NARCISSISM, SOCIAL MEDIA ADDICTION AND BODY DYSMORPHIA AMONG YOUNG ADULTS: ROLE OF SELF ESTEEM

Areej Nasir[1], Jawairia Zafar[*2], Saima[3]

[1]MS Scholar, Department of Applied Psychology, Riphah International University, GGC, Islamabad, Pakistan
[*2]Senior Lecturer, Department of Applied Psychology, Riphah International University, GGC, Islamabad, Pakistan.
[3]MS Scholar, Department of Applied Psychology, Riphah International University, GGC, Islamabad, Pakistan

Evabella753@Gmail.Com, [*2]Jawairia.zafar@riphah.edu.pk, Saimaiman228@gmail.com

[*2]https://orcid.org/0009-0004-1404 647x

Corresponding Author: *

ABSTRACT

The purpose of this research is to examine the moderating role of self-esteem on the relations between narcissism, social media addiction and body dysmorphic concerns among young adults. The quantitative research design carried out by surveying 249 respondents from Rawalpindi and Islamabad. Data were analyzed through Statistical Package for Social Science (SPSS) to test the research hypotheses. Self-reported measures including Narcissistic Personality Inventory (NPI), Social Media Addiction Scale Student Form (SMAS-SF), Appearance Anxiety Inventory (AAI) and Rosenberg Self-Esteem Scale (RSES) were used. The results demonstrate a notable and positive association between narcissism and social media addiction providing evidence for the idea that excessive use of social media is connected to narcissistic characteristics. Moreover, there was a positive correlation between narcissism and body dysmorphic concerns emphasizing the need of taking narcissistic tendencies into account when examining body image problems. However, the impact of self-esteem on the relationship between narcissism, social media addiction and body dysmorphic concerns was not shown to be substantial. This implies that the protective effects of self-esteem may not have a strong influence on these dynamics. The study also discovered a notable disparity between genders in terms of social media addiction, with men displaying elevated levels of addiction in comparison to women. However, no gender disparities were seen in relation to narcissism or body dysmorphic concerns.

Keywords: Narcissism, Social Media Addiction, Body Dysmorphic Concerns, Self-Esteem.

INTRODUCTION

The enormous impact of social media on human health is increasingly being investigated. Important psychological patterns associated with close relationships include infidelity, substance abuse, body dysmorphia, and low self-esteem (Andreassen et al., 2017). Personality is an intricate and multi-faceted notion that has captivated psychologists for a significant amount of time. One of the many theoretical perspectives that academics have looked to in their attempt to explain and make sense of personality is the characteristic theory. This pursuit has led researchers to turn to a range of theoretical approaches. The concept that underpins trait theory, which was initially

proposed by Allport (1937) and later refined by Cattell (1943), is that the personality of an individual can be summed up in a collection of attributes or characteristics that remain consistent over the course of their lifetime. According to this viewpoint, a person's personality is comprised of a stable, internal structure that is largely unaffected by the circumstances in which they find themselves at any given time. On the other hand, Bandura's social cognitive theory, which was published in 1986, lays a higher emphasis on the role that environmental and cognitive factors play in the process by which a person's personality is formed. In the process of an individual's personality development, this theory places an emphasis on the significance of self-regulation, observational learning, and self-efficacy. Even though it has been criticized for its lack of empirical evidence, Freud's psychoanalytic theory has had a significant impact on the field of personality psychology. This is the case despite the fact that it has been the subject of criticism. Freud claimed in 1905 that personality is produced not only by conscious struggles but also by the dynamic interaction of the ego, the superego, and the id within an individual (McCRAE et al., 2003) . The study of personality continues to be one of the primary foci of research in psychology, despite the fact that continuing debates are taking place among this and other theoretical approaches.

Narcissism, a major personality trait, has been the focus of a substantial amount of research in the field of psychology over the course of many years. Narcissism has garnered a significant amount of attention in recent years, particularly in relation to the use of various social media platforms. According to early studies that demonstrated a favourable link between narcissism and social media engagement Casale & Banchi (2020), individuals with more narcissistic tendencies have a tendency to interact more actively and self-primitively on platforms like Facebook (Casale & Fioravanti, 2018). Narcissism, characterized by a need for self-importance and admiration, is associated with excessive use of social media because these platforms provide opportunities for self-expression and practice (Brailovskaia et al., 2020). Although social media is a tool

for interaction, excessive use can lead to addiction and psychological damage (Andreassen et al., 2017). According to the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013), narcissistic personality disorder is characterized by a pervasive pattern of grandiosity, a craving for adulation, and a lack of empathy. Numerous studies have been carried out in an effort to study the origins of narcissism as well as its manifest manifestations. Early psychodynamic theories (Perrino & Ruez Jr., 2019) proposed that narcissism might originate from either an overvaluation of a child's worth by his or her parents or from a lack of attention shown to the youngster by those same parents.

Narcissistic individuals have also been shown to be more likely to engage in risky behavior (Casale et al., 2016). In addition, new studies have looked into the effects that narcissism can have on the relationships with other people. According to Campbell (1999), the results of these research suggest that high levels of narcissism are likely to be associated with difficulties in maintaining healthy social interactions. People who have high levels of narcissism are more likely to be dissatisfied with their bodies, as well as more likely to engage in appearance-oriented behaviors such as excessive exercise and cosmetic surgery, in an effort to achieve a self-image that is more in line with their expectations (Andreassen et al., 2017).

Furthermore, concerns about body dysmorphia have become increasingly influenced by the ideals of social media and have become a significant concern, especially among adolescents and young adults (Choukas-Bradley et al., 2019). Research has indicated that individuals who have high levels of narcissism are more likely to place a high premium on their physical appearance as a means of garnering attention and admiration (Campbell et al., 2002). This is because individuals with high levels of narcissism are more prone to believe that others judge them based on their appearance. This shows that people who have high levels of narcissism may be especially prone to having a poor picture of their bodies. Additionally, narcissists have a propensity to participate in self-enhancement practices, and they are

sensitive to criticism, all of which can heighten their preoccupation with how they appear physically (Kircaburun & Griffiths, 2018). However, narcissistic tendencies frequently co-occur with body dysmorphic concerns, which can be characterized as an excessive attention on perceived faults or defects in one's looks (American Psychiatric Association, 2013). Narcissistic tendencies are characterized by an overly positive view of one's own abilities and achievements. An intense attention on perceived flaws or defects in one's appearance is one of the defining characteristics of body dysmorphic issues. Individuals who have narcissistic tendencies may be more prone to manifest body dysmorphic symptoms, probably as a result of their heightened sensitivity to perceived imperfections and their need for perfection (Boulter & Sandgren, 2022; Sahraian et al., 2022). Narcissistic individuals may be more likely to suffer from body dysmorphic symptoms. A number of pieces of study have pointed in this direction.

