



A Comparison of Body Dysmorphic Disorder in Students with Narcissistic, Histrionic, and Normal Personality Patterns

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Quantitative Study

Abstract

Background: People with body dysmorphic disorder (BDD) have been hypothesized to have schizoid, narcissistic, and obsessional identity characteristics and to be touchy, independent, perfectionistic, and unreliable. Thus, the present study compared BDD in students with narcissistic, histrionic, and normal personality patterns.

Methods: The research method was causal-comparative and cross-sectional. The statistical population of the study included all the students of Ardabil Azad University in the second semester of the 2014-2015 academic year. Using the random cluster method, 600 students were selected and completed the Body Shape Questionnaire (BSQ-34; Cooper et al., 1987), and the narcissistic and histrionic subscales of the Millon Clinical Multiaxial Inventory-III (MCMI-III). The collected data were analyzed using univariate analysis of variance (ANOVA) in SPSS software.

Results: The results showed that there was a significant difference in BDD score between students with narcissistic, histrionic, and normal personality patterns, and the mean BDD scores in the two groups of students with narcissistic and histrionic personality patterns were higher than that in those with normal personality patterns ($P < 0.001$).

Conclusion: It can be stated that these components are among the important influencing variables in personality patterns, so it is necessary to pay attention to these components in the prevention and successful treatment of the affected people.

Keywords: Body dysmorphic disorders; Narcissism; Histrionic personality disorder; Students

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Introduction

Clinical patterns of personality represent those practical characteristics that implicitly show themselves in different areas of behavior and psychological functioning, and it covers an integrated range of psychological issues that may appear in any functional area under the influence of pathology and reflects a pattern of harmful behaviors (Sperandeo et al., 2019). The prevalence of personality disorders in the general population is between 0.5% and 2.5%, and in the clinical population it accounts for about 10% to 30% of the population; this rate is higher for clinical personality patterns (Gawda & Czubak, 2017).

People with a histrionic personality model need a great deal of attention and praise, and they behave in a dramatic and sociable way to ensure their safety (French & Shrestha, 2021). Seductive behavior is common in such patients, regardless of gender. These patients are thrill-seekers and may get into trouble with the law, abuse drugs, or act recklessly (Sadock, Kaplan, & Sadock, 2007).

People with narcissistic personality models value themselves too much and are self-satisfied, arrogant, and proud, they consider themselves entitled, and are self-centered, and if they do not know how to take part in social interactions in order to achieve their intentions, they can be submissive and obedient (Schalkwijk, Luyten, Ingenhoven, & Dekker, 2021). Narcissism has both positive and negative consequences, and some of its positive consequences include the reduction of depression, extroversion, initial agreeableness, and better performance in groups, and thirst for attention, extreme self-confidence, lack of empathy, aggression, (Papageorgiou, Denovan, & Dagnall, 2019), and social incompatibility are some of the negative consequences of narcissism (Czarna, Zajenkowski, Maciantowicz, & Szymaniak, 2021).

Although the antecedents of personality disorder in childhood are not well understood (De Fruyt & De Clercq, 2014), it has been recognized that factors such as adverse childhood events (Gunay-Oge, Pehlivan, & Isikli, 2020), negative social and environmental influences (Bozzatello, Garbarini, Rocca, & Bellino, 2021), emotional and behavioral disorders such as childhood anxiety, fear, and depression (Jiao et al., 2020), exposure to psychological stress, and personal injuries or deficiencies related to interpersonal relationships and environmental stressors in childhood and adolescence contribute to the development of personality disorders (Bozzatello et al., 2021).

Throughout life, a person internalizes an image of his/her body, and biological, environmental, and psychological factors play a role in the formation of the body image (Ramos, Moreno-Maldonado, Moreno, & Rivera, 2019). Mental health professionals have studied body image and found that some people have a constant preoccupation with their appearance, resulting in body deformity disorders (Quittkat, Hartmann, Dusing, Buhlmann, & Vocks, 2019). The findings show that 48-57% of people with body dysmorphic disorder (BDD) meet the diagnostic criteria of at least 2 types of personality disorders, 26% of them suffer from 3 types, and 4% of them suffer from 4 types of personality disorders. Cluster B and C disorders are more prevalent in these people (12-76%), and cluster A is less prevalent (10-40%) (Wever, Wever, & Constantian, 2020). The findings of Qian et al. (2021) showed that 71% of cosmetic surgery applicants receive a diagnosis of personality disorder. According to the results of previous researches, researchers are interested in the comparison of BDD among students with narcissistic personality patterns, students with dramatic personality patterns, and healthy individuals.

