Original Research

Relationship of Social Media and Body Image Dissatisfaction among University Students

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Abstract

Social media has become an integral part of young adults' lives today. It has moved well beyond simple entertainment and now can profoundly affect many areas of functioning. Social media messages promote the ideal, attractive body images that affect the university student's attitudes toward the body. The current study examined the relationship between social media and body image dissatisfaction and examined how social media impacts body image among university students. Sample size estimation was calculated from G*power and 462 students minimum required in the current study. This cross-sectional study recruited (N=500) respondents from different universities such as the University of Sahiwal, Government college university of Faisalabad Sahiwal campus, Virtual University of Sahiwal, University of Okara, Virtual University of Okara, University of Management and Technology, and the University of Lahore by employing simple random sampling. There were two questionnaires applied the social media questionnaire and Socio-Cultural Attitudes towards Appearance Scale-3 (SATAQ-3) for data collection. Data were analyzed with SPSS version 25.0 and results showed that there was a significant negative relationship of social media with body image dissatisfaction. Moreover, male students were higher users of social media as compared to female students as well as higher body image dissatisfaction as compared to girls. Implications and limitations of the study are mentioned as well as future directions also suggested. **Keywords:** body image dissatisfaction, social media, university students, cross-sectional research.

Introduction and Literature Review

Social media (SM) users are being overwhelmed by thousands of body images daily (Akram & Kumar, 2017; Valkenburg et al., 2022). SM provides online platforms, alike Facebook, YouTube, Instagram, etc. that enables users to create and share image and written material with others, and these SM platforms are full of body image material that reaches millions of individuals, including university students. SM is rapidly becoming a serious part of daily life for various. According to reports, there are 3.5 billion active SM users worldwide as

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of January 2019, and this figure continues to rise year after year (Saiphoo et al., 2020; Cataldo et al., 2021). Many of these images promote skinny and desirable body types and encourage the thin and attractive body type standard. SM images emphasize the link between physical attractiveness and a lean body, as well as the numerous social benefits connected with attractiveness (Sarir et al., 2018). Body image dissatisfaction (BID) can surely be influenced by social interactions with peers and others, and the role of SM in contributing to university students with their physiques cannot be ignored (Opara & Santos, 2019).

The research has shown a direct relationship between SM usage and BID among university students. Pressure to be skinny and achieve the ideal physique that society considers acceptable can start early in life, resulting in a distorted self-image and low body satisfaction (Mingoia et al., 2017; Vuong et al., 2021).

The younger adults are exposed to thin body images, the more negative body image individuals have, the more unsatisfied they will be with their bodies. The study also reveals that the longer university students are exposed to media and internalize slim body type standards, the more they wish to be thin and attractive and grow dissatisfied with their actual body type (Cohen et al., 2019).

Personal images and physical appearance assume a significant part of these SM activities (Khalid, 2017). Study shows that people who are more dissatisfied with their appearance simultaneously use SM more often. SM use was indirectly connected with BID and influenced life through peer impact (Hogue & Mills, 2019). University students who were exposed to appearance-focused television and magazines more frequently reported having more frequent discussions about appearance with friends, which was linked to higher BID (Hogue, 2017; Nagl et al., 2021).

Rationale of the Study

The rationale of the study is to analyze the relationship between SM and BID among university students. The slim body type broadcast on SM has historically caused BID in university students. Everyone is like slim body and media portray appreciation to slim bodies over the world specifically university students/youth optimally targeted. Therefore, this study examined how social media influences the body image dissatisfaction of university students and what the relationship is between social media use and body image dissatisfaction

Objectives of the Study

- 1. To find out the relationship among the use of SM and BID among university students.
- 2. To examine gender vise comparison in perspective of the use of SM and BID among university students

Hypotheses of the Study

It was hypothesized that...

- 1. **H1:** There was a significantly positive relationship between SM use and BID among university students.
- 2. H2a: Female students more frequently used SM as compared to male students.
- 3. **H2b:** Female students were more dissatisfied with their body image as compared to male students.

Method

Participant Characteristics

The study's total sample size was 500 university students including both female and male students, in which 250 female and 250 male students (belong to different private and public universities, University of Sahiwal, Government college university of Faisalabad Sahiwal campus, Virtual University of Sahiwal, University of Okara, Virtual University of Okara, University of Management and Technology and the University of Lahore and the cities are Sahiwal, Okara, and Lahore, all students belong to undergraduate level with the age range from 18 to 24 years).

