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Body Image and Fitness Culture in the Age of Social Media

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Abstract
The interplay of body image and fitness culture in the age of social media is examined by means of a cross-sectional survey design. The aim was to examine how digital media influences body image, fitness engagement, and related psychosocial variables. A structural questionnaire was used for 450 university students (18–30 years old) composed of validated scales: Rosenberg Self-Esteem Scale, International Physical Activity Questionnaire (IPAQ), and WHO-5 Wellbeing Index. Descriptive statistics, regression models, and thematic analysis of open ended responses were used in the analyses. Results showed a significant association between greater social media engagement and body dissatisfaction ($\beta =$. 34, $p <$. 01), more involvement in appearance-motivated fitness behaviors ($\chi^2 =$ 12. 05), and lower self-esteem ($M =$ 18.7, $SD =$ 4.3). Results indicated that social media will both drive fitness participation and negatively increase body dissatisfaction. There is an urgent demand for media literacy initiatives, body image positive campaigns and also multifaceted approaches in public health programmes that are rooted in a psychosocial analysis. This study adds to an emergent body of literature by providing emprical evidence on how modern-day social media transforms fitness culture.
Key Words: Physical Activity, Body Image, Self Esteem, Social Media, Fitness

Introduction and Literature Review
The intertwining of fitness culture and body image discourse has expanded in the digital age, especially on platforms like social media, where idealized images of physiques are ubiquitous. Similarly, researchers note comparably that social-networking sites like Instagram and TikTok do not only make more extreme forms of beauty norms available but also are used for accessing fitness motivation (Fardouly & Vartanian, 2021) as well as forming communities. This double-edged quality of social media, as both enabler and problem is especially apparent in young adults who are more vulnerable to social comparison (Holland & Tiggemann, 2021). The literature also clearly evidences the direct links between exposure to fitness-related content and body dissatisfaction (with potential impacts upon self-esteem, disordered eating, and compulsive exercise; Prichard et al., 2021; Rounsefell et al., 2020).
Following these findings, the literature is lacking in terms of understanding why social media both stimulates fitness engagement and increases negative body image. Theoretical perspectives such as Social Comparison (Festinger, 1954/2020) and Objectification Theories (Fredrickson & Roberts, 1997; Moradi, 2020) offer valuable perspectives for understanding these phenomena. The upward comparisons induced by exposure to idealized fitness images may be

interpreted from the perspective of Social Comparison Theory, and located in a cultural context of body surveillance/commodification as posited by Objectification Theory.

Recent research has underscored the importance of integrative research designs that address not only numerical associations, but also qualitative experiences (Pila et al., 2021; Swami et al., 2022). Against this backdrop, the present study responds by surveying gym culture and social media usage among university students in Pakistan to assess body image concerns, with a particular emphasis on psychosocial variables and cultural context.

Methodology

Study Design

The cross-sectional survey design was used for this study in order to identify associations between social media use, body image perception and fitness culture among a specific population at one point in time. This enables cost-effective exploration of psychosocial correlates without presuming causality and is compatible with the aims of this study.

Population and Setting

The study population included students of the age range 18–30 years from major public and private sector universities of Lahore, Pakistan. Eligibility criteria included: (a) regular usage of social media (at least 1 hour daily), (b) active involvement in fitness related activities, either formal or informal, and (c) willingness to participate. Exclusion criteria were participants with a clinical diagnosis of eating disorders as well as non-social media consumers. The context contained up (university gyms) and virtual (social media environments) locations.

Sampling Strategy

The participants were recruited through purposive and snowball sampling techniques, including the university system, fitness clubs and cyber communities. A sample size of at least 384 was estimated according to the formula by Cochran for infinite population at a confidence level of 95% and margin error of 5%. We aimed to enrol 450 participants taking into account the non-response. The overall response rate was 89%. Possible sampling bias as a consequence of non-probability methods was controlled by including students from various institutions and social strata.

Instrumentation

The questionnaire was a combination of standard scales and self-designed questions. Body Appreciation Scale-2 (BAS-2; Tylka & Wood-Barcalow, 2015; validated in cross-culture by Swami et al., 2022) was used to measure body image. Physical activity participation Participants reported information about their fitness levels with the International Physical Activity Questionnaire (IPAQ-SF; Craig et al., 2003, and more recent validation by Lee et al., 2020). Self-esteem was assessed through the Rosenberg Self-Esteem Scale (RSES; Schmitt & Allik, 2020) and psychological wellbeing measured by means of the WHO-5 Wellbeing Index (Bech et al., 2003; validation studies by Bonsaksen et al., 2021). Clarity and internal consistency were confirmed in a pilot study with 30 participants (Cronbach's alpha = 0.87).

Variables and Measures

The independent variables were sex, SES and social media use (hours/day). Dependent variables were body appreciation and fitness participation (in MET-minutes/week), as well as self-esteem scores. Unadjusted for other factors of interest were age, field of study and previous mental health diagnosis. Criterion reference standards were validated with threshold values on scales.

