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APPEARANCE RELATED SOCIAL MEDIA USE AND QUALITY OF LIFE AMONG UNIVERSITY STUDENTS: A GENDERED PERSPECTIVE: A CROSS-SECTIONAL STUDY

Original Research

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ABSTRACT

Background: Social media has become an integral component of daily life, influencing social interaction, self-perception, and emotional well-being. While it serves as a medium for global connection, it simultaneously fosters appearance-based social comparison and psychological distress. In Pakistan's culturally transitional context, where traditional values intersect with modern digital exposure, individuals experience intensified conflicts between social expectations and online ideals. This study sought to explore these dynamics among university students to contribute culturally relevant insights to psychological literature.

Objective: The study aimed to examine the relationship between appearance-related social media use and quality of life, with gender assessed as a moderating variable among university students.

Methods: A quantitative, cross-sectional design was employed with convenience sampling of 209 university students aged 18–28 years ($M = 21.57$, $SD = 2.63$) from Rawalpindi and Islamabad. The sample comprised 115 men (55%) and 94 women (45%). Data were collected using the Appearance-Related Social Media Consciousness Scale (ASMC; $\alpha = .92$) and the WHO Quality of Life–BREF ($\alpha = .88$). Subscale reliabilities for physical, psychological, social relationship, and environmental domains were .70, .75, .71, and .80, respectively. Statistical analyses were conducted using SPSS version 27, including descriptive statistics, Pearson product–moment correlation, and moderation analysis.

Results: Appearance-related social media use demonstrated a significant negative correlation with overall quality of life ($r = –.19$, $p < .01$). Subdomain correlations were negative for physical ($r = –.20$, $p < .01$), psychological ($r = –.17$, $p < .05$), and social relationships ($r = –.19$, $p < .01$) domains, while nonsignificant for environmental ($r = –.12$, $p > .05$). Moderation analysis revealed gender as a significant moderator ($\beta = 0.15$, $p < .05$), with the negative relationship being stronger among women than men.

Conclusion: Findings indicate that higher engagement in appearance-related social media use adversely affects quality of life across both genders, with women being more susceptible. These results emphasize the importance of digital literacy programs, self-care strategies, and gender-sensitive mental health interventions to mitigate the psychological effects of appearance-focused online behavior among young adults.

Keywords: Adolescent Behavior; Cross-Sectional Studies; Gender Identity; Mental Health; Quality of Life; Social Media; Students.

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INTRODUCTION

Over the past two decades, social media has emerged as a powerful determinant of human behavior and psychosocial development, deeply integrated into the routines of modern life. By 2023, approximately five billion individuals worldwide were active users, spending an average of more than two hours daily on various platforms (1). These platforms—Facebook, Instagram, Snapchat, and YouTube—have evolved beyond mere venues for entertainment and communication into arenas for social comparison, personality expression, and cross-cultural interaction. Through the continuous exposure to digitally perfected images, individuals are subtly compelled to engage in appearance-based comparisons, which may lead to psychological distress and diminished quality of life (2). Appearance-related social media consciousness has become an emerging construct in psychological and sociocultural discourse, reflecting the degree to which individuals internalize social attention toward physical appearance (3). Among emerging adults, particularly university students, this phenomenon involves meticulous self-presentation through photo editing, selective posting, and preoccupation with others' evaluations (4). In such environments, one's physical attractiveness becomes closely intertwined with self-worth, reinforcing societal pressures that equate beauty with social acceptance and personal success. Conversations among peers—both male and female—often revolve around strategies to enhance physical appeal, contributing to an "appearance culture" that intensifies self-scrutiny (3). Platforms such as Instagram and TikTok are now more than digital photo galleries; they represent dynamic ecosystems of comparison where users measure their perceived value against idealized portrayals of others. This behavioral shift has profound psychological implications, particularly among adolescents and young adults who are still consolidating their sense of identity (5). Repeated comparison and evaluation of physical appearance online may contribute to reduced self-esteem, body dissatisfaction, and anxiety, all of which negatively affect general well-being and day-to-day functioning (6).