Inclusion-Exclusion Criteria. All the respondents were university males and female students. All selected participants frequently used SM and had aged from 18 to 24 years. The respondents who did not fall in this criteria and setting were excluded from less than 18 years and more than 24 years old and studying at the college level as well did not participate in the study willingly. Private college students or weekend program students are also excluded.

Research Design and Sampling Technique

The quantitative cross-sectional design was used for the current study. It enables the researcher to test the relationship between the research variables. A random sampling technique was used for the current study.

Sample Size Estimation

G*power 3.1.9.7 (Faul et al., 2013) was used to do a prior power analysis. To make sure the study has enough power for analysis or a large enough sample size. For correlation, a total sample size of 462 was determined, with an effect size of 0.17, power of 0.95, and alpha error of 0.04. The current study enlisted 500 participants (N=500), with an additional 38 participants included accounting for attrition and bias.

Procedure

The data were collected from university students. Taken the institutional approval for the research. The sampling technique used for collecting data was simple random sampling. All the instructions were given clearly and confusion was clarified. Informed consent was taken from the selected sample and requested the respondents to provide correct information to the best of their capacity with assurance about the confidentiality of the information given by participants. After collecting the required data, it was analyzed through SPSS version 25.0 (Corportation, 2017). Quantitative research methods were used because required measuring data and generalizing results from a sample to the population of interest and allowed to determine the relationship between SM and BID within the sample of university students both males and females. The current research used the descriptive method by applying two scientific scales to the desired population. Many participants were used to representing the population of interest.

Instruments

Social Media Questionnaire. SM use was measured by social media questionnaire created by Ellison et al., (2007). This Facebook Intensity Scale (Cronbach's alpha = 0.83) was used to obtain a better measure of Facebook usage than frequency or duration. To measure the multiple factors of SM use, participants completed the 11-item research scale in this study, it was modified to include other forms of SM. Response categories ranged from 1 = strongly

agree to 5 = strongly disagree. The minimum score of the scale is 11 and the maximum score is 55. An example item is "Social media is a part of my everyday activity" (Ellison et al., 2007).

Socio-Cultural Attitudes towards Appearance Scale-3 (SATAQ-3). This scale measures the media-related socio-cultural attitudes towards appearance. To measure the multiple factors of societal influence, participants completed the 18-item research scale. Thompson et al, (2004) demonstrate brilliant convergent validity with measures of body image and an eating disorder. Response categories on the 5-point Likert scale ranged from 1 to 5, with 1 indicating "strongly disagree" and 5 indicating "strongly agree". The minimum and maximum scores are 18 and 90, respectively. An example item is social media is an important source of information about fashion and "being attractive". It provides quicker, more reliable, and valid results. An alpha range of .89 to .94 was determined to be acceptable and produced acceptable findings (Thompson et al., 2004).

Statistical Analysis

SPSS (Version 25.0) was used to analyze the data (Corportation, 2017). The descriptive statistics including mean and standard deviation applied to examine the mean scores of the variables. The correlation method was used to investigate the relationship between variables. T-test was applied to determine gender-wise comparison in perspective of SM uses and BID.

Ethical Consideration

Taken the institutional approval for the research, and scales approval from the original author to use in the current study. Informed consent was taken that the individual participating in the evaluation was completely informed. The participants in this study did so voluntarily, and they were informed that the questionnaire answers would be reviewed only by the researchers. In other words, they were informed that the findings would be reported accurately and that they would not be utilized for any other reason. Participants should be made aware of the purpose of the research. The main goal of informed consent is for the applicant to be able to decide whether or not to participate in the evaluation. Research participants should not be exposed to harm in any manner whatsoever. Confidentiality implies that any identifying information isn't made accessible.

Results

Table 1

	Ν	Min.	Max.	Mean	Std.
					Deviation
SM Scale Total	500	2.45	4.64	3.6857	0.47421
Total of Sociocultural Attitudes towards	500	1.00	4.67	3.3633	0.75644
Appearance Questionnaire					
Valid N	500				

Descriptive statistics of variables

Table 1 represents descriptive statistics of variables. The result shows that the minimum score of the SM scale was 2.45 and the maximum score was 4.64 while the mean value was 3.6857 with std. deviation 0.47421 of the overall SM scale. Further, the minimum score of the overall Sociocultural Attitudes towards Appearance Questionnaire was 1.00 and the maximum score was 4.67 while the mean value was 3.3633 with std. deviation 0.75644.

