JOURNAL OF PSYCHOPATHOLOGY 2022;28:135-141
DOI: 10.36148/2284-0249-473

Original article

Perfectionistic self-presentation and body dysmorphic features in a sample of community-dwelling adult women

Serena Borroni, Giulia Ruotolo, Valentina Grazioli, Andrea Fossati

Vita-Salute San Raffaele University, Faculty of Psychology, Milan, Italy

SUMMARY

Objectives

Perfectionism is considered a vulnerability factor for distress and psychopathology. It has also been linked to Obsessive Compulsive disorder-related disorders, including Body Dysmorphic Disorder (BDD). Moreover, previous studies showed that BDD features were associated to personality pathology. To our knowledge, there are no studies investigating the associations between perfectionistic self – presentation, the interpersonal dimensionn of perfectionism, and BDD features.

Methods

In a sample of 494 Italian community-dwelling adult female participants, we investigated the contribution of Perfectionistic Self- Presentation (PSP) and DSM-5 dysfunctional personality domains in predicting BDD features. Furthermore, we evaluated the associations between PSP and BDD features over and above the role of dysfunctional personality domains. The participants were administered the Perfectionistic Self-Presentation Scale, the Personality Inventory for DSM-5-BF (PID-5-BF), the Body Dysmorphic Disorder Dimensional Scale and the Appearance Anxiety Inventory.

Results

The regression analyses results showed that PSP was significantly associated with BDD features and produced a modest but significant increase in the prediction of BDD features when controlling for the PID-5-BF domains.

Conclusions

Our data seem to support the usefulness of considering PSP as a clinical marker for BDD vulnerability, over and above the role of personality domains, and suggest to assess both dysfunctional personality features and the interpersonal dimensions of PSP in prevention and early intervention programs for BDD.

Key words: perfectionistic self presentation, dysfunctional personality domains, body dysmorphic disorder features, community-dwelling female

Received: October 19, 2022
Accepted: November 2, 2022

Correspondence
Serena Borroni
Vita-Salute San Raffaele University, Faculty of Psychology, via Stamira D'Ancona 20, 20127 Milan, Italy. E-mail: borroni.serena@hsr.it

How to cite this article: Borroni S, Ruotolo G, Grazioli V, et al. Perfectionistic self-presentation and body dysmorphic features in a sample of community-dwelling adult women. Journal of Psychopathology 2022;28:135-141. https://doi.org/10.36148/2284-0249-473

Introduction

Perfectionism can be defined as the proneness to set high standards of performance together with tendencies for overly critical evaluations of one's own behavior, expressed in overconcern for mistakes and uncertainty regarding actions and beliefs [1].

Some evidence [1,2] suggested that perfectionism represents a multidimensional construct including interpersonal and intrapersonal dimensions.

Hewitt et al. (2008) [3] developed a perfectionism model that involves three broad domains of personality: perfectionism traits [2], automatic cognitive process [4] and perfectionistic self-presentation style [5]. Trait perfectionism [2] was conceptualized as three separate and stable dimensions: self-oriented perfectionism, other-oriented perfectionism and socially prescribed perfectionism, while perfectionistic self-presentation (PSP) focuses on the expression of one's supposed perfection to others. According to Hewitt

et al. (2003) [5] model, perfectionistic self-presentation includes three facets: Perfectionistic self-promotion, Nondisplay of Imperfection and Nondisclosure of Imperfection.

Perfectionism is considered a vulnerability factor for distress and personality pathology [6,7]. Moreover, a clinical review [8] suggested that participants with eating disorders, anxiety disorders and mood disorders showed elevated rates of perfectionism. These findings seem to suggest that perfectionism is a transdiagnostic feature, contributing to the onset and maintenance of psychopathology.

