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Abstract

This study was designed to investigate the relationship between social media usage and body dysmorphic disorder. Body dysmorphic disorder causes distress due to one's negative appraisal of their body image. The development of has been linked to the passive use of social media and photo-editing apps. The dramatic increase in the use of photo-editing apps and their well-established effects on mental health is a public health concern. Correlational research design was used to conduct this quantitative research. Survey was administered with closed ended questionnaires as method of data collection. Convenient sampling technique was employed to select the sample of study 100 (male=50, female=50) young adults. Findings of the study reveal that using of social media platforms are the positive predictors of body dysmorphic disorder among young adults. Findings uncover that female young adults reported greater level of using social media platforms as compared to male. Moreover, female young adults have the problems related to BDD.

Keywords: Body dysmorphic disorder, social media platforms

1. Introduction

Body Dysmorphic Disorder (BDD) has received considerable attention in the last two decades, and it is widely regarded as one of the most debilitating mental health conditions (Jassi, & Krebs, 2021). BDD is a chronic psychiatric disorder recognized by excessive preoccupation with minimal physical deformities (Rajabi et al., 2022). Such preoccupations can cause excessive thinking and compulsive behaviors, which may impede everyday life (França et al., 2017). BDD is considered an obsessive-compulsive disorder (OCD) by the American Psychiatric Association (APA) and the Diagnostic and Statistical Manual of Mental Disorders- Fifth Edition (González Mejías, 2018; Khan, 2020). The second diagnostic criterion for BDD is significant stress or emotional suffering, including depression, sadness, worry, anxiety, and other negative thoughts or feelings. Finally, for a diagnosis to be considered BDD, another mental illness should not explain the patient's preoccupation, such as anorexia nervosa and dissatisfaction with body shape (Alomari & Makhdoom, 2019; Russo, 2022). Although diagnostic criteria exist, BDD is frequently misdiagnosed and underreported (Alomari & Makhdoom, 2019; Rahat & Hayat, 2020).

A recent survey shows that only 15% of people with BDD are actually diagnosed. Even when people with BDD present themselves for mental health support, BDD symptoms are frequently missed or misdiagnosed with other illnesses, such as depression or social anxiety. Another reason why some BDD may have gone unnoticed is that people with BDD frequently mask their body image concerns out of shame or embarrassment or are dismissed (Jassi & Krebs, 2021). In recent estimates in Saudi Arabia, BDD is estimated to occur in 1.9 % of adults (Alomari & Makhdoom, 2019). BDD is expected to affect up to 1% of the U.S. population (Higgins & Wysong, 2018). A systematic review of BDD prevalence results the general population (0.5–3.2%). Also, this number is expected to be underestimated due to the reality that people with BDD feel stigmatized and do not seek help (Minty & Minty, 2021). Further, population-based studies show alarmingly high rates of suicidality in youth with BDD, which emphasizes the clinical importance of BDD (Alomari & Makhdoom, 2019).

Patients with BDD frequently feel misunderstood and avoid disclosing their symptoms for fear of being labeled as narcissistic or self-centered (Alomari & Makhdoom, 2019). Avoidance attitudes such as not participating in social activities and avoiding mirrors may also occur (Jerome, 2019; Alomari & Makhdoom, 2019; Nkegbe & Abor, 2023). People with BDD have symptoms similar to those of OCD, except for a lack of self-recognition of the mental illness and a poorer perspective (Alomari & Makhdoom, 2019). While most people experience some degree of dissatisfaction with their appearance at times, people with BDD experience persistent and intrusive thoughts about illusory flaws or defects in their appearance, especially regarding the nose, ears, mouth, and breast (Alomari & Makhdoom, 2019). Patients also obsess over their looks and body image, repeatedly checking the mirror, grooming, or seeking validation, sometimes for many hours per day. Individuals suffering from BDD frequently focus attention on a body part to the point where it interferes with their social, emotional, educational, and occupational wellbeing (Rajabi et al., 2022).

BDD sufferers believe they have a genuine physical flaw and, as a result, seek cosmetic treatments to correct their perceived flaw rather than seeking mental health services to address their beliefs. They frequently visit dermatologists, beauticians, Botox clinicians, and cosmetic surgeons. Research and clinical experience show that people with BDD often feel deeply dissatisfied with the end results of such procedures and want additional physical cosmetic intervention, or their obsessiveness shifts to another aspect of their appearance (Jassi & Krebs, 2021). BDD is believed to have its roots in psychological and physiological causes. BDD is thought to be caused by dysfunctional origins, such as abuse and, negative childhood experiences, and taunting, resulting in low self-esteem and insecurities (Higgins & Wysong, 2018). People with BDD believe people taunt them or negatively comment about their appearance. They also possess tendencies toward perfectionism and constantly compare their appearance to others (França et al., 2017). Patients who had a distorted self-perception of body shape or a distorted comparative perception of body image were 3.67 or 5.93 times more likely to have severe BDD symptoms than those who had a more accurate perception. BDD is thought to be caused by dysfunctional origins, such as abuse and negative childhood experiences, and taunting, resulting in low self-esteem and insecurities (Higgins & Wysong, 2018). Sixty-nine percent of BDD patients say they have been taunted or bullied at some point (Alsaidan et al., 2020). Now, as the social media trend grows, there is an extra, more relevant forum for bullying (Higgins & Wysong, 2018).

