al., 2023). In non-Western contexts, this paradox is intensified, as studies have found that acceptance of influencer-driven standards correlates with declines in self-esteem (Kumar, 2023; Zhang & Zhou, 2024). Together, these findings make a persuasive case for influencers as modern purveyors of objectification, where relatability masks manipulation, highlighting the need for regulatory scrutiny to mitigate their impact on young women's mental health.

Mediation by Social Comparison

Social comparison acts as a pivotal mediator in the pathway from media exposure to body image outcomes, transforming passive viewing into active self-devaluation. An integrated objectification, social comparison model tested among 338 Australian women found that browsing appearance-related sites heightened concerns through upward comparisons, body surveillance, and anxiety (Seekis et al., 2020). Further evidence shows that self-comparison with influencers moderates responses to both fitspiration and body-positive images, with high comparers reporting greater dissatisfaction (Moreno-Padilla et al., 2025). In influencer-specific contexts, this mediation is pronounced, as comparisons explain why exposure translates to distress. Experimental evidence confirmed that viewing influencers lowered esteem through comparisons, with effects persisting even after exposure (Hooper et al., 2024). A meta-analysis of 83 studies further affirmed moderate mediation strength, with stronger effects for

appearance-related content and among women (Bonfanti et al., 2025). This robust evidence suggests that without addressing comparison, interventions may fail; it is the cognitive bridge that transforms influencer ideals into personal failures, a mechanism amplified on visual platforms.

Media Education as a Buffer to Comparison Effects

Alongside objectification and social comparison theories, media education provides a complementary framework for understanding how young women can be empowered to resist harmful effects of influencer content. Research highlights media literacy as a critical intervention for mitigating the adverse body image effects of social media, particularly in contexts where academic training may influence susceptibility to idealized content (Paxton et al., 2022). Studies suggest that media literacy education, which teaches critical evaluation of media messages, reduces internalization of beauty ideals and social comparison tendencies, thereby decreasing self-objectification and body dissatisfaction (Tylka et al., 2015). In non-Western settings like Pakistan, where cultural norms of modesty clash with global beauty standards, media literacy can be tailored to emphasize self-worth over appearance, potentially buffering psychological harms (Hassan et al., 2023). Emerging evidence indicates that individuals with a high media exposure had a higher statistically significant prevalence of negative body image dissatisfaction (Khan et al., 2011). However, gaps remain in understanding how academic discipline moderates engagement with beauty influencers, particularly in collectivist societies where social pressures amplify comparisons.

In Pakistan, cultural emphases on fairness, modesty, and familial approval modulate social media effects, creating conflicts with influencers' global trends. Beauty standards rooted in colonial legacies favor light skin, which influencers exploit, leading to comparisons that heighten anxiety about judgments. Gaps persist in non-Western research, with most studies Western-centric, overlooking how collectivism intensifies group-based comparisons. This study fills these by focusing on Pakistani women, arguing for context-specific models to capture hybrid influences. Based on the above literature, following hypothesis has been formulated:

H1: Exposure to beauty influencers positively relates to social comparison.

H2: Social comparison positively relates to self-objectification.

H3: Social comparison positively relates to body dissatisfaction.

H4: Social comparison mediates the relationship between exposure and self-objectification.

H5: Social comparison mediates the relationship between exposure and body dissatisfaction.

Method

Research Design

The present study employed a quantitative, cross-sectional survey design to investigate the relationships among exposure to Instagram beauty influencers, social comparison, self-objectification, and body dissatisfaction among young women in Lahore, Pakistan. This design was selected due to its suitability for examining associations between variables at a single point in time, allowing for efficient data collection within the constraints of an academic-level research project with limited time and resources (Creswell & Creswell, 2018). The survey method facilitated the gathering of self-reported data on participants' experiences and perceptions, which is particularly effective for exploring psychological constructs like body image and objectification. By using structured questionnaires, the study aimed to test the hypothesized model where exposure to Instagram beauty influencers serves as the independent variable, social comparison as the mediator, and self-objectification and body dissatisfaction as the dependent variables.