Perfectionism has also been linked to Obsessive Compulsive Disorder (OCD) [9] and Obsessive-Compulsive disorder-related disorders, including Body Dysmorphic Disorder (BDD) [10]. BDD is characterised by preoccupation with perceived physical flaws, which the individual considers as "unattractive, abnormal or deformed" [11]. BDD prevalence among adults ranges from 1.7 to 2.4% [11] and data show that 9-15% of dermatologic patients and up to 10% of cosmetic surgery patients have BDD symptoms [11]. People with high levels of perfectionism may focus even on small physical flaws and be highly distressed by them [12]. Moreover, they could think that other people are judging them because of their imperfections, and this could increase their risk to develop BDD [13].

Empirical studies show that both self-oriented and socially prescribed perfectionism represent risk factors for BDD symptoms among students [13]. Moreover, perfectionism and selective attention predicted dysmorphic concerns in a sample of university students [14] and self-oriented perfectionism predicted BDD symptoms among adolescents [15].

To our knowledge, there are no studies investigating the associations between perfectionistic self-presentation and BDD features. However, McGee et al. (2005) [16] found that PSP dimensions, whose goal is to show other people a flawless image, interacted with body image dissatisfaction in predicting eating disorders.

Previous studies found that BDD is also associated with personality disorders (PDs) and dysfunctional personality features. In particular, BDD seems to be associated with paranoid [17,18], schizotypal [18,19], avoidant [17,19-21], obsessive-compulsive PDs [17,20,21] and with dependent [20,21] and borderline PDs [22]. Recently, Somma et al. (2020) [23] found that the personality profile of community – dwelling women with BDD, evaluated with DSM – 5 Section III Alternative Model of Personality Disorders (AMPD), is described by an impairment in self-functioning (AMPD Criterion A) together with AMPD Criterion B dysfunctional features of Depressivity, Anhedonia, Anxiousness, Perseveration, Separation insecurity, and Cognitive and perceptual dysregulation. Moreover, the BDD dysfunctional personological profile was completed by Submissiveness, Unusual beliefs, Eccentricity, Distractibility, and Hostility [23].

Starting from these considerations, the aim of the present study is to evaluate the associations between BDD, PSP and dysfunctional personality traits in an adult community-dwelling sample. In particular we hypothesized that:

1. PSP significantly predicts BDD features;
2. Dysfunctional personality features as listed in DSM – 5 Section III Alternative Model of Personality Disorders (AMPD) significantly predict BDD features;
3. PSP explains a significant amount of variance in BDD scores over and above the effect of dysfunctional personality traits.

This study was carried out in a female sample since evidence suggest that BDD is significantly more prevalent among women [24] and shows significant differences between females and males in age of onset and psychiatric comorbidities [25].

Methods

Subjects

The sample was composed by 494 Italian adult female participants who responded to an online survey (mean age = 32.66 years; SD = 14.26). Two hundred eighty - four (59.5%) participants were unmarried, 176 (35.6%) married, 22 (4.5%) divorced and 2 (0.4%) were widows. The work profile of the sample was characterized by 193 (39.1%) students, 146 (29.6%) office workers, 65 (13.2%) self-employed professionals, 24 (4.9%) unemployed, 23 (4.7%) laborers and 16 (3.2%) housewives. Finally, 14 (2.8%) participants were managers and 13 (2.6%) retirees. Concerning participants' education level, 212 (42.9%) participants had university degree, 206 (41.7%) had high school degree, 46 (9.3%) had junior high school degree and 30 (6.1%) reported post graduate education.

All participants volunteered to take part in the study and provided a written informed consent for participation after a complete and extensive description of the current research. Moreover, the questionnaire began with a detailed explanation of the processing of personal data and respect for privacy. All data were treated anonymously and in an aggregate form. None of the participants received an incentive for participating. The study was conducted in line with the Code of Ethics of the World Medical Association (Declaration of Helsinki).

Measures

Personality Inventory for DSM-5 Brief Form (PID-5-BF) [26]

The PID-5-BF is a 25-item self-report used to assess the five DSM-5 Section III domains of Negative Af-

fectivity, Detachment, Antagonism, Disinhibition, and Psychoticism. Each domain scale consists of 5 items and each PID-5-BF item is scored on only one PID-5-BF domain scale. The PID-5-BF items come from the 220-item self-report PID-5 and each PID-5-BF item is rated on a 4-point scale (i.e., 0 = very false or often false; 1 = sometimes or somewhat false; 2 = sometimes or somewhat true; 3 = very true or often true). Moreover, the PID-5-BF yields a score for the overall measure. The Italian version of PID-5-BF showed adequate psychometric properties [27].