In addition to this , early research that Andreassen et al.,(2017) did, they related narcissism to a heightened sense of self-esteem. Self-esteem plays an important role in mediating the relationship between narcissism and these negative outcomes. People with high self-esteem may be more vulnerable to social disruptions, while people with low self-esteem may be more vulnerable (Rao & Kumar, 2020). However, the relationship between narcissism and self-esteem has been the subject of inquiry in research that has been conducted more recently. Some of these studies have revealed that narcissistic persons may have inflated self-esteem and are more prone to respond defensively when their self-esteem is attacked (Bushman & Baumeister, 1998). One of the distinguishing characteristics of narcissistic personality disorder is an inflated sense of self-confidence, which is typically displayed by narcissists. Moreover, the authors found that even a level of self-esteem that was considered to be healthy was susceptible to being eroded by criticism since it was unstable, prone to oscillations, and subject to being undercut by (Hyatt et al., 2018). It is necessary to keep in mind that narcissism can take on a variety of forms, some of which, like vulnerable narcissism, are linked to lower levels of self-esteem It is important to keep this in mind since vulnerable narcissism is associated with lower levels of self-esteem. This highlights the complicated nature of the relationship, which at various moments in time and location can have both positive and bad implications associated with it (Rogoza et al., 2018). In addition, a number of researchers in the academic world have investigated the underlying mechanisms that are responsible for the connection between narcissism and high levels of self-esteem.

According to Campbell et al., (2002) one of the possible explanations for the behavior of narcissists is that they participate in self-enhancement strategies, in which they play up their strengths and minimize their weaknesses in order to maintain high levels of self-esteem. This is one of the possible explanations for the behaviour of narcissists. In addition to this, the various social media platforms have recently arisen as an important context in which to investigate narcissism and self-esteem. According to Yang & Bradford Brown, (2016) the culture of the "selfie" and online self-presentation have a significant role in the development of a person's sense of self-worth among individuals, particularly among young adults.

1.1. Rationale

The present study aims to address an increasingly critical issue in today's digital age, focusing on the complex interplay between narcissism, social media addiction, body dysmorphia, and the moderating role of self-esteem among young adults. Understanding these dynamics is crucial, given the psychological challenges faced by individuals navigating a world where digital platforms have become central to identity formation and self-perception.

The rise of social media has revolutionized the way young adults interact, communicate, and present themselves. Social media platforms serve as modern arenas for self-promotion, social comparison, and the quest for external validation. This has profound implications for mental health, especially in relation to narcissistic traits. Individuals high in narcissism often exhibit a heightened need for admiration and external validation, which can be fueled by excessive social media use. Research suggests that such

platforms provide an ideal environment for narcissists to engage in self-promotion, which may reinforce these traits and exacerbate their impact on psychological well-being.

Consequently, this study examines how narcissism, as an independent variable, can drive addiction to social media and foster body dysmorphic concerns. However, Body dysmorphia, a preoccupation with perceived physical imperfections, is increasingly prevalent among young adults, a phenomenon possibly exacerbated by social media's promotion of idealized and filtered images. Young adults are particularly vulnerable to these influences, as they are in a critical developmental stage where self-image and self-worth are highly malleable. The overexposure to curated and often unattainable standards of beauty may lead to negative body image, heightened dissatisfaction, and, in extreme cases, the development of body dysmorphia. The association between social media addiction and body dysmorphic concerns is a pressing area of investigation, as young adults frequently use these platforms to compare their appearance to others, often negatively affecting their self-perception.

Self-esteem plays a critical moderating role in this dynamic. High self-esteem may serve as a protective factor, buffering individuals from the negative psychological outcomes associated with excessive social media use and body image concerns. Conversely, individuals with low self-esteem may be more susceptible to the harmful effects of narcissism and social media addiction, making them more likely to develop body dysmorphic tendencies. By exploring self-esteem as a moderating variable, this study seeks to identify how varying levels of self-worth impact the relationship between narcissism, social media addiction, and body dysmorphia.

1.2. Significance of Study

The significance of this research lies in its potential to shed light on how these psychological factors interact in a rapidly evolving digital landscape. Given the growing concern about the mental health of young adults, the findings could inform the development of targeted interventions to mitigate the negative effects of social media addiction and body image concerns. By addressing the role of self-esteem, the study also highlights the importance of fostering positive self-regard to promote psychological resilience in an era dominated by social media. Understanding these relationships is essential for devising strategies to support the well-being of young adults who are increasingly immersed in a culture of digital self-presentation and social comparison. Therefore, the relevance of this study is particularly heightened in the Pakistani context, where cultural values often emphasize physical appearance, societal expectations, and social comparison, particularly for young adults. In a society where collectivism and family reputation play significant roles, social media has become a double-edged sword. It provides a platform for self-expression but also amplifies societal pressures regarding appearance and success. This dynamic makes young adults in Pakistan highly vulnerable to developing narcissistic traits, excessive social media usage, and body dysmorphic concerns.

Moreover, Pakistan has a relatively conservative culture with deep-rooted norms regarding beauty, body image, and success, which can intensify the impact of social media on young minds. For many Pakistani youth, social media is a primary outlet for expressing individuality and seeking validation, yet it also fosters a toxic culture of comparison and idealized standards of beauty. Narcissism, social media addiction, and body dysmorphia may thus manifest uniquely in this demographic, influenced by both global trends and local cultural factors. The moderating role of self-esteem could be crucial in understanding how young Pakistanis navigate these challenges, particularly given the cultural emphasis on external validation.

This study is essential for identifying the psychological risks associated with excessive social media use and the growing prevalence of narcissistic behaviors in Pakistan's youth. By exploring these relationships, the research can inform culturally sensitive interventions and contribute to the broader discourse on mental health, self-image, and the role of digital media in shaping individual well-being.

1.3. Objectives

• To investigate the relationship between narcissism, social media addiction and body dysmorphic concerns among young adults.

• To investigate the moderating role of self-esteem in relationship between narcissism, social media addiction and body dysmorphic concerns among young adults.

• To investigate the role of various demographics (i.e. gender) on study variables.