Table 2

Correlation among study variables

Variables	SM	SATAQ
Social media	-	.666**
Sociocultural Attitudes Towards Appearance Questionnaire		-

Note. ***Correlation is significant at the 0.01 level (2-tailed), (–) indicates the negative relationship.*

Table 2 shows the relationship between SM and BID among university students. The results show that SM use and BID have a significant positive relationship .666**.

Table 3

Independent sample t-test utilized for gender-wise comparison of social media and body image

Variable	Gender		95%CI		
	Male	Female	t	LL	UL
	M (SD)	M(SD)			
Social Media use 3.782 (.427)	3.588	4.661**	.112	.275	
	(.427)	(.499)			
Body image dissatisfaction	3.510 (.628)	3.216 (.841)	4.415**	.162	.423

Note. CI = *Confidence Interval, LL*= *Lower Limit, UL* = *Upper Limit*

Table 3 shows a comparison of male and female users in terms of SM use and BID. The result shows that SM use was high (M= 3.7825) in male university students as compared to female university students (M= 3.5888) as well as t-score (t= 4.661**) shows a significant difference between male and female university student's users. Meanwhile, BID was high (M= 3.5100) in male university students as compared to female university students (M= 3.2167) as well as t-score was (t= 4.415**) shows a highly significant difference between male and female university students.

Discussion

The current study's first (H1) hypothesis was a significant relationship between SM and BID according to findings .666** proved that the hypothesis was accepted. There was a relevant study found that SM and BID positively and significantly correlated with each other .026** (De Vries et al., 2019). Another similar study found that SM usage and BID positively correlated with each other .22** (Kim & Chock, 2015). Additionally, another depicted study found that SM usage and BID positively correlated with each other by 0.13** (Marengo et al., 2018). Such as SM usage and BID positively correlated with each other .582** (Puglia, 2017).

Similarly, a relevant study depicted or indicated that SM usage with the passage of time and BID positively correlated with each other .23* (Salomon & Brown, 2019). Therefore SM usage and BID are positively related to each other .48** (Sumter et al., 2018). There was a contrast study found that SM and BID non-significantly correlated with each other by 0.173 (Meier & Gray, 2014). There was another contrast study found that SM and BID negatively correlated with each other by -0.02 (Koktowski, 2020).

The current study's hypothesis (H2a) claimed there were female students more frequently used SM as compared to male students according to findings of female students (M=3.58) as compared to male students (M=3.78) proving that the hypothesis was rejected. There was a contrast study found that SM highly use female students (M= 60.98) as compared to the male students (M=54.30). There was a significant difference between female and male students in terms of SM use (Tufail et al., 2015).

Another contrast study indicated that SM highly uses female students (M=3.23) as compared to male students (M=2.21). There was a non-significant difference between female and male students in terms of SM use (Nesi & Prinstein, 2015). Another study proved that SM highly uses female students (M=2.01) as compared to male students (M=1.55). There was a negatively significant difference between female and male students in terms of SM use (Alloway et al., 2014).

There was a relevant study that indicated SM highly uses female students (M=3.27) as compared to male students (M=3.63). There was a significant difference between female and male students in terms of SM use (Okazaki & Hirose, 2009). The current study's hypothesis (H2b) proposed there was that BID higher in female students (M=3.2167) as compared to the male students (M=3.5100). There was a non-significant difference between female and male university students in terms of the BID.

The contrast study proved that BID was higher in female students (M=17.3) as compared to male students (M=22.2). There was a significant difference between female and male university students (Morrison et al., 2004). The contrast study indicated that BID was higher in female students (M=96.38) as compared to male students (M=87.16). There was a significant difference between female and male university students (Masood et al., 2018).

Conclusion

Conclusively, the findings of this study have supported the claim that SM images of thin and muscular models influence are the precursors of university student's body image, whereas lowered body image act as a reason for university students to treat in more body shaping behaviors to have an ideal thin and muscular body image. In Pakistan, people are especially concerned about their body image because they are frequently evaluated by other people. The current study result found that there was a significantly positive relationship of SM usage and BID. Male students were higher use of SM and were more dissatisfied with their body images.