Quality of life, as defined by the World Health Organization, encompasses physical, psychological, social, and environmental domains of well-being and is not merely the absence of disease (7). It involves both subjective satisfaction and objective living conditions that enable individuals to lead meaningful lives (8,9). The physical health domain concerns illness and treatment effects on daily life (10), the psychological domain relates to emotional balance and life satisfaction (11), the social domain pertains to interpersonal relationships and perceived support (12), while the environmental domain reflects the influence of one's surroundings—such as safety, recreation, and accessibility—on overall wellness (13,14). Any disruption within these domains, such as from social comparison-induced stress or appearance-related insecurities, can significantly reduce perceived life quality. In contemporary society, physical attractiveness has evolved into a social asset, symbolizing discipline and conformity to cultural beauty norms. However, this emphasis disproportionately affects women, who are often evaluated based on appearance rather than behavior or achievement (15). The psychological burden of failing to meet these beauty ideals can lead to self-stigmatization, emotional distress, and even social marginalization, ultimately diminishing overall quality of life (16). Despite extensive global discourse on social media use and well-being, there remains limited understanding of how appearance-related social media behavior interacts with gender differences to influence quality of life, particularly in developing contexts. This study, therefore, seeks to explore the association between appearance-related social media use and quality of life among university students, with specific attention to the moderating effect of gender. The objective is to elucidate how social media-driven appearance consciousness impacts the physical, psychological, social, and environmental dimensions of well-being, thereby informing strategies to mitigate its adverse effects and promote healthier digital engagement among young adults.

METHODS

The present research employed a quantitative, cross-sectional design to examine the relationship between appearance-related social media use and quality of life among university students. Data were collected from multiple public and private universities located in Rawalpindi and Islamabad through a convenience sampling technique, ensuring accessibility to participants within the target population. The sample size was determined using G*Power software (17), which yielded a final sample of 209 participants. The sample comprised 115 men and 94 women, aged between 18 and 28 years (M = 21.57, SD = 0.48), representing emerging adults in an academic environment. Participation was voluntary, and informed consent was obtained from all individuals before data collection commenced. Ethical approval for the study was obtained from the Institutional Review Board (IRB) of the respective university prior to initiation of the research. To ensure ethical compliance, participants were clearly informed about the study's educational purpose, their right to

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withdraw at any time, and the confidentiality of their responses. Anonymity was maintained throughout, with no identifying information collected. Inclusion criteria required that participants be active users of social media for at least one hour daily for the preceding six months to ensure familiarity with social media platforms. Exclusion criteria included individuals exhibiting clinical symptoms of social media addiction or those with known psychiatric disorders that might influence self-perception or well-being, to avoid confounding psychological bias. Each participant completed a demographic information sheet that recorded age, gender, educational background, birth order, family structure, height, weight (for BMI calculation), and frequency of social media usage (in hours per day, days per week, and years of use).

The *Appearance-Related Social Media Consciousness Scale* (ASMC), developed by Choukas-Bradley et al., was administered to assess the degree of participants' awareness and concern regarding their physical appearance on social media. The ASMC has demonstrated strong internal consistency, with a Cronbach's alpha coefficient of $\alpha = 0.95$, indicating excellent reliability across both genders. The *World Health Organization Quality of Life Scale–BREF* (WHOQOL-BREF), developed by the WHOQOL Group, was employed to measure participants' quality of life. This validated 26-item instrument assesses four domains: physical health, psychological well-being, social relationships, and environmental conditions. Reported Cronbach's alpha coefficients for these subdomains were 0.82, 0.75, 0.66, and 0.80, respectively, reflecting acceptable reliability for cross-cultural use. Participants completed the questionnaires in a self-administered format, taking approximately 8–10 minutes to finish. Clear verbal and written instructions were provided to minimize response bias and ensure consistent comprehension of the questions. The collected data were analyzed using the *IBM Statistical Package for the Social Sciences* (SPSS) version 27. Descriptive statistics were computed to summarize demographic characteristics, while internal consistency was verified using reliability analysis. Inferential analyses included the Pearson product–moment correlation to examine associations between variables, independent sample t-tests to assess gender-based differences, and moderation analysis to determine the interaction effects of gender on the relationship between appearance-related social media use and quality of life.