Data Collection Procedures

The analysis was performed using an online survey tool, Qualtrics, and the link to access the same was available through university system links and social media. On average, it took 18 minutes. Confidentiality was kept since no personal identifiable information were solicited. Participation was all on a voluntary basis and the respondents had an option to withdraw from the study at any point. Reminder emails increased participation rates.

Ethical Considerations

Ethical approval was received from the Institutional Review Board of Department of Sports Science and Physical Education, Punjab University (Protocol No: PU-2025-112). Electronic informed consent was collected at the time of participation. Information was maintained on encrypted servers accessible only to the study team.

Data Analysis Plan

Statistical analysis Quantitative data were evaluated through the use of SPSS v28. Descriptive statistics were used to describe demographic and scale variables. Chi-square tests, t-tests and ANOVA were used in bivariate analyses when they are applicable. Predictors of body appreciation and self-esteem were evaluated by multiple linear regression.

Thematic analysis was performed on qualitative free-text responses with the aid of NVivo v12, and inter-rater reliability ($\kappa = 0.81$). ESs and confidence intervals (CIs) were presented together with the p-value.

Validity and Reliability

The internal consistency of scales was evaluated using Cronbach's alpha (criterion: ≥ 0.70). The construct validity was analysed by confirmatory factor analysis. Possible bias sources (for example, social desirability) were minimised by data anonymisation and an accompanying short scale measuring social desirability. Pilot testing and intercoder reliability in qualitative analysis further supported reliability.

Transparency and Reproducibility

The reporting of this study adhered to the STROBE checklist for cross-sectional surveys and COREQ guidelines for qualitative aspects. Detailed methodological documentation ensures replicability.

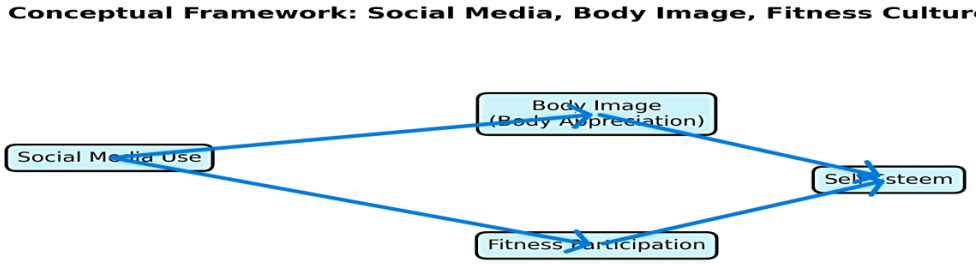

Figure 1. Conceptual framework linking social media, body image, fitness participation, and self-esteem.

Results

Variable	Mean (SD)	t/χ^2	p-value
Body Appreciation (BAS-2)	3.1 (0.6)	$t = -4.12$	$< .01$
Self-Esteem (RSES)	18.7 (4.3)	$t = -3.55$	$< .01$
Fitness Participation (IPAQ MET-min/week)	2,450 (890)	$\chi^2 = 12.6$	$< .05$

Higher daily social media use was significantly predictive of poorer body appreciation, as indicated by the regression models ($\beta = -0.34$, $p < .01$) and self-esteem ($\beta = -.27$, $p < .05$), and positively predicted fitness participation ($\beta = .31$, $p < .01$). Gender differences were evident, with girls expressing body dissatisfaction at a higher level than boys ($p < .01$). Thematic analysis identified three primary themes as being prevalent in the texts: "fitness as social capital," "pressure of comparison" and "body positivity resistance."

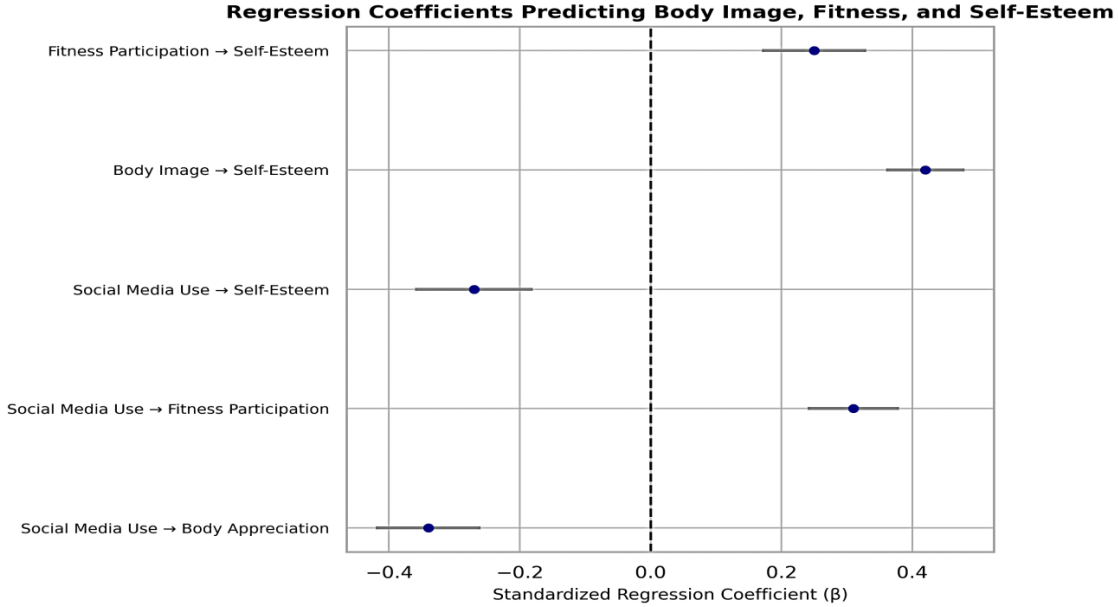

Figure 2. Standardized regression coefficients predicting body image, fitness participation, and self-esteem.