Perfectionistic Self – Presentation Scale (PSPS) [5]

The PSPS is a 27 item self – report measure that evaluates the multidimensional nature of PSP. It is composed by 3 subscales: Perfectionistic self-promotion, Nondisplay of imperfection and Nondisclosure of imperfection. Items are scored on a 7 – point Likert scale ranging from "I totally disagree" to "I totally agree". Reliability and validity data are showed in both English [5] and Italian [28].

Body Dysmorphic Disorder Dimensional Scale (BDD-D) [29]

The BDD – D is a 5-item scale developed to assess the DSM-5 diagnostic criteria for BDD. All items are rated on a 5 – point Likert scale. The BDD – D also yields a total score that is the sum of the individual items scores. The BDD-D demonstrated adequate psychometric properties both in the original [29] and in the Italian version [23].

Appearance Anxiety Inventory (AAI) [30]

The AAI is a self-report questionnaire comprised of 10 items that evaluates the cognitive processes and safety seeking behaviors associated to a distorted body image and shame in participants with BDD. Participants scored each item on a 5 – point Likert scale ranging from 0 ("Not at all") to 4 ("All the time"). The AAI total score is the sum of the item scores. Adequate psychometric properties have been provided for the original [30] and the Italian version [23].

Data analysis

Cronbach's alpha coefficient was used to evaluate the internal consistency reliability of the measures that were used in this study. Pearson's r coefficient was used to evaluate the association between continuous variables. In all bivariate analyses, the nominal significance level (i.e., $p < 0.05$) was corrected according to the Bonferroni procedure for multiple comparisons.

To investigate the predictors of BDD-D and AAI, we carried out hierarchical regression analyses. Only potential predictors that were significantly associated with the dependent variables following the Bonferroni correction were included in the model. In the first models we entered as predictors of BDD-D and AAI scores the PSPS scales whereas in the next models we considered as predictors the PID-5-BF domains scores. In both models the participant's age was entered in the first step. Finally, we evaluated whether the PSPS scales predicted BDD-D and AAI scores over and above the PID-5-BF dysfunctional domains. The multicollinearity was tested by means of variance inflation factors (VIFs), with 2.5 or higher used as a cut-off for identifying multicollinearity that could negatively impact the regression models [31]. To identify eventual first-order linear auto-correlations, Durbin-Watson values were computed: values between 1.5 and 2.5 were considered acceptable.

Results

In Table I are listed the descriptive statistics, the internal consistency values and the correlations with participant's age.

The bivariate associations of PSPS and PID-5-BF scales with BDD-D and AAI are listed in Table II.

In all hierarchical regression analyses, the participants' age was entered in the Step 1.

The first model showed that, when the PSPS scales were entered in the regression equation predicting BDD-D, the adjusted R^2 value was .14, $p < .001$; Perfectionistic Self-Promotion and Nondisclosure of Imperfection resulted significant predictors ($\beta = .14$, $p < .05$ and $\beta = .20$, $p < .001$ respectively). We obtained similar results when we considered the AAI score as dependent variable: the PSPS scales explained the 9% of the variance (adjusted $R^2 = .19$, $p < .001$), Perfectionistic Self -Promotion ($\beta = .20$, $p < .001$) and Nondisplay of Imperfection ($\beta = .22$, $p < .001$) were found as significant predictors of AAI score.