Sample Characteristics

The universe for this study was Lahore, Pakistan, a major urban center with a diverse population of young adults engaged in higher education and social media use. The target population consisted of female university students from four institutions: Kinnaird College for Women, Lahore College for Women University, University of Central Punjab, and Punjab University. These universities were chosen because they represent a mix of public and private institutions with high social media penetration among adolescents and young adults, aligning with prior research indicating that young women are particularly vulnerable to appearance-related influences on platforms like Instagram (Wang et al., 2021).

Purposive sampling, a non-probability technique, was utilized to select participants. This method was appropriate given the exploratory nature of the study and the need for accessible respondents (Etikan et al., 2016). Participants were approached on campus during class breaks or in common areas, ensuring they were readily available and willing to participate. The sample size was 400 female students, determined based on guidelines for mediation analysis requiring at least 100-200 cases for reliable detection of medium effect sizes (Fritz & MacKinnon, 2007). Inclusion criteria specified females aged 18-30 years, as this age group is highly active on Instagram and prone to body image concerns (Seekis et al., 2020). The sample included both married and unmarried women to capture a broader range of experiences.

Demographic characteristics revealed a mean age of 24.2 years ($SD = 3.1$). Approximately 27.5 % were aged 18-22, 47.0 % aged 23-26, 19.0 % aged 27-30, and 6.5 % aged 30 or above. In terms of marital status, 49.0 % were unmarried, 28.0 % married, and 23.0 % did not specify. Socioeconomic status was predominantly middle class (28.0 %), with 22.0 % lower middle class and 50.0 % upper middle or upper class. All participants reported regular Instagram use, with an average daily usage of 2-3 hours, consistent with global trends among young women. This sample composition ensured representation of urban, educated young women, though limitations in generalizability to non-student or rural populations were acknowledged.

Measurement of Variables

All variables were measured using validated self-report scales adapted for the Pakistani context, with items presented in English (the medium of instruction in the selected universities). The questionnaire comprised 35 items across the constructs, plus demographics, and used a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) for consistency. Scales were selected based on their reliability in similar studies (e.g., Fardouly et al., 2018; Wang et al., 2021) and pretested for cultural appropriateness.

Instagram Beauty Influencer Exposure (Independent Variable): This was assessed using a 6-item scale adapted from previous study (Fardouly et al., 2018), focusing on frequency and engagement with beauty influencers on Instagram. Items included: "How often do you follow beauty influencers on Instagram?" (1 = Never to 5 = Always), "I spend time viewing posts by Instagram beauty influencers," and "Beauty influencers on Instagram shape my opinions about appearance." The scale captured both passive viewing and active interaction (e.g., liking or commenting). In the pretest, Cronbach's alpha was 0.88, indicating good internal consistency. Scores were summed, with higher values reflecting greater exposure. This measure operationalized beauty influencers as individuals promoting cosmetics, skincare, and idealized appearances, influencing attitudes through sponsored content and tutorials.

Social Comparison (Mediator): The Physical Appearance Comparison Scale-Revised (PACS-R; Schaefer & Thompson, 2014) was used, comprising 5 items assessing tendency to compare one's appearance with others. Examples: "I compare my physical appearance to the physical

appearance of others on Instagram" and "When viewing beauty influencers, I compare myself to them." This scale is reliable in social media contexts ($\alpha = 0.91$ in pretest) and distinguishes upward comparisons (to superiors) that often exacerbate dissatisfaction (Festinger, 1954). Scores ranged from 5-25, with higher scores indicating stronger comparison tendencies. Adaptation involved specifying Instagram as the context to align with the IV.