RESULTS

The study included 209 university students with a mean age of 21.57 years (SD = 2.63), representing an emerging adult population. Among the participants, men constituted 55% (n = 115), while women made up 45% (n = 94). The distribution of birth order showed that both first-born and middle-born participants were equal in proportion, each accounting for 40.2% (n = 84), whereas 19.6% (n = 41) were last-born. Regarding educational status, 37.8% (n = 79) were undergraduate students, and 62.2% (n = 130) were postgraduate students. Most participants (64.6%; n = 135) belonged to nuclear families, while 35.4% (n = 74) were from joint family systems. Additionally, 66% (n = 138) were hostel residents, and 34% (n = 71) were day scholars. Descriptive analysis revealed that participants reported an average of 4.72 hours (SD = 2.32) of daily social media use, engaging approximately 4.78 days per week (SD = 2.31), with an overall duration of use averaging 5.84 years (SD = 3.17). The reliability analysis demonstrated satisfactory internal consistency across all scales, with Cronbach's alpha values of .92 for appearance-related social media use, .88 for quality of life, .70 for physical health, .75 for psychological health, .71 for social relationships, and .80 for environmental well-being. The mean score for appearance-related social media use was 43.50 (SD = 17.45), while the overall mean quality of life score was 86.82 (SD = 14.34). Subdomain means indicated a physical health score of 23.04 (SD = 4.19), psychological health score of 20.04 (SD = 3.85), social relationship score of 9.94 (SD = 2.42), and environmental well-being score of 26.65 (SD = 5.23).

Pearson's correlation analysis revealed a significant negative association between appearance-related social media use and overall quality of life ($r = –.19$, $p < .01$). Similar negative correlations were observed with the physical ($r = –.20$, $p < .01$), psychological ($r = –.17$, $p < .05$), and social relationship ($r = –.19$, $p < .01$) domains, while the association with the environmental domain was non-significant ($r = –.12$, $p > .05$). Strong positive intercorrelations were found among the quality-of-life subdomains, with coefficients ranging from .45 to .89 ($p < .001$). Moderation analysis demonstrated that appearance-related social media use significantly predicted quality of life ($\beta = –0.32$, SE = 0.24, 95% CI [0.03, 0.07], $p < .01$). Gender also emerged as a significant predictor ($\beta = 0.13$, SE = 0.11, 95% CI [0.05, 0.09], $p < .05$), indicating that men reported higher quality of life compared to women. Furthermore, a significant interaction effect was observed between appearance-related social media use and gender ($\beta = 0.15$, SE = 0.13, 95% CI [–0.07, –0.01], $p < .05$), suggesting that the negative relationship between appearance-related social media use and quality of life was stronger among women than men. The overall model was statistically significant ($R^2 = .319$, $F = 6.18$, $p < .001$).

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Table 1: Demographics Statistics of Demographic Variables (N=209)

Demographics	***M***	***SD***	***f***	***%***
Age	21.57	2.63		
Gender				
Men			115	55
Women			94	45
Birth Order				
First Born			84	40.2
Middle			84	40.2
Last Born			41	19.6
Family Structure				
Nuclear			135	64.6
Joint			74	35.4
Education				
Undergraduate			79	37.8
Postgraduate			130	62.2
Residence Status				
Hostelite			138	66.0
Day Scholar			71	34.0
Social Media Use (Hrs./day)	4.72	2.32		
Social Media Use (Days/week)	4.78	2.31		
Social Media Use (Years)	5.84	3.17		

Note. *f*=Frequency, *%*= Percentage, *M*= Mean, *SD*=Standard Deviation.

Table 2: Descriptive Statistics and Reliability Analysis of Variables

Variables	***k***	***M***	***SD***	***Range***		**α**
				Actual	*Potential*	
Appearance-Related Social Media Use	13	43.50	17.45	13-91	13-91	.92
Quality of Life	26	86.82	14.34	48.-123	26-130	.88
Physical	7	23.04	4.19	13-34	7-35	.70
Psychological	6	20.04	3.85	9-29	6-30	.75
Social Relationship	3	9.94	2.42	3-15	3-15	.71
Environmental	8	26.65	5.23	11-40	8.40	.80

Table 3: Pearson Correlation analysis between Variables (N=209)

Variables	1	2	3	4	5	6
1. Appearance-Related Social Media Use	-	-.19**	-.20**	-.17*	-.19**	-.12
2. Quality of Life		-	.84***	.84**	.71***	.89***
3. Physical			-	.65***	.45***	.64***
4. Psychological				-	.51***	.62***
5. Social-Relationship					-	.58***
6. Environmental						-