2. LITERATURE REVIEW

2.1. Underpinning Theory

The Social Comparison Theory suggests that individuals assess their self-worth and appraise their abilities and traits by comparing themselves to others (Festinger, 1954). However, this theory has two aspects i.e. upward and downward social comparison. This theory applies well to social media, where people frequently see idealized images of others. This leads to upward comparisons, where individuals compare themselves to those they perceive as better, often resulting in dissatisfaction and poor self-image. For those with narcissistic traits, these upward comparisons can worsen issues related to body image, as they attempt to achieve unrealistic beauty standards promoted online. Such comparisons may also lead to social media addiction, as users seek affirmation through likes and comments.

On the other hand, downward comparisons comparing oneself to those seen as worse off can momentarily increase self-esteem by enhancing feelings of superiority. Narcissistic individuals might rely on downward comparisons to protect or strengthen their delicate self-image, especially when encountering content on social media that threatens their self-perception. However, this approach can have negative effects, as it may reinforce addictive behaviour and lead to a greater dependence on external validation. Therefore, both upward and downward comparisons show how self-esteem influences the relationship between narcissism, social media addiction, and body image issues.

2.2. Narcissism

Narcissism, a personality trait marked by a sense of superiority, a craving for adulation, and a deficiency in empathy, has garnered growing attention from researchers investigating the psychological effects of using social media (American Psychiatric Association, 2013). Narcissism, as a construct, can be categorized into two subtypes: grandiose narcissism and vulnerable narcissism. Grandiose narcissism is characterized by explicit displays of self-importance and superiority, whereas vulnerable narcissism is linked to heightened sensitivity and defensiveness (Miller et al., 2011). The emergence of social media platforms, which allow individuals to carefully construct idealized representations of themselves, has raised worries regarding the amplification of narcissistic characteristics among young adults.

Studies have shown a notable correlation between narcissism and behaviours exhibited on social media platforms. Individuals with high levels of narcissistic tendencies are more prone to participating in self-promotional behaviours on social media, such as sharing photos and status updates that aim to gain affirmation from others (Casale & Banchi, 2020). These behaviours are motivated not just by self-expression but also by a craving for praise and positive reinforcement from their online audiences (Kircaburun & Griffiths, 2018). Hence, social media can function as a medium for self-centered individuals to satisfy their want for recognition and adulation, thereby strengthening and intensifying these characteristics.

The high occurrence of narcissistic behaviours in relation to social media is a specific worry among young individuals, who frequently engage with these platforms. During the stage of young adulthood, the process of developing one's identity is of great importance. The feedback received from social media platforms can have a substantial impact on how individuals perceive themselves and their level of self-esteem (Abdollahi et al., 2023).

2.3. Social Media Addiction

The widespread use of social media platforms in recent years has profoundly

transformed the way people engage, communicate, and view themselves and others. The advent of the digital revolution has led to the emergence of a problem called social media addiction, which is defined by the excessive and compulsive use of social networking platforms to the point that it disrupts one's daily activities (Casale & Banchi, 2020). Social media addiction is classified as a behavioural addiction similar to gambling or chemical dependency. It is characterized by symptoms such as changes in mood, increased tolerance, withdrawal symptoms, conflicts, and relapses (Kuss & Griffiths, 2017).

The pervasive nature of social media in everyday life, especially among the younger generation, has generated substantial interest and apprehension within the academic sphere. Adolescents, specifically, are particularly prone to becoming addicted to social media because of their period of development, which includes forming their identity and having a strong desire for social acceptance and validation from their peers (Kuss & Griffiths, 2017). Research has indicated that excessive and compulsive usage of social media might result in detrimental effects such as reduced academic achievement, disturbed sleep cycles, and compromised mental well-being (Andreassen et al., 2017).

Furthermore, the algorithms and design elements of social media platforms are specifically customized to optimise user engagement and the amount of time spent on the screen, frequently at the cost of users' overall well-being. The continuous influx of alerts, likes, comments, and shares establishes a pattern of reinforcement that might sustain addictive behaviours (Andreassen et al., 2017; Casale & Banchi, 2020; Kuss & Griffiths, 2017). The psychological processes that contribute to social media addiction are intricate and diverse, encompassing both internal drives, such as the desire for self-expression and comparing oneself to others, and external incentives, such as receiving social validation and feedback (Rao & Kumar, 2020).

2.4. Body Dysmorphia

Body Dysmorphic Concerns (BDC) refer to a persistent obsession with perceived imperfections in one's physical appearance, even if these flaws are usually little or no noticeable to other people. This syndrome is becoming more common among young adults, characterized by excessive grooming, behaviours to blend in, and frequent checking of oneself in the mirror (Yang & Bradford Brown, 2016). The cultural preoccupation with physical appearance, intensified by the ubiquitous presence of media and digital platforms, plays a crucial role in these issues.

Research conducted in both the past and now has shed light on the complex and diverse characteristics of BDC. (Veale et al., 2014) found that people with body dysmorphic issues commonly experience intense distress and have difficulty functioning socially. They often turn to cosmetic operations in an attempt to improve their condition. Similarly, a study conducted by Gumpert et al. (2024), emphasizes that these concerns are not only surface, but are deeply rooted and can result in significant psychological suffering, such as anxiety and depression.

During the phase of emerging adulthood, body dysmorphic concerns can have a significant negative impact, as this period is characterized by the exploration of one's identity and the solidification of self-concept. According to (Kuck et al., 2021) young people who have body dysmorphic concern (BDC) generally struggle with reduced self-esteem and increased susceptibility to judgement from their peers, which in turn affects their overall mental health and well-being. Furthermore, the influence of socioeconomic and cultural variables in worsening BDC must be disregarded. The widespread depiction of idealized body standards in media and the resulting pressure to conform to these standards have been recognized as major factors in the formation and perpetuation of Body Dysmorphic Concern (BDC) (Gumpert et al., 2024). These influences frequently result in a mistaken perception of oneself and an excessive emphasis on physical appearance, which reinforces the concerns related to body dysmorphia.
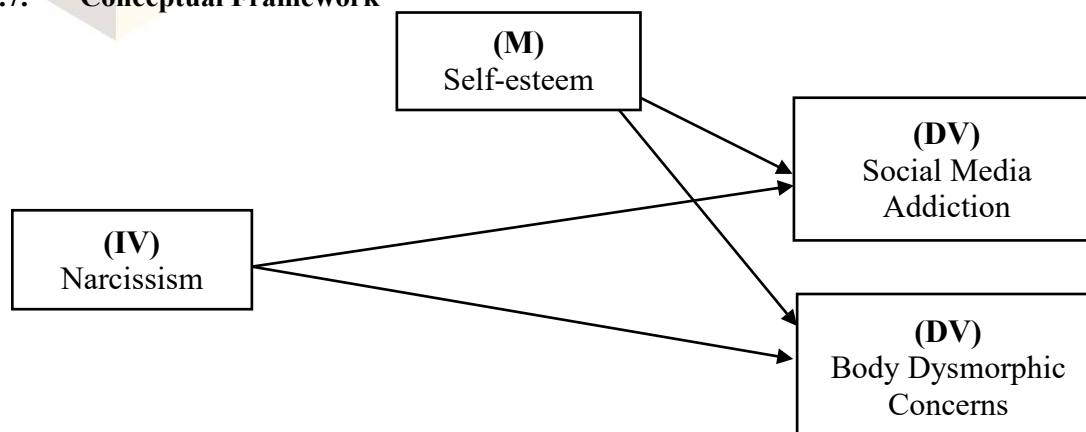
2.5. Self Esteem