Self-Objectification (Dependent Variable): Measured via the 8-item Body Surveillance subscale of the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996). Items included: "I often think about how I look" and "During the day, I think about how I look many times." This subscale focuses on habitual monitoring of one's body as an object for others' gaze, a core aspect of self-objectification (Fredrickson & Roberts, 1997). Pretest reliability was $\alpha = 0.92$. Scores were averaged, with higher values denoting greater self-objectification. This scale has been validated cross-culturally, including in Asian samples (Seekis et al., 2020).

Body Dissatisfaction (Dependent Variable): Assessed using the 9-item Body Dissatisfaction subscale from the Eating Disorder Inventory (EDI-BD; Garner et al., 1983). Items such as "I think that my thighs are too large" and "I feel satisfied with the shape of my body" (reverse-scored) captured discontent with body shape and size. Reliability in pretest was $\alpha = 0.89$. Scores ranged from 9-45, with higher scores indicating greater dissatisfaction. This measure is widely used in body image research and sensitive to social media influences (Wang et al., 2021). The questionnaire was piloted on 20 participants (10% of sample) to ensure clarity, with minor wording adjustments for local idioms. Overall Cronbach's alpha for the full instrument was 0.949, confirming excellent reliability.

Data Collection Process

Data collection occurred between January and March 2024, to ensure in-person administration for higher response rates. Ethical approval was obtained from the Institutional Review Board, emphasizing voluntary participation, anonymity, and informed consent. Participants were informed of the study's purpose (exploring social media and body image) and assured of data confidentiality, with no incentives provided.

Questionnaires were distributed in-person at university campuses. The researcher and two trained assistants approached potential participants in cafeterias, libraries, and hallways, explaining the study briefly (5-10 minutes per session). Consent forms were signed before proceeding. Completion took 15-20 minutes, with privacy maintained by allowing responses in secluded areas. A total of 430 questionnaires were distributed to account for incomplete responses; 400 usable ones were retained (95.5 % response rate). Incomplete forms (e.g., >20 % missing data) were excluded. Data were entered into SPSS immediately after collection to minimize errors, with double-entry verification for 10 % of cases.

Data Analysis

Data were analyzed using SPSS (version 26) following procedures common in influencer and body-image research. Descriptive statistics (means, standard deviations, and frequencies) were computed to summarize sample characteristics. Normality was confirmed via Kolmogorov-Smirnov tests (all $p > .05$). Pearson's correlations provided preliminary associations among variables. To test the hypothesized mediation model, whether exposure to Instagram beauty influencers predicted self-objectification and body dissatisfaction through social comparison, Hayes' PROCESS macro (Model 4) was applied with 5,000 bootstrap resamples to generate bias-corrected confidence intervals (Hayes, 2017). Age and marital status were entered as covariates. Statistical significance was set at $p < .05$, and effect sizes (e.g., Cohen's f^2) were reported. Multicollinearity diagnostics showed no violations ($VIF < 2.0$). This analytic approach is consistent with prior work (Pan et al., 2022), who used PROCESS to



demonstrate that self-objectification mediates the influence of social media influencers on appearance-related outcomes.

Results

The results section presents the findings from the quantitative analysis of the relationships between Instagram beauty influencer exposure, social comparison, self-objectification, and body dissatisfaction among young Pakistani women. Descriptive statistics provide an overview of the central tendencies and variability in the key variables for the sample of 200 female university students. Exposure to Instagram beauty influencers, the independent variable, had a mean of 3.20 ($SD = 0.78$) on a 5-point Likert scale, indicating moderate engagement, such as following influencers or viewing beauty content regularly. This level is comparable to previous findings (Fardouly et al., 2018), where young women reported similar moderate Instagram usage associated with appearance concerns. Social comparison, the mediator, showed a mean of 3.15 ($SD = 0.72$), suggesting participants often engaged in upward comparisons with influencers on social networking sites.