Methods

This study was a causal-comparative, cross-sectional research. The statistical

population of this research included all students of Islamic Azad University, Ardabil branch, Iran, in the second semester of the 2014-2015 academic year (the number of these students was about 12,000 according to the vice president of research). The research sample, according to the prevalence of personality patterns, included 600 university students which were selected through multi-stage cluster sampling method. The method was as follows: from the 4 faculties, 5 fields of study were randomly selected from each field, 1 class was randomly selected from each field of study, and the researcher randomly selected 30 people from each class. Then, the selected students were asked to complete the narcissistic and histrionic subscales of the Millon Clinical Multiaxial Inventory-III (MCMI-III) and the Body Shape Questionnaire (BSQ-34), and 3 groups were selected.

Procedure

For the two groups of narcissistic and histrionic personality patterns, students were selected who had a high score (cutoff score of 11 for the narcissistic personality pattern and cutoff score of 12 for the histrionic personality pattern with one standard deviation above the mean) on the narcissistic or histrionic subscales of the MCMI-III. In addition, the control group consisted of healthy students who had a low score on the narcissistic or histrionic subscale of the MCMI-III. After coordinating with the person in charge of education and classroom affairs, the classes were visited. Before each class, an agreement was made with the relevant professor for the researcher to speak for 20 minutes at the end of the class.

All the students present in the class were given verbal information about the research and assurance that their information would remain confidential (not writing the name and surname). After obtaining the consent of the subjects, the students were asked to complete the questionnaires. This whole process took 1 month. The present study received the permission of the Ethics Committee of Islamic Azad University of Ardabil with the code 34079. All participants provided a written informed consent.

Body Shape Questionnaire: The BSQ-34 was developed by Cooper et al. in 1987. The BSQ-34 measures concerns about body shape and has been used to assess body dissatisfaction (Cooper, Taylor, Cooper, & Fairbum, 1987). Each item is scored on a 6-point Likert scale ranging from 1 to 6 [1 (never), 2 (rarely), 3 (sometimes), 4 (often), 5 (very often), and 6 (always)]. The total score of the questionnaire ranges from 34 to 204. A higher score indicates greater dissatisfaction with body shape (Cooper et al., 1987). In Iran, Sadeghi et al. (2023) reported a Cronbach's alpha value of 0.95 and a test-retest of 0.82 for the BSQ-34. The internal consistency of the questionnaire was confirmed by a Cronbach's alpha value of 0.77 in the present study.

To analyze the data, a variety of descriptive statistical techniques were employed such as examining frequency tables, and calculating the mean and standard deviation. Additionally, a univariate analysis of variance (ANOVA) was done using SPSS software (version 23; IBM Corp., Armonk, NY, USA).

Results

In the study, 60.6% of the male students and 39.4% of the females students had a narcissistic personality pattern, while 35.5% of men and 64.5% of women had a histrionic personality model. Moreover, 58.8% of the participants were men, 41.2% were women, 21.2% had narcissistic personality pattern, 32.3% had dramatic personality pattern, and 8.8% were married.

Table 1. Mean and standard deviation of body dysmorphia

Variable	Groups	Mean \pm SD
Body dysmorphia	Narcissistic	96.97 \pm 40.47
	Histrionic	79.19 \pm 26.29
	Normal	52.03 \pm 17.80

SD: Standard deviation

Furthermore, 18.2% of the participants had narcissistic personality pattern and 16.1% had histrionic personality pattern, and 20.6% were employed. In addition, 33.3% had narcissistic models, 32.3% had histrionic models, and 38.2% did not have any disorders. The mean age of the students with narcissistic and histrionic personalities, and healthy students was 22.42 ± 3.13 years, 21.58 ± 2.23 years, and 12.22 ± 1.60 years, respectively.

The mean \pm SD of body dysmorphia of students with narcissistic and histrionic personality patterns, and healthy students were 96.97 ± 40.47 , 79.19 ± 26.29 , and 52.03 ± 17.80 , respectively (Table 1).

As seen in table 2, Levene's test was not significant. Based on the default results of determining the variances in the above-confirmed variables, this test was not significant for body dysmorphia, so the use of parametric tests is unimpeded.

As seen in table 3, there is a significant difference between body dysmorphia of students with narcissistic, histrionic, and normal personality patterns ($P < 0.001$).

As seen in table 4, the mean body dysmorphia scores of students with narcissistic compared to histrionic, narcissistic compared to normal, and histrionic compared to normal personality patterns are significantly higher.