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2. Heavy consumption of photo editing apps is a risk factor for BDD

Research conducted in Australia and New Zealand found that increased use of social media platforms, particularly Instagram and Snapchat, was associated with increased body image concerns. One hundred forty-four females (14–18 years old) were randomly exposed to either original or altered (retouched and reshaped) Instagram selfies in a between-subject experiment. The findings revealed that more exposure to modified Instagram photos results in a negative body image (Khanna, & Sharma, 2017; Shahzadi & Ahmad, 2018). Also, exposure to the modified photographs had a negative impact on girls with stronger social comparison tendencies. Girls exposed to modified Instagram photographs have lower body satisfaction than those exposed to real photos (MurrayStuart & McLeanSiân, 2018; Khan & Ali, 2018).

A survey of social media users in Saudi Arabia reported BDD in 4% of users, with a higher prevalence in young users. Users spending longer time on Snapchat and Instagram were significantly associated with a high probability of having BDD (Alsaidan et al., 2020). Moreover, an interview of 18 active female users of Snapchat and Instagram at California State University has found participants believed social media and society have generated unrealistic beauty standards. These overwhelming standards caused them to feel insecure about their physical appearance. The dramatic increase in social media consumption in the past decades comes in parallel with a host of mental health issues. A large body of research has examined the negative impact of extensive social media use on wellbeing. Some studies have linked body dysmorphic to the negative use of these social media. Social media seems to have the effect of normalizing standard beauty criteria, which affects one's thoughts about their own physical appearance and probably increases their acceptance of cosmetic surgery. In Saudi Arabia, the prevalence of BDD has only been studied in students, dermatology patients, and people undergoing facial plastic surgery (AlShahwan, 2020).

2.1. Research Gap

Despite international studies linking social media with the development of body image issues and BDD, limited research has been conducted on this issue in Pakistan. Understanding how these issues manifest within a Pakistani cultural context is crucial for the development of effective interventions and support systems.

2.2. Statement of the Problem

The rapid growth and widespread use of social media platforms among adolescents in Pakistan have raised concerns regarding their mental health, particularly in relation to Body Dysmorphic Disorder (BDD). Body Dysmorphic Disorder is a psychological condition where individuals become excessively preoccupied with perceived flaws or defects in their appearance, which are often not noticeable to others. In the age of digital connectivity, where selfies, curated images, and beauty standards dominate social media, adolescents are increasingly exposed to unrealistic portrayals of beauty and body image. The problem lies in the fact that this constant exposure to idealized images can create a distorted perception of self-image, leading to dissatisfaction with one's own physical appearance, lower self-esteem, and in some cases, the development of BDD. Adolescents, being in a critical stage of self-identity formation, are particularly vulnerable to the pressures of conforming to these unrealistic ideals. In Pakistan, where traditional cultural beauty standards are still strongly influential, the fusion of global social media trends with local expectations can exacerbate the challenges adolescents face in accepting their bodies. This research seeks to investigate the impact of social media usage on the prevalence of Body Dysmorphic Disorder among adolescents in Pakistan. Specifically, it aims to explore the relationship between the time spent on social media, the type of content consumed, and the likelihood of developing symptoms of BDD. By understanding these dynamics, this study will provide insights into the potential risks posed by social media exposure and offer recommendations for mental health interventions and strategies to mitigate the negative effects on adolescent well-being in the Pakistani context.

2.3. Rationale of the Study

The rationale behind this study is to explore the relationship between social media usage and the prevalence of Body Dysmorphic Disorder (BDD) among adolescents in Pakistan. With the increasing penetration of social media platforms like Facebook, Instagram, TikTok, and Twitter among young people, there is growing concern about the potential negative effects of these platforms on adolescents' body image perceptions. Social media, with its constant flow of idealized and filtered images, can foster unrealistic beauty standards, leading to the development of negative body image and, in some cases, BDD.

2.4. Objectives of the Study

- To measure the relationship between social media usage and body dysmorphic disorder
- To compare the mean score difference in term of social media usage and body dysmorphic disorder between male and female adults

2.5. Significance of the Study

The significance of studying the impact of social media on Body Dysmorphic Disorder (BDD) among adolescents in Pakistan is multifaceted, as it addresses pressing issues related to mental health, societal norms, and the influence of modern digital platforms.