Self-esteem, a crucial concept in psychology, pertains to an individual's personal

assessment of their own value. It includes personal ideas and emotional experiences, such as feelings of success, hopelessness, satisfaction, and embarrassment (Rosenberg, 1965). High self-esteem is defined as having a favourable opinion of oneself and a belief in one's abilities, whereas low self-esteem is characterized by having negative self-perceptions and feelings of inadequacy (Hyatt et al., 2018).

Multiple studies (Andreassen et al., 2017; Hyatt et al., 2018; Maddux, 2014) have extensively demonstrated the significance of self-esteem in diverse facets of mental health and overall well-being. discovered that self-esteem is a substantial indicator of both overall life satisfaction and psychological well-being. People who have a strong sense of self-worth are more inclined to demonstrate resilience when confronted with challenges, adopt better habits, and sustain positive connections with others (Liu et al., 2021; Shengyao et al., 2024).

Furthermore, self-esteem is not an unchanging characteristic; it can vary depending on life events, social connections, and personal accomplishments. Muris & Otgaar (2023), propose that self-esteem functions as a sociometer, an internal mechanism that measures the extent to which individuals perceive acceptance or rejection from others. This viewpoint emphasizes the ever-changing nature of self-esteem and its vulnerability to outside factors. Self-esteem is crucial for young people as they navigate a significant phase of personal growth focused on establishing their identity and self-perception (Maddux, 2014). Studies suggest that self-esteem reaches its highest point throughout adolescence and early adulthood, highlighting the significance of this period for self-assessment and the development of one's identity (Liu et al., 2021; Shengyao et al., 2024). Based on the above discussion the hypotheses would be:

2.6. Hypotheses

- **H₁:** There will be positive relationship between narcissism, body dysmorphic concerns and social media addiction among young adults.
- **H₂:** Self-esteem moderates the relationships between narcissism, social media addiction and body dysmorphic concerns among young adults.
- **H₃:** Male scored high on narcissism, social media addiction and body dysmorphic than female among young adults.

2.7. Conceptual Framework

3. METHODOLOGY

3.1. Research Design

This study was based on quantitative analysis with cross-sectional survey research design. The survey was divided into two parts namely the demographic questions (gender, family system, residence, marital status and social media) and the of the study variables.

3.2. Sample

The sample consisted of 249 young adults aged between 18 and 35, with mean and standard deviation years according to Petry's guidelines (Petry, 2017). The sample consist of (n= 114) male and (n=135) female. Data was collected from twin city of Rawalpindi and Islamabad by using convenient sampling technique.

Inclusion criteria. The inclusion criteria were as follows:

- Only young adult
- At least matric education easily understands the concept
- Islamabad and Rawalpindi.

Exclusion criteria. The exclusion criteria were as follows:
- Below 18 years were excluded.
- Young adult psychological and physical Handicap will be excluded.

3.3. Instrumentation

To determine the impact of narcissism on body dysmorphia and social media addiction we collected data in respect of total four variables. First, we measured the body dysmorphic concerns by using Appearance Anxiety Inventory (AAI) that was developed by Veale et al.in (2014). The AAI consists of 10 items on five-point Likert scale. It exhibited high internal consistency with a Cronbach's Alpha of 0.86 (Veale et al., 2014). Second, we measure the self-esteem by using the scale developed by Morris Rosenberg (Rosenberg, 1965). The RSES consists of 10 items that measure global self-esteem. Respondents rate their level of agreement with each statement on a 4-point scale ranging from "strongly agree" to "strongly disagree." The Rosenberg Self-Esteem Scale demonstrates good internal consistency, with high Cronbach's alpha coefficients typically ranging from 0.85 to 0.88, indicating that the items in the scale are highly correlated. The scale has shown good concurrent, discriminant, and predictive validity. Third, we measure the social media addiction by using Social Media Addiction Scale - Student Form, a popular self-report tool (Şahin, 2019). This is a five-point Likert scale with four sub-dimensions and 29 items. Items 1 through 5 falls under the virtual tolerance sub dimension; items 6 through 14 falls under the virtual communication sub dimension; items 15 through 23 falls under the virtual problem sub dimension; and items 24 through 29 falls under the virtual information sub dimension. The scale has only positive items on it. The scale allows for a maximum score of 145 and a minimum score of 29. Higher scores suggest that the agent considers himself to be a "social media addict." The Cronbach's alpha coefficient, or internal consistency coefficient, was discovered.93 overall on the scale. Lastly, we measure the narcissism by using the SD3 (Short Dark Triad) scale, a psychometric tool designed to measure the three personality traits of the Dark Triad: Machiavellianism, narcissism, and psychopathy. Developed by Jones & Paulhus (2014), this scale comprises 27 items, with each of the three traits represented by nine items. Respondents rate the extent to which each statement applies to them on a Likert scale, typically ranging from 1 (not very true of me) to 5 (very true of me). The SD3 demonstrates good internal consistency, with Cronbach's alpha coefficients of 0.77, suggesting that the items within the scale are consistently measuring narcissistic traits.

3.4. Ethical Considerations

When doing quantitative research, it is crucial to prioritize ethical considerations to maintain the study's integrity and safeguard the participants. The researcher received informed consent from all participants, ensuring their comprehensive understanding of the study's objectives, methodologies, potential hazards, and advantages. Stringent measures were taken to uphold privacy and confidentiality, ensuring that data was anonymized to safeguard the identities of participants. In addition, researchers take measures to ensure that their study does not inflict any bodily or psychological harm on participants, and they grant participants the right to withdraw from the study at any moment without facing any negative consequences.