Discussion

The present study was conducted to compare BDD in students with narcissistic, histrionic, and normal personality patterns. The results showed a significant difference in BDD score between the two groups of students with narcissistic and histrionic personality patterns and those with normal personality pattern; the mean BDD scores in the two groups of students with narcissistic and histrionic personality patterns were higher than that of those with normal personality pattern. This finding is consistent with the results of the studies by Loron, Ghaffari, and Poursafargholi (2018), Kucur et al. (2016), and Zojaji, Arshadi, Keshavarz, Mazloum, Golzari, and Khorashadizadeh (2014). BDD, narcissistic personality disorder, and histrionic personality disorders have been reported in many studies as the most common personality disorders in patients seeking cosmetic interventions (Kucur et al., 2016; Zojaji et al., 2014). Loron et al. (2018) demonstrated that narcissistic personality trait was the most common (34.5%) followed by histrionic personality trait (27%), and obsessive personality trait was the least common personality trait (4%) in patients seeking B Botulinum toxin type A (BoNTA) injection. Patients with anxiety disorder had the highest frequency of clinical syndromes (46%) among the participants in this study, somatization had 25.5%, and dysthymia had the lowest frequency (11%). The findings of Gazize and Gharadaghi (2013), Mulken, Bos, Uleman, Muris, Mayer, and Velthuis (2012) also showed that histrionic personality disorder is more common in people seeking cosmetic procedures than in the general population.

Table 2. Levene's test results

Variable	F	df1	df2	P-value
Body dysmorphia	1.627	2	95	0.225

df: Degree of freedom

Table 3. Results of univariate analysis of variance on body dysmorphia of students

Source of change	SS	MS	F	P-value
Between groups	34357.34	309.68	43.13	0.0001
Within group	83604.78	61.99	91.70	0.0010
Total	117962.12	293.03	21.22	0.0001

SS: Sum of squares; MS: Mean squares

Appearance-induced depression is often accompanied by negative personality traits, including low self-esteem, high self-exclusion, and shame (Graboyes et al., 2020). Those individuals with high levels of depression often choose escapism in response to social demands, since social encounters prompt feelings of conversation anxiety and social avoidance (Pauze et al., 2020). In explanation of these findings, it can be stated that self-concept plays a prominent role in character formation; people with a negative self-concept and extreme use of extreme mechanisms face the increase of the possibility of suffering from personality disorders (Bozzatello et al., 2021).

Psychodynamic theories have suggested that BPD arises from precocious distortions in object relations and characteristic patterns of attachment, thus inducing an intolerance of aloneness, hypersensitivity to environmental stimuli, expectation of detachment and hostility from other, and loss of positive memories of dyadic relationships (Bozzatello et al., 2021). In addition, people with BDD usually seek beautification treatments to solve their body image problems.

They are not aware that their problem is a psychiatric disorder and that mental health treatments are often effective for them (Tomas-Aragones & Marron, 2016). If these people are unsatisfied with cosmetic surgery and are looking for subsequent surgeries, they are most likely suffering from BDD and personality disorders in cluster B or C (Higgins & Wysong, 2018). Moreover, the results showed significant differences in BDD between the groups of students with narcissistic and histrionic personality patterns. The mean BDD scores in narcissistic students were higher than that in histrionic students. Another reason is that being excessively worried about how one looks, especially with their appearance, to the point of having a psychiatric disorder called narcissism, can influence a person's decision to have cosmetic surgery. This shows how psychological factors and personality traits play a role in choosing to have cosmetic surgery (Golshani, Mani, Toubaei, Farnia, Sepehry, Alikhani, 2016). It is believed that these patients' self-esteem relies heavily on their appearance, and when their self-esteem is low, they seek surgery (Al Ghadeer et al., 2021).

The limitation of the present research is that the sample was limited to the students of Ardabil Azad University, which limits the generalizability of the results. It is suggested that in order to generalize the results of this research project, it should be carried out in other groups as well. In the current research, due to the obstacles and the lack of facilities to conduct interviews or use the direct method, a questionnaire was used. It is suggested that clinical interviews be used along with questionnaires in future research to obtain more accurate results.

Table 4. Results of least significant difference multiple comparison test on body dysmorphia of students

Variable	Groups	Narcissistic	Histrionic
Body dysmorphia	Narcissistic	-	17.78*
	Histrionic	-17.78*	-
	Normal	-44.94*	-27.16*

Creating and expanding counseling and psychotherapy centers at the university level to help students with personality patterns, identifying the antecedents of personality patterns in childhood, and adjusting the factors that create and maintain personality patterns are also recommended.

Conclusion

The results of the present study, with the aim of comparing BDD in students with narcissistic, dramatic, and normal personality patterns, showed a significant difference in BDD between students with narcissistic, dramatic, and normal personality patterns. As a result, it can be stated that BDD is one of the important factors effective in narcissistic and dramatic personality patterns, and its management requires detailed planning.

Conflict of Interests

Authors have no conflict of interests.

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