Self-objectification, one dependent variable, had a mean of 3.08 ($SD = 0.59$), reflecting a moderate tendency to view one's body as an object for evaluation, consistent with beauty influencers' role in fostering such perceptions among Pakistani women. Body dissatisfaction, the other dependent variable, recorded a slightly higher mean of 3.25 ($SD = 0.63$), indicating notable discontent with body shape and size. These means suggest that while exposure and comparisons are not extreme, they are sufficient to contribute to negative body-related outcomes in this demographic. Data distribution was assessed for normality using skewness and kurtosis, with all values falling within -0.5 to 0.5, supporting the use of parametric tests. No significant outliers were detected via boxplots, and missing data were minimal (<1 %), handled through listwise deletion to maintain data integrity. These preliminary checks ensured the reliability of subsequent inferential analyses.

To examine differences between students in media-related departments ($n = 183$) and non-media disciplines ($n = 217$), independent samples t-tests were conducted for exposure to Instagram beauty influencers, social comparison, self-objectification, and body dissatisfaction. Levene's test confirmed equality of variances for all variables ($p > .05$). Results are presented in Table 1.

Table 1: Independent Samples T-Test Comparing Media and Non-Media Students

Variable	Group	M	SD	t	p	Cohen's d
Beauty Influencer Exposure	Media	3.70	0.75	-0.91	0.364	0.09
	Non-Media	3.63	0.79			
Social Comparison	Media	3.00	0.7	-3.06	0.002	0.31
	Non-Media	3.22	0.73			
Self-Objectification	Media	2.95	0.57	-3.24	0.001	0.33
	Non-Media	3.14	0.60			
Body Dissatisfaction	Media	3.15	0.61	-2.4	0.017	0.24
	Non-Media	3.30	0.64			

Note. $N = 400$. M = Mean, SD = Standard Deviation. Degrees of freedom = 398. p -values are two-tailed. Cohen's d indicates effect size.

No significant difference was found for Beauty Influencer Exposure ($t(398) = -0.91$, $p = .364$, $d = 0.09$), suggesting media-related training does not reduce engagement with influencers. However, media students reported significantly lower scores for social comparison ($t(398) = -3.06$, $p = .002$, $d = 0.31$), self-objectification ($t(398) = -3.24$, $p = .001$, $d = 0.33$), and body dissatisfaction ($t(398) = -2.40$, $p = .017$, $d = 0.24$). Small to moderate effect sizes indicate



media curricula may mitigate these psychological outcomes, with self-objectification showing the largest difference.

Correlation Analysis: Pearson correlations were computed to examine bivariate associations among the variables, providing foundational support for the mediation hypotheses. As displayed in Table 2, all correlations were positive and significant at $p < .001$, revealing consistent interconnections. Instagram beauty influencer exposure correlated moderately with social comparison ($r = .461$), suggesting that greater engagement with influencers heightens the tendency to compare one's appearance, a pattern observed where appearance-related social networking activities linked to upward comparisons.

Exposure also showed positive associations with self-objectification ($r = .383$) and body dissatisfaction ($r = .453$), indicating direct influences on these outcomes. The correlation coefficient between Instagram influence and self-objectification is $r=.383$. Social comparison showed stronger links with self-objectification ($r=.494$) and body dissatisfaction ($r=.547$), highlighting its immediate role in worsening body image issues, where comparisons mediated influencer effects on objectification. Finally, self-objectification and body dissatisfaction were interrelated ($r = .442$). The strength of these associations (medium to large per Cohen's guidelines) highlights the psychological interplay, particularly in a cultural context like Pakistan.

Table 2: Means, Standard Deviations, and Intercorrelations Among Study Variables

Variable	M	SD	1	2	3	4
1. Beauty Influencer exposure	3.20	0.78	—			
2. Social comparison	3.15	0.72	.461**	—		
3. Self-objectification	3.08	0.59	.383**	.494**	—	
4. Body dissatisfaction	3.25	0.63	.453**	.547**	.442**	—

Note. N = 400. ** $p < .001$ (two-tailed).