3.5. Procedure

The study "Narcissism, social media addiction and body dysmorphic concerns among young adults: moderating role of self-esteem" documented the results of quantitative research. In order to investigate correlations, patterns, and links between variables, numerical data was gathered and analyzed as part of this study. The researcher assessed narcissism, social media addiction, body dysmorphic issues, and self-esteem in this study using standardized measures and questionnaires. The data was analyzed using statistical techniques. In any scientific endeavor, ethical issues are crucial. All participants were provided informed permission, guaranteeing that they were aware of the goals and possible dangers of

the study. Data was securely saved, and participants' privacy were preserved through maintaining confidentiality. There was no bias or discrimination of any kind, and the research was carried out in a fair, respectful, and honest manner. The study was adhering to ethical rules and principles set out by ethical committees in order to protect participant welfare and research integrity.

4. RESULTS AND FINDINGS

Table 1: Demographics Characteristics of the Study Variables (N=249)

Characteristics	Categories	f	%
Gender	Male	114	46
	Female	135	54
Family system	Nuclear	128	51
	Joint	121	49
Residence	Urban	60	24
	Rural	189	76
Marital Status	Single	188	74.5
	Married	61	24.5
Social media	You-tube	50	20
	Instagram	54	21
	Facebook	104	42
	Twitter	29	12
	Tik-Tok	12	5

Note. f= frequency of demographics.

Table 1 shows the frequency for the demographic variables. Participants consist of 114 male (46%) and 135 females (54%). However, 128 participants (51%) came from nuclear families, and 121 participants (49%) came from joint families. Moreover, Facebook appears to be one of most used social media platforms among study participants consists of 104 (42%

Table 2: Descriptive Statistics and Reliability Coefficient of Assessment Measures (N=249)

Variables	K	M	SD	α	Ranges		Skewness	Kurtosis
					Actual	Potential		
Body Dysmorphic Concerns	10	12.54	6.93	.76	0-33	0-40	.46	-.27
Narcissism	9	26.17	4.54	.54	12-35	9-45	-.45	-.02
Social Media Addiction	29	78.88	16.42	.86	43-135	29-145	.50	.78
Self Esteem	10	23.79	3.63	.58	15-32	10-40	-.05	-.47

Note: M=Mean; SD= Standard Deviation; α= Alpha Reliability.

Table 2 presents the descriptive statistics of the measures utilized in the study, together with the corresponding alpha reliability values for both the measures and their respective subscales. The alpha reliability coefficients of all the scales fall within the acceptable range (p>.50), indicating that our measures were reliable and suitable for data collection.

Table 3: Correlation for Study Variables (N= 249)

	1	2	3	4
Body Dysmorphic Concerns	1	.322**	.205**	-.051
Social Media		1	.139*	.156*

Addiction

Narcissism	1	-.127[*]
Self-Esteem		1

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

The correlation matrix for the research variables from 249 participants is shown in Table 3. Self-Esteem, Body Dissatisfaction (BD), Narcissism, and Social Media Addiction are investigated. Each table field contains the Pearson correlation coefficient (r) indicating the strength and direction of the association between variables. High levels of body dissatisfaction (BD) were linked to higher levels of narcissism (r =.205, p <.01) and social media addiction (r =.322, p <.001), suggesting a correlation between the two. In this sample, body dissatisfaction was not highly correlated with self-esteem (r =-.051, p >.05). SM Addiction was positively correlated with narcissism (r =.139, p <.05), suggesting that persons with greater degrees of narcissism are more prone to engage in addictive behaviors connected to social media. Narcissism had a mild negative connection with self-esteem (r = -.127, p <.05), indicating a small adverse relationship.

There is a substantial positive link between social media addiction and self-esteem (r =.156, p <.05), suggesting that persons with higher degrees of addiction likely to have poorer self-esteem.

Table 4: Moderating Effect of Self-Esteem Between Narcissism and Social Media Addiction (N=249)

Outcome Variable: Social Media Addiction					
				95%CI	
Predictor	β	SE	p	LL	UL
Constant	78.95	1.02	.00	76.93	80.98
Narcissism	.57	.22	.01	.12	1.02
Self Esteem	.81	.28	.00	.25	1.37
Narcissism * Self Esteem	.03	.06	.55	-.08	.15
ΔR^2	.05				
ΔF	4.41				

The moderation analysis results for the connection between narcissism and social media addiction are shown in Table 5. It looks at the moderating role of self-esteem. For every predictor, estimates, standard errors (SE), 95% confidence intervals (CI), and matching p-values are included in the table. The main effects section's significant p-values (p <.05) demonstrate that individually narcissism and self-esteem significantly predict social media addiction. But the interaction term between self-esteem and narcissism is not significant (p =.55), indicating that narcissism and social media addiction are not moderated by self-esteem. The model is statistically significant (F = 4.41, p =.004) and accounts for 5% of the variance in social media addiction (R2 =.05). These results collectively suggest that whereas narcissism and self-esteem may have separate effects on social media addiction, self-esteem does not moderate this link.

Table 5: Moderating Effect of Self-Esteem Between Narcissism and Body Dysmorphic Concerns (N=249)

Outcome Variable: Body Dysmorphic Concerns					
				95%CI	
Predictors	β	SE	p	LL	UL
Constant	12.54	.43	.00	11.68	13.40
Narcissism	.30	.09	.00	.11	.49
Self Esteem	-.04	.12	.70	-.28	.19
Narcissism * Self Esteem	.002	.02	.92	-.04	.05

ΔR^2	.04
ΔF	3.65

Table 4 shows how self-esteem moderates the link between narcissism and body dysmorphic concerns. The table shows main effect and interaction effect estimates, SE, 95% CI, and p-values. The major effect estimates show narcissism, self-esteem, and body dysmorphic links. Narcissism has significant relationship with body dysmorphic concerns (b = .30, p= .001) while self-esteem has non-significant relationship with body dysmorphic concerns (b = -.04, p =.70). The interaction between narcissism and self-esteem (b = 0.002, p = 0.92) is equally non-significant, demonstrating that self-esteem does not mitigate the link between narcissism and body dysmorphic concerns. The model explains 4% of body dysmorphic concerns with a statistically significant F-value of 3.65 (p = 0.01). The model's variables explain only a small percentage of body dysmorphic concerns, according to the low R-squared value. These findings suggest that self-esteem did not significantly regulate the link between narcissism and body dysmorphic concerns in this population, underlining the need for more research on this complicated interaction.