Limitations of the Study

The present study has some limitations. This research was conducted in Pakistan and was limited to Sahiwal, Okara, and Lahore Cities, while other cities of Pakistan were excluded from data collection. The study recruited university students, but college students were excluded. The sample of the study was limited, should be taken a surplus sample from the rest of the cities or provinces to make it more generalizable. Finally, because this was a quantitative study, participants were unable to elaborate on their emotions or offer further remarks. A spot where participants could give further thoughts on the study would have been great.

Implications of the Study

This study provides significant insights to concerned institutions based on the findings. According to the findings, university students who use SM must establish and maintain interpersonal connections, construct and sustain social identities, and seek entertainment value. Because the findings demonstrated that SM has a detrimental impact on body image, SM can have some negative consequences.

Recommendations for Future Research

While this study provided a great start to understanding the relationship of SM and BID of university students, more research is needed on how people use SM to make social comparisons and judgments about their bodies. Future research should focus on peer comparisons and how SM may feed similarities through like and share features, as well as continuing to explore how young adults are influenced by comparisons to fashion models and celebrities. Future research should look into efficient SM marketing techniques that promote actual beauty campaigns and a more realistic representation of females' shapes and sizes. As a result, future research should increase the sample size and possibly include a broader age range of participants, allowing them to compare people at different phases of maturity

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References

- Akram, W., & Kumar, R. (2017). A study on positive and negative effects of social media on society. *International Journal of Computer Sciences and Engineering*, *5*(10), 351–354.
- Alloway, T., Runac, R., Qureshi, M., & Kemp, G. (2014). Is Facebook Linked to Selfishness? Investigating the Relationships among Social Media Use, Empathy, and Narcissism. *Social Networking*, 03(03), 150–158. https://doi.org/10.4236/sn.2014.33020
- Cataldo, I., De Luca, I., Giorgetti, V., Cicconcelli, D., Bersani, F. S., Imperatori, C., ... & Corazza, O. (2021). Fitspiration on social media: Body-image and other psychopathological risks among young adults. A narrative review. *Emerging Trends in* Drugs, Addictions, and Health, 1, 100010.
- Cohen, R., Fardouly, J., Newton-John, T., & Slater, A. (2019). # BoPo on Instagram: An experimental investigation of the effects of viewing body positive content on young women's mood and body image. *New Media & Society*, 21(7), 1546–1564. https://doi.org/10.1177/1461444819826530
- Corportation, I. B. M. (2017). *IBM SPSS Statistics for Windows (Version 25.0 Armonk). IBM Corp: Armonk, NY, USA.*
- De Vries, D. A., & Vossen, H. G. (2019). Social Media and Body Dissatisfaction: Investigating the Attenuating Role of Positive Parent–Adolescent Relationships. *Journal of Youth and Adolescence*, 48(3), 527–536. https://doi.org/10.1007/s10964-018-0956-9
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college student's use of online social network sites. *Journal of Computer Mediated Communication*, 12(4), 1143–1168. https://doi.org/doi:10.1111/j.1083-6101.2007.00367.x

- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2013). Statistical Power Analyses Using G*Power 3.1: Tests for Correlation and Regression Analyses. *Behavior Research Methods*, 41, 1149–1160. https://doi.org/10.3758/BRM.41.4.1149
- Hogue, J. V. (2017). The Effects of Active Social Media Engagement on Eating Disorder Risk Factors in Young Women. *Body Image*. http://hdl.handle.net/10315/34335
- Hogue, J. V., & Mills, J. S. (2019). The effects of active social media engagement with peers on body image in young women. *Body Image*, 28, 1–5. https://doi.org/10.1016/j.bodyim.2018.11.002
- Khalid, H. (2017). The effects of social networks on Pakistani students. *Journal of Information Technology & Software Engineering*, 7(3), 1–6. https://doi.org/10.4172/2165-7866.1000203
- Kim, J. W., & Chock, T. M. (2015). Body image: Associations between social grooming on Facebook and body image concerns. *Computers in Human Behavior*, 48, 331–339. https://doi.org/10.1016/j.chb.2015.01.009
- Koktowski, K. A. (2020). Social Network Site Use and Body Image among Adolescents. *Alfred University*.
- Marengo, D., Longobardi, C., Fabris, M. A., & Settanni, M. (2018). Highly-visual social media and internalizing symptoms in adolescence: The mediating role of body image concerns. *Computers in Human Behavior*, 82, 63–69. https://doi.org/10.1016/j.chb.2018.01.003
- Masood, A., Sulman, M., Rashid, S., Ashraf, F., Qaisar, S., & Ashraf, F. (2018). The objectified body consciousness, and perceived body image as predictors of disordered eating patterns in medical students. *Pakistan Journal of Clinical Psychology*, 17(1), 55–68.
- Meier, E. P., & Gray, J. (2014). Facebook photo activity is associated with body image disturbance in adolescent girls. *Cyberpsychology, Behavior, and Social Networking*, 17(4), 199–206. https://doi.org/10.1089/cyber.2013.0305
- Mingoia, J., Hutchinson, A. D., Wilson, C., & Gleaves, D. H. (2017). The relationship between social networking site use and the internalizations of a thin ideal in females: A metaanalytic review. *Frontiers in Psychology*, 7(8), 1351. https://doi.org/10.3389/fpsyg.2017.01351
- Morrison, T. G., Kalin, R., & Morrison, M. A. (2004). Body-image evaluation and body-image investment among adolescents: A test of sociocultural and social comparison theories. *Adolescence*, *39*(155), 571–592.
- Nagl, M., Jepsen, L., Linde, K., & Kersting, A. (2021). Social media use and postpartum body image dissatisfaction: The role of appearance-related social comparisons and thin-ideal internalization. *Midwifery*, 100, 103038.
- Nesi, J., & Prinstein, M. J. (2015). Using Social Media for Social Comparison and Feedback-Seeking: Gender and Popularity Moderate Associations with Depressive Symptoms. *Journal of Abnormal Child Psychology*, 43(8), 1427–1438. https://doi.org/10.1007/s10802-015-0020-0

- Okazaki, S., & Hirose, M. (2009). Does gender affect media choice in travel information search? On the use of mobile Internet. *Tourism Management*, *30*(6), 794–804. https://doi.org/10.1016/j.tourman.2008.12.012
- Opara, I., & Santos, N. (2019). A Conceptual Framework Exploring Social Media, Eating Disorders, and Body Dissatisfaction Among Latina Adolescents. *Hispanic Journal of Behavioral Sciences*, *41*(3), 363–377. https://doi.org/10.1177/0739986319860844
- Puglia, D. R. (2017). Social media use and its impact on body image: the effects of body comparison tendency, motivation for social media use, and social media platform on body esteem in young women. *Doctoral Dissertation, The University of North Carolina at Chapel Hill*, 4, 9–15.
- Saiphoo, A. N., Halevi, L. D., & Vahedi, Z. (2020). Social networking site use and self-esteem: A meta-analytic review. *Personality and Individual Differences*, 153, 109639. https://doi.org/109639
- Salomon, I., & Brown, C. S. (2019). The Selfie Generation: Examining the Relationship Between Social Media Use and Early Adolescent Body Image. *Journal of Early Adolescence*, 39(4), 539–560. https://doi.org/10.1177/0272431618770809
- Sarir, S., Muhammad, N., Ala, I., Jadoo, M. A., Iqbal, S., Abbas, S., ... &, & Kashif, N. (2018). Role of physical attractiveness in mate selection by educated women in Khyber Pakhtunkhwa. Arts and Social Sciences Journal, 9(2), 335. https://doi.org/10.4172/2151-6200.1000335
- Sumter, S. R., Cingel, D. P., & Antonis, D. (2018). "To be able to change, you have to take risks #fitspo": Exploring correlates of fitspirational social media use among young women. *Telematics and Informatics*, 35(5), 1166–1175. https://doi.org/10.1016/j.tele.2018.01.013
- Thompson, J. K., van den Berg, P., Roehrig, M., Guarda, A. S., & Heinberg, L. J. (2004). The sociocultural attitudes towards appearance scale-3 (SATAQ-3): Development and validation. *International Journal of Eating Disorders*, 35(3), 293–304.
- Tufail, M. W., Kazmi, A., Saleem, M., & Khan, R. (2015). Facebook addiction: its relation with academic performance of University students. Social Sciences Postgraduate International Seminar (SSPIS).
- Valkenburg, P. M., Meier, A., & Abeele, M. V. (2022). Advancing Our Understanding of the Associations Between Social Media Use and Well-Being.
- Vuong, A. T., Jarman, H. K., Doley, J. R., & McLean, S. A. (2021). Social media use and body dissatisfaction in adolescents: The moderating role of thin-and muscular-ideal internalization. International *Journal of Environmental Research and Public Health*, 18(24), 13222