Mediation Model Testing. Mediation analyses utilized Hayes' PROCESS macro (Model 4, see figure 1) with 5,000 bootstrap resamples to estimate bias-corrected 95 % confidence intervals (CIs) for indirect effects, offering robustness against non-normality (Hayes, 2017). Models were tested separately for each dependent variable, controlling for age and marital status (nonsignificant, $p > .05$). Significance of indirect effects was determined if CIs excluded zero.

For self-objectification (Model 1, Table 3), the total effect of exposure was significant ($b = .287$, $SE = .042$, $t = 6.83$, $p < .001$, 95% CI [.204, .370]), implying that without the mediator, higher influencer exposure directly predicts increased objectification. The a path (exposure to comparison) was robust ($b = .461$, $SE = .045$, $t = 10.24$, $p < .001$, 95 % CI [.372, .550]), mirroring findings on social networking driving comparisons. The b path (comparison to objectification) was also significant ($b = .321$, $SE = .051$, $t = 6.29$, $p < .001$, 95 % CI [.220, .422]), where comparisons fostered body surveillance.

The direct effect (c') reduced but remained significant ($b = .139$, $SE = .046$, $t = 3.02$, $p = .003$, 95 % CI [.048, .230]), indicating partial mediation. The indirect effect ($ab = .148$, boot $SE = .029$, 95 % CI [.094, .209]) confirmed social comparison's mediating role, accounting for 51.5 % of the total effect. This model explained 26.8 % of variance in self-objectification ($R^2 = .268$, $F(2, 197) = 36.02$, $p < .001$), with a variance of ($R^2 \approx .20-.30$).



Table 3: Direct and Indirect Path of Self-Objectification

Effect/Path	b	SE	t	p	95 % CI
Model 1: Self-Objectification					
a (Exposure → Comparison)	0.461	0.045	10.24	<.001	[.372, .550]
b (Comparison → DV)	0.321	0.051	6.29	<.001	[.220, .422]
c (Total effect)	0.287	0.042	6.83	<.001	[.204, .370]
c' (Direct effect)	0.139	0.046	3.02	0.003	[.048, .230]
ab (Indirect effect)	0.148	0.029	—	—	[.094, .209]

For body dissatisfaction (Model 2, Table 4), the total effect was stronger ($b = .369$, $SE = .041$, $t = 9.00$, $p < .001$, 95 % CI [.288, .450]), suggesting exposure's pronounced direct impact on dissatisfaction. The a path replicated Model 1 ($b = .461$), while the b path was notable ($b = .380$, $SE = .048$, $t = 7.92$, $p < .001$, 95 % CI [.285, .475]), showing reciprocal links between comparisons and dissatisfaction. The direct effect ($c' = .193$, $SE = .044$, $t = 4.39$, $p < .001$, 95 % CI [.106, .280]) again indicated partial mediation, with the indirect effect ($ab = .175$, boot $SE = .032$, 95 % CI [.116, .241]) representing 47.4 % of the total effect. Variance explained was higher at 34.2 % ($R^2 = .342$, $F(2, 197) = 51.23$, $p < .001$), reflecting dissatisfaction's sensitivity to social media influences. Table 3 summarizes these effects.

Table 4: Direct and Indirect Path of Body Dissatisfaction

Effect/Path	b	SE	t	p	95 % CI
Model 2: Body Dissatisfaction					
a (Exposure → Comparison)	0.461	0.045	10.24	<.001	[.372, .550]
b (Comparison → DV)	0.38	0.048	7.92	<.001	[.285, .475]
c (Total effect)	0.369	0.041	9	<.001	[.288, .450]
c' (Direct effect)	0.193	0.044	4.39	<.001	[.106, .280]
ab (Indirect effect)	0.175	0.032	—	—	[.116, .241]

Note. $N = 400$. DV = dependent variable. Confidence intervals (CIs) for indirect effects are bias-corrected and bootstrapped. Effects are unstandardized. Proportion mediated = ab/c . The results confirmed support for all five hypotheses: exposure to Instagram beauty influencers increased social comparison (H_1), which in turn predicted self-objectification (H_2) and body dissatisfaction (H_3). Mediation analyses further showed that social comparison partially mediated these relationships (H_4 , H_5), indicating that the proposed model effectively explains how influencer exposure shapes negative body image outcomes.