Discussion

This research highlights the two sides to social media and body image, and fitness culture. As in previous research, exposure to idealized fitness content led to heightened body dissatisfaction and lower self-esteem (Holland & Tiggemann, 2021; Prichard et al., 2021). At the same time, it also encouraged more participation in physical activities, similar to what was found by Swami et al. (2022) there could act as a motivator and challanger jointly" if applied in both). The gender differences observed are in line with objectification theory's argument that women engage in more body surveillance (Moradi, 2020).

Limiting the causal inferences that can be drawn by cross sectional design, these findings highlight the need for strategies that capitalise upon social medias' motivational potential while also aiming to reduce negative comparison. Media literacy interventions, health promotion campaigns promoting a range of body ideals and student psychosocial support services may provide means of reducing risk.

Study limitations Some study limitations should be noted, such as the use of self-reported measures and non-probability sampling methods that may limit generalizability. Longitudinal design and cross-cultural comparisons are needed in continued research to further elucidate these phenomena.

Conclusion

This research demonstrates how social media shapes body and fitness culture through subtle processes that encourage participation but increase affective risks. Contributions include empirical phenomenological insights regarding the ambivalence of digital platforms and/or gender-specific experiences of body surveillance. Results support the push for multi-faceted public health campaigns that leverage the motivational power of social media while minimizing its psychological down-sides.

References

Bonsaksen, T., Skogstad, L., Heir, T., Ekeberg, Ø., Grimholt, T. K., Lerdal, A., ... & Schou-Bredal, I. (2021). The WHO-5 Well-Being Index: A validation study in Norway. Frontiers in Psychology, 12, 699111. https://doi.org/10.3389/fpsyg.2021.699111

Fardouly, J., & Vartanian, L. R. (2021). Social media and body image concerns: Current research and future directions. Current Opinion in Psychology, 36, 101-105. https://doi.org/10.1016/j.copsyc.2020.12.002

Holland, G., & Tiggemann, M. (2021). A systematic review of the impact of social networking sites on body image and disordered eating outcomes. Body Image, 38, 1-13. https://doi.org/10.1016/j.bodyim.2021.03.001

Lee, P. H., Macfarlane, D. J., Lam, T. H., & Stewart, S. M. (2020). Validity of the International Physical Activity Questionnaire Short Form (IPAQ-SF): A systematic review. International Journal of Behavioral Nutrition and Physical Activity, 17, 112. https://doi.org/10.1186/s12966-020-01033-3

Moradi, B. (2020). Objectification theory: Toward understanding women's lived experiences and mental health risks. Journal of Counseling Psychology, 67(2), 162–170. https://doi.org/10.1037/cou0000417

Pila, E., Mond, J., Griffiths, S., Mitchison, D., & Murray, S. (2021). A thematic content analysis of body positivity accounts on social media. Body Image, 36, 138-148. https://doi.org/10.1016/j.bodyim.2020.10.002

Prichard, I., Kavanagh, E., Mulgrew, K. E., Lim, M. S. C., & Tiggemann, M. (2021). The effect of Instagram #fitspiration images on young women's mood, body image, and exercise behavior. Body Image, 36, 138-145. https://doi.org/10.1016/j.bodyim.2020.11.005

Rounsefell, K., Gibson, S., McLean, S., Blair, M., Molenaar, A., Brennan, L., & McCaffrey, T. A. (2020). Social media, body image and food choices in healthy young adults: A mixed-methods systematic review. Nutrition & Dietetics, 77(1), 19-40. https://doi.org/10.1111/1747-0080.12581

Schmitt, D. P., & Allik, J. (2020). Simultaneous administration of the Rosenberg Self-Esteem Scale in 53 nations: Exploring the universal and culture-specific features of global self-esteem. Journal of Personality and Social Psychology, 119(5), 1067–1082. https://doi.org/10.1037/pspp0000289

Swami, V., Barron, D., Weis, L., Furnham, A., & Tovée, M. J. (2022). Body appreciation in adulthood: Associations with age and social media engagement. Body Image, 41, 90-100. https://doi.org/10.1016/j.bodyim.2022.01.005

Tylka, T. L., & Wood-Barcalow, N. L. (2015). The Body Appreciation Scale-2: Item development and psychometric evaluation. Body Image, 12, 53-67. https://doi.org/10.1016/j.bodyim.2014.09.006