Table 6: Independent Sample T Test on the Basis of Gender of Participants on Study Variables (N=249)

Variables	Male (n= 114)		Female (n= 135)		T (247)	p	Cohen's d
	M	SD	M	SD			
Body Dysmorphic Concerns	12.81	7.49	12.31	6.45	.564	.573	
Narcissism	25.90	4.31	26.40	4.72	-.866	.388	
Social Media Addiction	81.73	16.21	76.41	16.19	2.546	.012	0.32
Self-Esteem	24.16	3.70	23.48	3.56	1.468	.145	

Note. M= Mean; SD= Standard Deviation.

The findings of an independent sample t-test, which was used to look at gender differences in several research variables among 249 participants, are shown in Table 6. Body Dysmorphic Disorder (Body D), Narcissism, and Social Media Addiction (SM) are among the characteristics evaluated. The mean scores for males (M = 12.81, M = 25.90) and females (M = 12.31, M = 26.40) for Body Dysmorphic Disorder and Narcissism were similar, showing no statistically significant differences (p >.05). But when it came to social media addiction, there was a clear gender difference. The mean score of male participants was found to be higher (M = 81.73) than that of female participants (M = 76.41), suggesting a larger prevalence of addiction in the former group. This difference had a medium effect size (Cohen's d = 0.32) and was statistically significant t (247) = 2.546, p =.012). These results imply that, although there were no gender differences in the sample for narcissism or body dysmorphic disorder, men tended to have higher levels of social media addiction than women.

5. DISCUSSION

Given the pervasive influence that social media platforms have on contemporary culture, it is of the utmost importance to gain an understanding of the ways in which personal characteristics such as narcissism and self-esteem combine with social media activity to possibly enhance the prevalence of body dysmorphic disorder. In this research, the findings of the study are evaluated critically in light of the existing body of literature. Additionally, the intricate connections that were discovered are investigated, along with their implications for theoretical knowledge and treatments that are implemented in the real world with the intention of improving the mental health of young people with regard to the digital age. With the help of a comprehensive data analysis, the purpose of this talk is to shed

light on the complexities of narcissism, addiction to social media, body dysmorphic issues, and the moderating function of self-esteem. In doing so, we hope to advance our understanding of the psychological processes that are operating in the social contexts of today that are mediated by digital technology.

The first hypothesis, which proposed a positive link between these two variables among young adults, is substantiated by the strong correlation (r =.139, p <.05) that exists between addiction to social media and narcissism. This result is in line with the findings of other studies that have suggested a connection between narcissistic traits and excessive usage of social media. People who are narcissistic, for instance, are more prone to promote themselves and seek praise through social media, as indicated by study that was conducted in the past (Yang & Bradford Brown, 2016). In addition, according to a study that was conducted by Brailovskaia et al. (2020), narcissistic individuals are more likely to use Facebook for the purpose of achieving self-improvement objectives, such as gaining attention and praise from other people. In a similar vein, Kuss & Griffiths (2017), conducted a meta-analysis in which they discovered a significant link between problematic social media use and narcissism. This finding suggests that individuals who exhibit higher levels of narcissistic traits may be more likely to acquire addictive behaviours related to social media. In light of this, the current finding highlights the importance of taking into consideration narcissism as a potential risk factor for the addiction to social media that is prevalent among young people.

Moreover, as indicated by Hypothesis 1, there is a positive correlation exists between narcissism and body dysmorphic concerns among young adults, (r =.205, p <.01). A similar association between dysmorphic worries or body dissatisfaction and narcissistic tendencies has been demonstrated in previous research, and our result is in line with other findings. As an example, a study that was conducted by Sahraian et al. (2022), found that narcissistic personality traits have a positive correlation with an individual's preoccupation with their physical appearance and concerns with their

body image. Consequently, the findings of the current study corroborate and expand upon the body of material that has already been published. This is accomplished by highlighting the connection between narcissism and body dysmorphic issues among young individuals. This link highlights the importance of taking into consideration personality qualities such as narcissism when analyzing and treating individual members of this group who have issues with their body image.

The findings of the moderation analysis, which are presented in Table 4, give light on the ways in which narcissism, self-esteem, and addiction to social media engage with one another in young people. As per the second hypothesis, the relationship between narcissism and addiction to social media is controlled by self-esteem. However, the findings reveal that the p-values for the interaction term between self-esteem and narcissism are not significant (p=.55), but the primary effects of narcissism and self-esteem on addiction to social media, are significant. This highlights the fact that the findings contradict the hypothesis. The findings of this study lend credence to the findings of earlier studies that have suggested that increased levels of self-esteem may not be a required condition for the direct impact of narcissism on addiction to social media. According to Andreassen et al.(2017), a positive association was found between narcissism and addiction to social media networks, regardless of the individual's level of self-esteem. In a similar line, the research conducted by Susanto et al. (2021), discovered that self-esteem did not play a moderating effect in the significant direct connection that exists between narcissism and addiction to social media. These findings highlight the fact that self-esteem may not serve as a buffer in this connection, despite the fact that narcissism may be a component in excessive usage of social media. Additionally, the findings of the research project that investigated the role that self-esteem plays as a moderating factor in the relationship between narcissism and body dysmorphic concerns are presented in Table 5. The conclusion that can be drawn from this finding is that the association between narcissism and body dysmorphic concerns was not significantly influenced by

self-esteem in the cohort that was investigated. According to Hypothesis 2, which said that narcissism and body dysmorphic concerns would be tempered by self-esteem, the outcome contradicts this hypothesis. However, narcissism and body dysmorphic concerns are statistically significant. It is important to note that the contradiction between the theory and the actual data highlights the complex nature of the relationship between self-esteem, and body dysmorphic disorder. Despite the fact that some earlier studies have suggested that issues with body image and narcissism may be mediated or buffered by self-esteem (Boulter & Sandgren, 2022; Kuck et al., 2021; Sahraian et al., 2022). As an illustration, Boulter & Sandgren (2022), found that individuals who exhibited high levels of narcissism and had low levels of self-esteem were more likely to experience body dissatisfaction and disordered eating practices. However, the research conducted by Sowislo and Orth (2013), demonstrated that having a healthy level of self-esteem mitigated the negative impacts of narcissism on concerns regarding one's body image. However, Hyatt et al. (2018), were unable to find any evidence to support the hypothesis that self-esteem acts as a moderator in the relationship between narcissism and body dissatisfaction among college students. In a similar vein, Imran et al.(2024),found that there was no significant interaction between narcissism and self-esteem when they were attempting to predict body image disorders among undergraduate students.