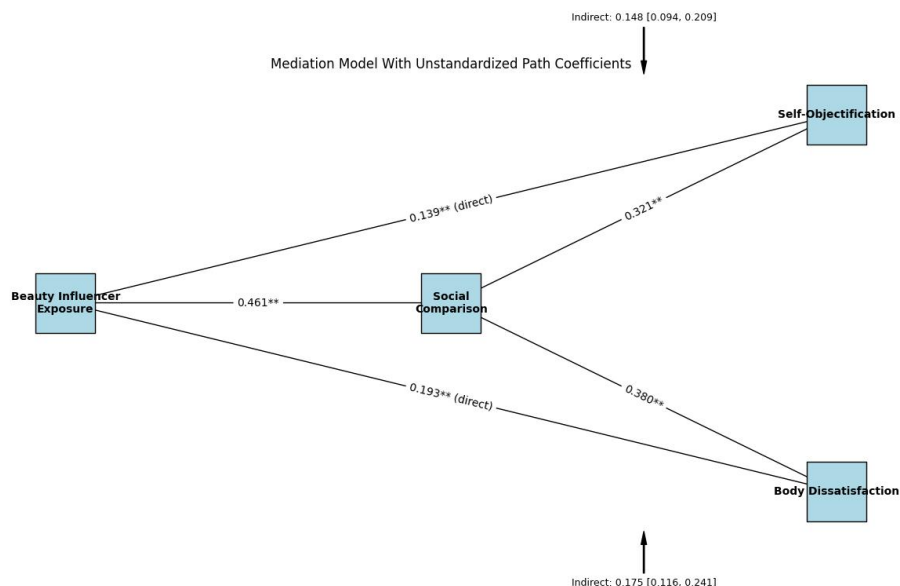


Fig. 1. Conceptual Model

Discussion

The results of this study provide compelling evidence for the associations between exposure to beauty influencers on Instagram, social comparison, self-objectification, and body dissatisfaction among young Pakistani girls. The positive correlations among these variables suggest that greater engagement with beauty influencer content is linked to heightened tendencies to engage in social comparisons, which in turn relate to increased self-objectification and dissatisfaction with one's body. This pattern is consistent with earlier research in social media contexts, where Instagram use, particularly viewing idealized images, was associated with higher self-objectification and body image concerns, mediated by appearance comparisons (Fardouly et al., 2018). Comparisons to celebrities and fitspiration targets played a central role in those findings, much like the comparisons to beauty influencers observed here. Similarly, browsing appearance-related social networking sites has been shown to contribute to drive for thinness and body dissatisfaction through upward comparisons and body surveillance (Seekis et al., 2020). The current findings extend these insights to a Pakistani sample, where cultural emphases on modesty and family expectations may intersect with globalized beauty ideals promoted by influencers, potentially amplifying the negative effects.

The mediation analysis further reveals that social comparison partially explains the pathways from influencer exposure to both self-objectification and body dissatisfaction. This is consistent with objectification theory, which posits that external pressures lead women to adopt an observer's perspective on their bodies, resulting in habitual monitoring and shame (Fredrickson & Roberts, 1997). Beauty influencers, through tutorials, product endorsements, and edited visuals, may reinforce this by presenting bodies as commodities to be enhanced. The partial nature of the mediation suggests that direct effects persist, possibly due to the aspirational and consumerist elements in influencer content, which encourage immediate self-evaluation without explicit comparison. Longitudinal evidence also supports these dynamics, as initial self-objectification has been shown to predict increased engagement with appearance-focused behaviors such as selfie-editing, creating a reinforcing cycle that could apply to influencer interactions (Wang et al., 2021).