- **Rising Prevalence of Body Image Issues:** In today's world, social media platforms like Instagram, TikTok, and Facebook often promote unrealistic beauty standards, which can significantly affect the way adolescents perceive their bodies. The study helps to understand how these digital platforms contribute to body dissatisfaction and the rise of Body Dysmorphic Disorder (BDD), which is a condition where an individual obsessively focuses on perceived flaws in their physical appearance. For Pakistani adolescents, who are increasingly engaged with social media, it is important to explore whether these platforms are fueling mental health issues, especially when it comes to body image. This is especially significant as Pakistan, like many other countries, is witnessing an increasing shift toward digital media consumption, with teenagers spending more time online.
- **Cultural Context and Influence of Beauty Standards:** Pakistan has a unique cultural context where traditional beauty ideals are often in conflict with the Western standards perpetuated on social media. In Pakistan, fair skin, slim bodies, and particular facial features are often idealized. The study will shed light on how these ideals, which may differ from local cultural values, can influence adolescents' self-perception. It will also explore the role of social media in perpetuating such beauty standards and how this might contribute to mental health issues.

- **Mental Health Implications:** The growing mental health concerns in adolescents worldwide, including anxiety, depression, and self-esteem issues, are increasingly linked to the consumption of social media. Adolescents, being in a vulnerable stage of identity formation, are more susceptible to social comparisons, which can lead to BDD. This study can help identify the prevalence of BDD among adolescents in Pakistan and its association with social media usage. Understanding the relationship between social media use and mental health could lead to better mental health intervention strategies and preventive measures, which is a critical need in Pakistan, where mental health awareness is still growing.
- **Policy and Intervention Development:** Research into the impact of social media on adolescents' mental health can guide policymakers, educators, and mental health professionals in developing interventions tailored to Pakistani adolescents. This can include creating awareness programs, guidelines for healthy social media usage, and integrating mental health education in schools. It can also inform regulations for digital platforms to ensure that social media content is sensitive to cultural differences and mental health concerns.
- **Support for Families and Educators:** By understanding the link between social media and BDD, the study can provide valuable insights for parents and teachers on how to better support adolescents in navigating the pressures of social media. This can also contribute to creating a more supportive environment for adolescents to openly discuss their challenges regarding body image and mental health.
- **Global Relevance with Local Focus:** While the relationship between social media and mental health is well-documented globally, focusing on Pakistan's adolescent population adds a unique perspective that accounts for regional differences in culture, socioeconomic status, and access to technology. This can enrich the global conversation about the impacts of social media, offering valuable insights into how these issues manifest in a South Asian context, with potential applications to other countries with similar cultural backgrounds. The significance of this study lies in its potential to highlight the specific impact of social media on body image issues among Pakistani adolescents, particularly in terms of BDD. It can contribute to a deeper understanding of how modern digital platforms influence self-esteem and mental health, which in turn can help shape more effective mental health policies, educational programs, and social media guidelines. Ultimately, it can play a vital role in mitigating the negative consequences of social media use on adolescent mental well-being in Pakistan.

3. Method

Participants: Correlational research design was used to conduct this quantitative research. Survey was administered with closed ended questionnaires as method of data collection. Convenient sampling technique was employed to select the sample of study 100 (male=50, female=50) young adults.

Instrument: Social media use and behaviors assessed via a 4-point Likert scale (Always, Sometimes, Rarely, Never) (Schieber et al., 2018). **Dysmorphic Concern Questionnaire:** The DCQ is a seven-item self-report questionnaire that examines cognitive and behavioral features of dysmorphic concern. Responses evaluated on a four-point response scale ranging from 0 "Never" to 3 "All of the time". All seven items of the DCQ summed up to result in one total score with no subscales. The total score may range from 0 to 21. Higher scores indicate higher levels of altitudinal disturbance regarding one's appearance. A DCQ score cut-off of 11 was selected to identify participants with BDD. This was based on the study where this cut-off showed good internal consistency with Cronbach's $\alpha = 0.81$. Overall, the DCQ has shown high internal consistency and structural validity (Rozzell et al., 2020).

4. Results

Table 1: Correlation between Social Media Usage and Body Dysmorphic Disorder among young adults

	Tik Tok	Facebook	You Tube	Instagram	Body Dysmorphic Disorder
Tik Tok	1	.531**	.653**	.431**	.790**
Facebook		1	.524**	.397**	.507**
You Tube			1	.610**	.761**
Instagram				1	.517**
Body Dysmorphic Disorder					1

Table 1 shows the positive correlation between using social media platforms and body dysmorphic disorder. Social media platforms are the positive predictors of body dysmorphic disorder among young adults.