Note. **p<.05, **p<.01, ***p<.001*

Table 4: Moderation Analysis (N=209)

Variables	Quality of Life		
	β	*SE*	*95 % CI*
Appearance-Related Social Media Use	-0.32**	0.24	[0.03, 0.07]
Gender	0.13*	0.11	[0.05, 0.09]
Appearance-Related Social Media Use X Gender	0.15*	0.13	[-0.07, -0.01]
R^2	.319		
F	6.18***		

Note. **p<.05, **p<.01, ***p<.001*, Gender, 0 = Women, 1 = Men.

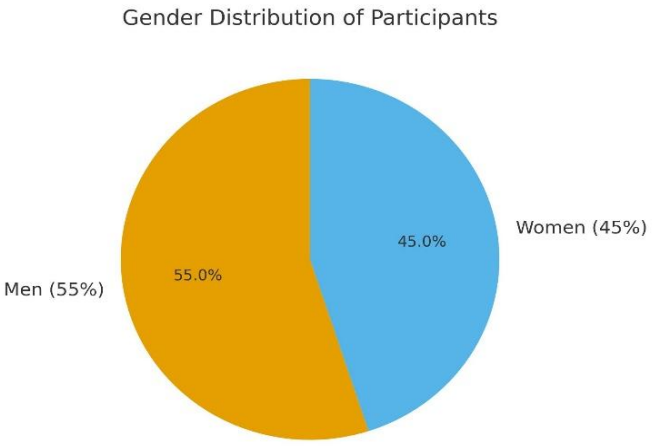
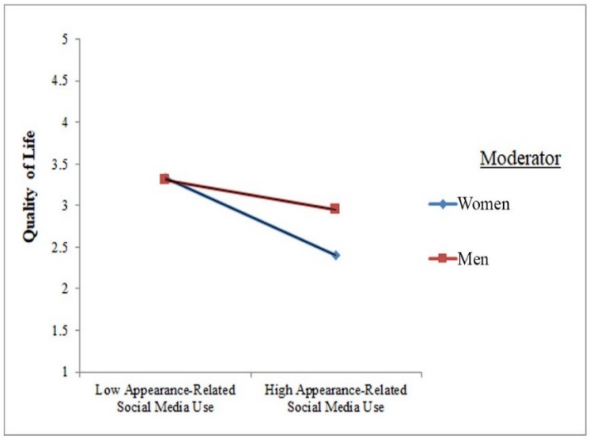


Figure 1 Gender Distribution of Participants



Interaction Plot of Appearance Related Social Media Use and Gender on Quality of Life

Figure 1 Interaction Plot of Appearance Related Social Media Use and Gender on Quality of Life

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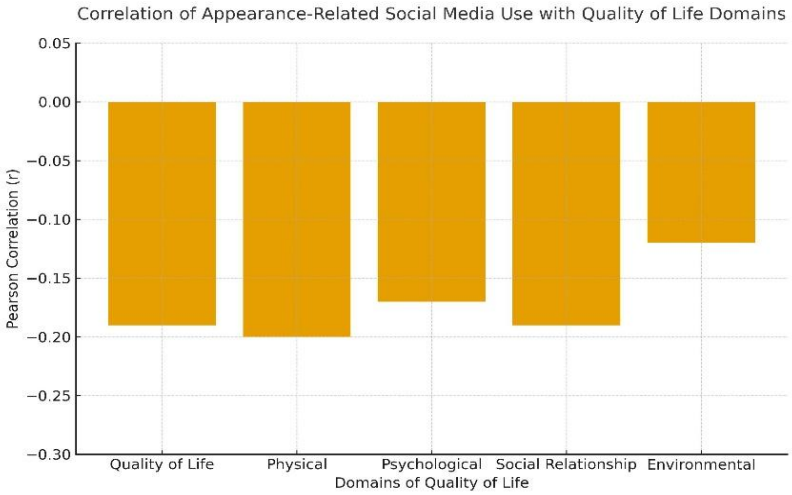

Figure 2 Correlation of Appearance-Related Social Media Use with Quality of Life Domains