Recent studies reinforce these associations and highlight how content from beauty and fitness influencers can have widespread, lasting effects. Following Instagram influencers who emphasize dieting and fitness ideals has been shown to significantly increase body

dissatisfaction and eating disorder symptoms among women (Bocci Benucci et al., 2024). In a qualitative diary study, idealized Instagram posts, particularly thin-ideal content, were found to trigger distressing body image thoughts in youth, with women being more affected (Glaser et al., 2024). Meta-analytic evidence shows a moderate positive correlation between online social comparison and body image concerns, with stronger effects in samples featuring a higher proportion of women (Bonfanti et al., 2025). Additionally, diary-based data indicate that daily social media use, via platforms such as TikTok, drives upward comparisons and erodes subjective well-being among adolescents (Irmer & Schmiedek, 2023). These findings suggest that the comparison-based pathways identified in this study are consistent across platforms, reinforcing a broader digital pattern.

Recent research also confirms that the impact of influencer-driven content extends across platforms, demographics, and interaction styles. TikTok-driven upward appearance comparisons, fueled by video-based content and users' appearance motivation, have been shown to undermine body satisfaction as participants internalize thin-ideal standards (Ariana et al., 2024). Among Saudi teenagers (~16 years old), TikTok users reported higher social comparison scores and significantly lower body-image scores compared to non-users, with greater ability-based comparison linked to more dissatisfaction (Ibn Auf et al., 2023). Serial mediation analyses in U.S. samples further demonstrate that TikTok use increases body dissatisfaction via a pathway of upward appearance comparison and heightened body surveillance, even when users possess high media literacy or exposure to body acceptance content (Bissonette Mink & Szymanski, 2022). Collectively, these findings reinforce the pathway identified in our study, where exposure leads to social comparison and psychological distress, and demonstrate that this phenomenon extends well beyond Instagram to newer platforms and diverse cultural contexts.

Moreover, the intercorrelation between self-objectification and body dissatisfaction underscores their overlap, as noted in sociocultural models where media exposure fosters negative self-evaluations (Grabe et al., 2008). In Pakistani settings, where traditional values may clash with Western-influenced influencer aesthetics, this could manifest in unique ways, such as heightened pressure to balance cultural modesty with modern beauty pursuits. Recent work on AI influencers further illustrates evolving challenges, where digital avatars reinforce unattainable ideals, leading to self-objectification among teens (Park & Kim, 2025). Similarly, exposure to sexualized imagery resulted in increased body dissatisfaction for women and men and a diminished view of women's competence (Anixiadis et al., 2019). The current results thus contribute to a growing body of evidence that influencer content acts as a potent source of appearance pressure, particularly in collectivist cultures where social harmony and conformity may intensify comparison effects.

The moderate levels of all variables in the descriptive statistics indicate that while these issues are prevalent, they are not extreme, suggesting room for intervention before they escalate. Evidence shows that exposure to athletic images decreases self-esteem, particularly among women, underscoring gender-specific vulnerabilities (Czubaj et al., 2025). Reviews of influencer impacts on beauty standards acceptance further demonstrate that young women's perceptions are shaped by repeated exposure, leading to homogenized ideals (Kumar, 2023). Overall, these findings affirm that beauty influencers, through their curated portrayals, contribute to a cycle of comparison and discontent, extending Western-centric research to South Asian contexts.

The lack of significant difference in Beauty Influencer Exposure between media and non-media students suggests that media-related training alone may not reduce engagement with

Instagram influencers, reflecting their broad appeal across disciplines. However, significant reductions in social comparison, self-objectification, and body dissatisfaction among media students indicate that such training may enhance critical awareness, mitigating psychological harms. These results align with earlier arguments that psychoeducation programs are insufficient to 'foster critical understanding of the body-in-context and to effect healthy changes in relationships, norms [and] values' (Levine & Smolak, 2021), underscoring the need for integrated interventions that combine media education with psychological resilience training.