Table 2: Mean score difference of Social Media Usage and Body Dysmorphic Disorder between male and female young adults

Variable	Gender	N	M	Std.Deviation	df	t-test	p-value
Social Media Usage	Male	50	8.3501	6.03947	98	11.902	.001
	Female	50	13.0834	9.05004			
Body Dysmorphic Disorder	Male	50	19.0682	5.00582	98	9.531	.001
	Female	50	35.0294	7.90953			

Table 2 describes the mean score comparison of using social media and body dysmorphic disorder between male female young adults. Findings uncover that female young adults reported greater level of using social media platforms as compared to male. Moreover, female young adults have the problems related to BDD.

4.1. Discussion

Body dysmorphic disorder causes distress due to one's negative appraisal of their body image. The development of has been linked to the passive use of social media and photo-editing apps. The dramatic increase in the use of photo-editing apps and their well-established effects on mental health is a public health concern. Findings of the current study uncover that that social media platforms are the positive predictors of body dysmorphic disorder among young adults. Findings uncover that female young adults reported greater level of using social media platforms as compared to male. Moreover, female young adults have the problems related to BDD. People with BDD believe people taunt them or negatively comment about their appearance. They also possess tendencies toward perfectionism and constantly compare their appearance to others (França et al., 2017). Patients who had a distorted self-perception of body shape or a distorted comparative perception of body image were 3.67 or 5.93 times more likely to have severe BDD symptoms than those who had a more accurate perception. BDD is thought to be caused by dysfunctional origins, such as abuse and negative childhood experiences, and taunting, resulting in low self-esteem and insecurities (Higgins & Wysong, 2018). Sixty-nine percent of BDD patients say they have been taunted or bullied at some point (Alsaidan et al., 2020). Now, as the social media trend grows, there is an extra, more relevant forum for bullying (Higgins & Wysong, 2018).

5. Conclusion

This study sheds lights on how consumption of social media platforms is associated with negative appraisals about one's physical appearance. Results reveal a potential role for social media in propagating body dysmorphic disorder and, subsequently, propensity toward cosmetic surgery, especially among females and singles. The mechanism of such an effect probably involves perpetual social comparisons and the unrealistic beautified appearances that result from photo-editing filters in Snapchat and Instagram.

5.1. Contribution of the Study

- **Raising Awareness about BDD:** The study can significantly contribute to understanding how body image concerns develop in the context of social media exposure. By identifying the links between social media use and the onset or exacerbation of BDD symptoms, the research can raise awareness about this mental health issue. In Pakistan, where mental health discussions are often underrepresented, this study would shed light on how social media impacts body image perceptions and the psychological well-being of adolescents.
- **Examining Cultural and Societal Influences:** Social media's impact on body image may differ across cultures. In Pakistan, where traditional beauty standards and societal expectations can be rigid, this study can explore how these norms are amplified or challenged through social media. It would provide an understanding of the interaction between local cultural values and global trends, which may influence how Pakistani adolescents perceive their bodies.
- **Providing Evidence for Mental Health Interventions:** By documenting the prevalence and characteristics of BDD among Pakistani adolescents, the study can inform policy makers, educators, and mental health professionals about the need for targeted interventions. For example, it can suggest the development of school-based mental health programs that address the pressures of social media, self-esteem, and body image. The findings could also guide mental health campaigns to promote healthy body image and reduce the harmful effects of social media.
- **Contributing to Academic Literature:** This research would fill an important gap in academic literature, particularly in South Asia, where studies on the intersection of social media and mental health, especially BDD, are relatively limited. It could provide a foundation for future research in this area, encouraging further exploration into the specific impact of social media on the mental health of adolescents in other developing countries.
- **Influencing Social Media Practices:** The study can also have an indirect effect on how social media platforms are used in Pakistan. By showcasing the negative impact on adolescents' mental health, the study could advocate for more ethical practices within the social media industry, such as the promotion of diverse body types, the reduction of harmful beauty standards, and enhanced mental health resources for users.
- **Guiding Parents and Caregivers:** For parents and caregivers in Pakistan, the study's findings can provide essential guidance on how to help their children navigate the pressures of social media. It could equip them with knowledge on how to spot the signs of BDD, foster healthy conversations about body image, and encourage a balanced relationship with social media. In conclusion, this study would provide valuable insights into the relationship between social media and BDD among adolescents in Pakistan. It would contribute to mental health awareness, offer practical recommendations for intervention, and support efforts to promote a healthier, more positive relationship with social media in the context of a rapidly changing digital landscape. By filling a critical gap in understanding, this research could have far-reaching impacts on both the academic and social levels.

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