Moreover, according to the findings of the independent sample t-test presented in Table 6 shows that there is a statistically significant gender difference in addiction to social media among the 249 participants. However, there was no such difference observed for narcissism or body dysmorphic disorder (BDD). According to Hypothesis 3, which states that gender would influence the links among young people between body dysmorphic concerns, addiction to social media, and narcissism, these data provide support for the hypothesis being tested. More precisely, the figures indicate that men are more likely to be addicted to social media than women are. These findings are consistent with those of past studies that investigated the ways in which gender

influences the use of social media. For instance, a study that was conducted in 2016 by Andreassen and colleagues found that men are more likely than women to develop addictive behaviours that are related with the use of social media and to spend more time on Facebook and other social networking sites. A similar finding was made by Kuss and Griffiths (2017), who discovered that men are more prone to engage in problematic internet use, such as excessive use of social media. Given that men have been shown to exhibit higher degrees of addiction than women, these findings lend credibility to the hypothesis that gender plays a crucial role in determining the degree to which individuals are susceptible to being addicted to social media. Because of this, even if the results of this study indicate that narcissism and body dysmorphic disorder are not significantly different between the sexes, the gender difference in addiction to social media highlights the necessity of taking gender dynamics into consideration when attempting to comprehend and treat mental health issues that are associated with digital technology among young adults.

5.1. Theoretical and Practical Implications

The model incorporating narcissism, social media dependency, body dysmorphic concerns, and self-esteem as moderators in Pakistan is relevant due to its collectivist society. In such societies, the desire for social approval and comparison is heightened, especially on social networking sites. This model can study how Pakistani youth and adolescents engage in social comparison on social media, leading to self-emptying and promoting family, social status, or relatedness over self. The model also explains the rising incidence of body dysmorphic disorders due to overuse of social media admirers who identify with Western beauty standards and Bollywood glamour. High self-esteem acts as a protective mechanism, potentially lessening the impact of social media addiction and hypervigilance related to body dysmorphia issues. This model provides an opportunity to investigate the intersection of cultural expectations and social media use in

affecting self-worth obsession and mental health.

On the other hand, the model has some practical implications in terms of enhancing mental health literacy and conveying an understanding for intervention. With more knowledge, we can develop health campaigns on the one hand against a potential addiction to social media use, and body dysmorphia caused by strangers comparing themselves to models. It could also allow for educational campaigns around the benefits of social media as well and on teaching children that we are comparing ourselves constantly to unattainable standards. Additionally, schools and universities should introduce digital wellness programs that could manage social media addiction by teaching people to adopt a balanced usage of these tools. Policymakers and educators may apply insights from this model to the increase of self-esteem and decrease in reliance on external source verification. The thriving beauty sector in Pakistan could spearhead inclusive and diverse benchmarks of idealized beauty, taking off the heat on young minds bombarded with unrealistic targets by media. It could also encourage social media influencers and celebrities to make and post more pure content that paints over-glamorous aspirations in an undesirable light.

5.2. Limitations and Future Suggestions

The study's sample size may limit the ability to generalize findings to all young people in Rawalpindi and Islamabad, with self-reported data potentially introducing bias. The cross-sectional design restricts causal inference among narcissism, social media addiction, body dysmorphia, and self-esteem, and cultural factors may reduce the relevance of results to other regions. Participants might favor socially acceptable responses on sensitive topics, and the study overlooks the impact of different social media platforms and the long-term effects of addiction and narcissism on psychological well-being. Recommendations for future research include conducting longitudinal studies to track changes over time, comparative analyses across diverse cultural contexts, and examining the effectiveness of

interventions aimed at improving self-esteem. Investigating the unique effects of various social media platforms and other moderating factors, such as peer influence and socioeconomic status, could deepen understanding. Utilizing a broader range of psychological assessments and exploring the roles of emerging technologies and educational initiatives would further enrich the discourse on social media's impact on self-image and mental health.

REFERENCES

Abdollahi, A., Gardanova, Z. R., Ramaiah, P., Zainal, A. G., Abdelbasset, W. K., Asmundson, G. J. G., Chupradit, S., Sultonov, S. K., Pashanova, O. V., & Iswanto, A. H. (2023). Moderating Role of Self-Compassion in the Relationships Between the Three Forms of Perfectionism with Anger, Aggression, and Hostility. Psychological Reports, 126(5), 2383–2402. https://doi.org/10.1177/0033294122108791 1

American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders. American Psychiatric Association. https://doi.org/10.1176/appi.books.9780890 425596

Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. Addictive Behaviors, 64, 287–293. https://doi.org/10.1016/j.addbeh.2016.03.00 6

Boulter, M. W., & Sandgren, S. S. (2022). Me, myself, and my muscles: associations between narcissism and muscle dysmorphia. Eating Disorders, 30(1), 110–116. https://doi.org/10.1080/10640266.2021.193 0348

Brailovskaia, J., Bierhoff, H.-W., Rohmann, E., Raeder, F., & Margraf, J. (2020). The relationship between narcissism, intensity of Facebook use, Facebook flow and Facebook addiction. Addictive Behaviors Reports, 11, 100265. https://doi.org/10.1016/j.abrep.2020.10026 5

Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does

self-love or self-hate lead to violence? Journal of Personality and Social Psychology, 75(1), 219–229. https://doi.org/10.1037/0022-3514.75.1.219

Campbell, W. K., Rudich, E. A., & Sedikides, C. (2002). Narcissism, Self-Esteem, and the Positivity of Self-Views: Two Portraits of Self-Love. Personality and Social Psychology Bulletin, 28(3), 358–368. https://doi.org/10.1177/0146167202286007

Casale, S., & Banchi, V. (2020). Narcissism and problematic social media use: A systematic literature review. Addictive Behaviors Reports, 11, 100252. https://doi.org/10.1016/j.abrep.2020.100252

Casale, S., & Fioravanti, G. (2018). Why narcissists are at risk for developing Facebook addiction: The need to be admired and the need to belong. Addictive Behaviors, 76, 312–318. https://doi.org/10.1016/j.addbeh.2017.08.038

Casale, S., Fioravanti, G., & Rugai, L. (2016). Grandiose and Vulnerable Narcissists: Who Is at Higher Risk for Social Networking Addiction? Cyberpsychology, Behavior and Social Networking, 19(8), 510–515. https://doi.org/10.1089/cyber.2016.0189