DISCUSSION

The present study investigated the relationship between appearance-related social media use and quality of life among university students, with gender examined as a moderating variable. The findings demonstrated a significant negative correlation between appearance-related social media use and overall quality of life, supporting the hypothesis that increased engagement in appearance-focused online behavior is linked to diminished well-being. This association reflected consistent evidence from previous research suggesting that individuals who frequently engage in social media for appearance-oriented purposes tend to experience lower satisfaction with life and reduced psychological well-being (18). The underlying mechanism appears to involve heightened internalization of idealized beauty standards and increased social comparison, both of which are known to erode self-esteem and emotional stability (19). The results further confirmed that gender moderated this relationship, indicating that while the negative association between appearance-related social media use and quality of life was present in both men and women, it was considerably stronger among women. This finding aligns with earlier research highlighting that, women are often more vulnerable to appearance-related social pressures and social media–driven beauty ideals, leading to greater psychological distress and lower perceived life satisfaction (20,21). The emphasis on physical attractiveness as a measure of social worth contributes to a culture of self-objectification that disproportionately affects women, thereby exacerbating gender disparities in mental and emotional well-being. Conversely, men may experience relatively lower social scrutiny regarding appearance, which could partly explain their higher reported quality of life scores in physical and psychological domains.

Interestingly, the study also revealed that women scored higher in the social relationship domain of quality of life, suggesting that interpersonal support and social connectedness may serve as protective factors for women's well-being. This observation aligns with previous evidence that women's quality of life is more strongly influenced by social and emotional support networks, whereas men's quality of life tends to be more dependent on physical and environmental satisfaction (22,23). These findings collectively underscore the multidimensional impact of social media on psychological functioning and the importance of considering gendered experiences in digital behavior research. From a public health and psychosocial perspective, the findings highlight the growing need to address appearance-based social media use as a contemporary determinant of mental health and overall quality of life. Awareness programs and preventive interventions should focus on promoting digital literacy, resilience against unrealistic beauty standards, and balanced engagement with online content. Educational institutions and mental health organizations can play a crucial role in integrating self-care strategies, media literacy workshops, and counseling services to mitigate the harmful effects of appearance-driven comparison.

Despite its meaningful contributions, the study had certain limitations. The cross-sectional design restricted the ability to infer causal relationships between social media use and quality of life. The reliance on self-reported data may have introduced response bias, as participants could have underreported or overestimated their social media engagement or well-being. Moreover, the study did not differentiate between various social media platforms, which may exert distinct psychological effects—for instance, visual-centric applications such as Instagram and Snapchat might have stronger appearance-related influences than text-based platforms. Additionally, the exclusion of clinical measures of mental health limited the depth of psychological interpretation. Nevertheless, the study's methodological strengths included the use of psychometrically robust instruments, an adequately powered sample size, and the inclusion of both male and female participants, which allowed gender-based moderation analysis. Future research should adopt longitudinal or experimental designs to better establish causality and explore potential mediating variables such as self-esteem, body image satisfaction, and social comparison orientation. Examining platform-specific behaviors and cultural influences would further enrich understanding of how digital environments shape modern perceptions of self and well-being (24). Overall, the findings contribute to the growing body of evidence linking social media engagement to psychosocial outcomes, emphasizing the need for balanced and mindful digital consumption. Encouraging awareness of healthy online habits, fostering realistic self-perception, and promoting mental health support systems remain essential strategies to enhance quality of life in an increasingly appearance-driven digital age.

CONCLUSION

The study concluded that greater engagement in appearance-related social media use was associated with poorer quality of life among university students, with gender playing a moderating role in this relationship. Women demonstrated a stronger negative link between appearance-based online behaviors and well-being, highlighting their heightened vulnerability to social comparison and appearance pressures. Although gender differences were not broadly significant, women reported relatively better outcomes in the social relationship aspect of life quality. These findings underscore the need for universities and health professionals to integrate preventive, gender-sensitive strategies that foster balanced and mindful social media use. Promoting digital literacy, self-care practices, and psychoeducational interventions within academic and rehabilitation contexts can help mitigate the psychological and social consequences of appearance-focused online engagement, ultimately enhancing overall well-being and resilience among young adults.

AUTHOR CONTRIBUTION

Author	Contribution
Ayesha Waqar*	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Muhammad Faran	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Maria Waqar	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published

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