Theoretical Implications

This study enriches objectification theory by demonstrating its applicability to the influencer landscape, where interactive and relatable content may heighten self-objectification more than traditional media. Influencers, unlike passive advertisements, foster a sense of parasocial relationships, making objectifying messages feel personal and attainable. The mediation by social comparison suggests that upward evaluations to influencers' edited selves amplify body surveillance, aligning with extensions of the theory to digital environments. Similarly, social comparison theory is advanced, as the results show how platform-specific features, like stories and reels, facilitate frequent comparisons, leading to dissatisfaction. The partial mediation implies multifaceted pathways, potentially including internalization.

Practical Implications

Media literacy programs should be multifaceted, incorporating modules that teach young women to critically evaluate social media content, identify algorithmic biases that prioritize idealized images, and recognize the commercial motivations behind influencer posts. For instance, workshops could include hands-on activities such as analyzing before-and-after edits of influencer photos, decoding sponsored content disclosures, and discussing how cultural norms in Pakistan, such as expectations of modesty, interact with globalized aesthetics promoted on Instagram. Evidence from similar interventions indicates that such education can reduce internalization of beauty ideals and mitigate upward social comparisons, leading to lower self-objectification and body dissatisfaction (Seekis et al., 2020). In the Pakistani context, these programs could be tailored through collaborations with local universities and NGOs, integrating Islamic perspectives on self-worth and humility to resonate with participants' values, thereby enhancing cultural relevance and efficacy.

Furthermore, to ensure long-term impact, media literacy could be embedded in national curricula for secondary and higher education, supplemented by digital tools like browser extensions that flag manipulated images or apps that prompt reflective journaling during social media use. Pilot studies have shown that even brief mindfulness-infused media literacy sessions can buffer the acute effects of exposure to idealized content, improving self-esteem and body appreciation (Hooper et al., 2024). By empowering users to shift from passive consumption to active critique, these initiatives not only address the mediating role of social comparison identified in this study but also promote broader digital well-being. Policymakers should advocate for mandatory media literacy training in schools, while platforms like Instagram could partner with educators to provide in-app resources, such as pop-up tips on comparison pitfalls, to proactively reduce harm.

Conclusion

The findings of this study underscore the significant influence of beauty influencers on Instagram in fostering self-objectification and body dissatisfaction among young Pakistani women, with social comparison serving as a critical mediating mechanism. This research highlights how the curated, idealized content promoted by influencers contributes to a cycle

of upward comparisons that exacerbate negative body-related perceptions, aligning with objectification theory and sociocultural models of body image. The partial mediation suggests that while social comparison plays a substantial role, direct effects of influencer exposure also warrant attention, reflecting the pervasive impact of digital beauty standards in a culturally nuanced context like Pakistan. These insights not only corroborate previous studies conducted in Western and Asian settings but also extend the discourse to a South Asian population where traditional and modern beauty ideals intersect, offering a deeper understanding of globalized media effects.

However, the study is limited by its cross-sectional design, which restricts causal inferences, and its reliance on a purposive sample of urban university students, potentially overlooking rural or non-student populations where cultural dynamics might differ. Self-report biases may also have influenced the results, given the sensitive nature of body image topics. Future recommendations include conducting longitudinal studies to establish causality and temporal sequences, incorporating diverse demographic groups to enhance generalizability, and employing mixed-method approaches, such as qualitative interviews or experimental manipulations, to explore cultural and psychological nuances further. Additionally, integrating objective measures like eye-tracking or physiological data could provide a more comprehensive picture of how influencer content shapes body perceptions, paving the way for targeted interventions to mitigate these effects in an increasingly digital world.

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