Choukas-Bradley, S., Nesi, J., Widman, L., & Higgins, M. K. (2019). Camera-ready: Young women's appearance-related social media consciousness. Psychology of Popular Media Culture, 8(4), 473–481. https://doi.org/10.1037/ppm0000196

Festinger, L. (1954). A Theory of Social Comparison Processes. Human Relations, 7(2), 117–140. https://doi.org/10.1177/001872675400700202

Gumpert, M., Rautio, D., Monzani, B., Jassi, A., Krebs, G., Fernández de la Cruz, L., Mataix-Cols, D., & Jansson-Fröjmark, M. (2024). Psychometric evaluation of the appearance anxiety inventory in adolescents with body dysmorphic disorder. Cognitive Behaviour Therapy, 53(3), 254–266. https://doi.org/10.1080/16506073.2023.2299837

Hyatt, C. S., Sleep, C. E., Lamkin, J., Maples-Keller, J. L., Sedikides, C., Campbell, W. K., & Miller, J. D. (2018). Narcissism and self-esteem: A nomological network analysis. PLOS ONE, 13(8), e0201088. https://doi.org/10.1371/journal.pone.02010

88

Imran, H., Rehman, S., Khanum, S., & Shahzadi, M. (2024). Association of Self-Esteem, Narcissistic Tendencies, and Selfie-Posting Behavior among Young Adults. Pakistan Journal of Health Sciences, 26–31. https://doi.org/10.54393/pjhs.v5i01.1266

Jones, D. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3). Assessment, 21(1), 28–41. https://doi.org/10.1177/1073191113514105

Kircaburun, K., & Griffiths, M. D. (2018). Instagram addiction and the Big Five of personality: The mediating role of self-liking. Journal of Behavioral Addictions, 7(1), 158–170. https://doi.org/10.1556/2006.7.2018.15

Kuck, N., Cafitz, L., Bürkner, P.-C., Hoppen, L., Wilhelm, S., & Buhlmann, U. (2021). Body dysmorphic disorder and self-esteem: a meta-analysis. BMC Psychiatry, 21(1), 310. https://doi.org/10.1186/s12888-021-03185-3

Kuss, D. J., & Griffiths, M. D. (2017). Social Networking Sites and Addiction: Ten Lessons Learned. International Journal of Environmental Research and Public Health, 14(3). https://doi.org/10.3390/ijerph14030311

Liu, Q., Jiang, M., Li, S., & Yang, Y. (2021). Social support, resilience, and self-esteem protect against common mental health problems in early adolescence: A nonrecursive analysis from a two-year longitudinal study. Medicine, 100(4), e24334. https://doi.org/10.1097/MD.0000000000024334

Maddux, J. E. (2014). Mental Health and Self-Esteem. In The Wiley Blackwell Encyclopedia of Health, Illness, Behavior, and Society (pp. 1525–1528). Wiley. https://doi.org/10.1002/9781118410868.wbehibs409

McCRAE, R. R., COSTA, P. T., & JR. (2003). Personality in Adulthood. Taylor & Francis. https://doi.org/10.4324/9780203428412

Muris, P., & Otgaar, H. (2023). Self-Esteem and Self-Compassion: A Narrative Review and Meta-Analysis on Their Links to Psychological Problems and Well-Being. Psychology Research and Behavior Management, 16, 2961–2975. https://doi.org/10.2147/PRBM.S402455

Perrino, J. E., & Ruez Jr., D. R. (2019). Eastern Oyster (&lt;i&gt;Crassostrea virginica&lt;/i&gt;) Filtration Efficiency of Chlorophyll-&lt;i&gt;a&lt;/i&gt; under Dynamic Conditions in the Hudson-Raritan Estuary at Pier 40, New York City. Open Journal of Ecology, 09(07), 238–271. https://doi.org/10.4236/oje.2019.97019

Rao, D. S., & Kumar, A. (2020). Development and Validation of the Social Media Self-Esteem Scale for Adolescents. International Journal of Cyber Behavior, Psychology and Learning, 10(4), 1–13. https://doi.org/10.4018/IJCBPL.2020100101

Rogoza, R., Żemojtel-Piotrowska, M., Kwiatkowska, M. M., & Kwiatkowska, K. (2018). The Bright, the Dark, and the Blue Face of Narcissism: The Spectrum of Narcissism in Its Relations to the Metatraits of Personality, Self-Esteem, and the Nomological Network of Shyness, Loneliness, and Empathy. Frontiers in Psychology, 9. https://doi.org/10.3389/fpsyg.2018.00343

Rosenberg, M. (1965). Society and the Adolescent Self-Image. Princeton University Press. https://doi.org/10.1515/9781400876136

Şahin, C. (2019). Social Media Addiction Scale--Student Form. In PsycTESTS Dataset. https://doi.org/10.1037/t72756-000

Sahraian, A., Janipour, M., Tarjan, A., Zareizadeh, Z., Habibi, P., & Babaei, A. (2022). Body Dysmorphic and Narcissistic Personality Disorder in Cosmetic Rhinoplasty Candidates. Aesthetic Plastic Surgery, 46(1), 332–337. https://doi.org/10.1007/s00266-021-02603-x

Shengyao, Y., Salarzadeh Jenatabadi, H., Mengshi, Y., Minqin, C., Xuefen, L., & Mustafa, Z. (2024). Academic resilience, self-efficacy, and motivation: the role of parenting style. Scientific Reports, 14(1), 5571. https://doi.org/10.1038/s41598-024-55530-7

Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. Psychological Bulletin, 139(1), 213–240. https://doi.org/10.1037/a0028931

Susanto, H., Suryani, E., Astiarani, Y., & Kurniawan, F. (2021). Relationship between Narcissism, Self-Esteem, and Social Media Addiction in Preclinical Medical Students. Althea Medical Journal, 8(1). https://doi.org/10.15850/amj.v8n1.2097

Veale, D., Eshkevari, E., Kanakam, N., Ellison, N., Costa, A., & Werner, T. (2014). The Appearance Anxiety Inventory: Validation of a Process Measure in the Treatment of Body Dysmorphic Disorder. Behavioural and Cognitive Psychotherapy, 42(5), 605–616. https://doi.org/10.1017/S1352465813000556

Yang, C., & Bradford Brown, B. (2016). Online Self-Presentation on Facebook and Self Development During the College Transition. Journal of Youth and Adolescence, 45(2), 402–416. https://doi.org/10.1007/s10964-015-0385-y.