When we considered the PID-5-BF domain scores as independent variables and the BDD-D as dependent variable, the adjusted R^2 value was .21, $p < .001$; the BDD-D score was significantly predicted by Negative Affectivity ($\beta = .27$, $p < .001$), Detachment ($\beta = .15$, $p < .001$), Antagonism ($\beta = .12$, $p < .01$) and Psychoticism ($\beta = .11$, $p < .05$). Moreover, Negative Affectivity ($\beta = .27$, $p < .001$), Detachment ($\beta = .12$, $p < .005$) and Antagonism ($\beta = .15$, $p < .001$) were associated with AAI score; the model explained the 22% of the variance (adjusted $R^2 = .22$, $p < .001$). In all regression models all the VIFs were < 2.5, excluding multicollinearity problems. Also, all the Durbin-Watson values were between the two critical values of $1.5 < d < 2.5$, showing that there was no first-order linear auto-correlation in our multiple linear regression data.

Table III presents the hierarchical regression analyses results. These models considered the BDD-D and the AAI scores as dependent variables. The PID-5-BF domain scales were entered in the regression equation in Step 2 and the PSPS scales were added as predictors in the equation in Step 3.

TABLE I. *Perfectionistic Self-Presentation Scale, Personality Inventory for DSM-5-Brief Form, Body Dysmorphic Disorder Dimensional Scale, Appearance Anxiety Inventory: descriptive statistics, Cronbach a values and correlation with age (N = 494).*

	M	*SD*	α	*r*
PSPS scales				
Perfectionistic self-promotion	38.69	12.15	.88	.52
Nondisplay of imperfection	42.10	12.42	.88	.53
Nondisclosure of imperfection	22.94	7.50	.76	.36
PID-5-BF				
Negative affectivity	1.61	.69	.70	.52
Detachment	.79	.60	.66	.30
Antagonism	.52	.51	.72	.36
Disinhibition	.92	.62	.71	.23
Psychoticism	.95	.74	.80	.38
BDD-D	5.75	4.22	.92	-.34
AAI	13.84	9.52	.91	-.46

Note. PSPS: Perfectionistic Self-Presentation Scale; PID-5-BF: Personality Inventory for DSM-5-Brief Form; BDD-D: Body Dysmorphic Disorder Dimensional Scale; AAI: Appearance Anxiety Inventory; α: Cronbach's alpha; r: Pearson Correlation coefficient

TABLE II. *Bivariate Pearson correlation analyses between Perfectionistic Self-Presentation Scale, Personality Inventory for DSM-5-Brief Form, Body Dysmorphic Disorder Dimensional Scale and Appearance Anxiety Inventory (N = 494).*

	BDD-D *r*	AAI *r*
PSPS scales		
Perfectionistic self-promotion	.42*	.52*
Nondisplay of imperfection	.41*	.53*
Nondisclosure of imperfection	.38*	.38*
PID-5-BF		
Negative affectivity	.48*	.52*
Detachment	.32*	.30*
Antagonism	.31*	.36*
Disinhibition	.17*	.23*
Psychoticism	.37*	.38*

*Note. PSPS: Perfectionistic Self-Presentation Scale; PID-5-BF: Personality Inventory for DSM-5-Brief Form; BDD-D: Body Dysmorphic Disorder Dimensional Scale; AAI: Appearance Anxiety Inventory; r: Pearson Correlation coefficient. The nominal significance level was corrected according to Bonferroni Correction and set to *p < .003*

Discussion

The present study aims at evaluating the role of perfectionistic self-presentation in predicting BDD over and above the PID-5-BF personality domains. In particular, we operationalized BDD considering both the intense preoccupation with perceived flaws in one's own physical appearance, which appear minimal or completely unobservable to others (assessed by BDD-D) and the cognitive processes and safety seeking behaviors associated to a distorted body image and shame (assessed by AAI).

Our sample was composed by adult community-dwelling female participants since most studies carried out in the general population reported a higher prevalence in women [24,32] and suggested that women and men differ in body areas of concern [33].

Consistent with our hypothesis and in line with previous evidences [13,15,34], in the present study perfectionism was linked to BDD features. Our findings seemed to extend previous work, suggesting the role of the interpersonal expression of perfectionism in BDD. Specifically, our regression analyses results showed that the proneness to actively try to seem perfect and the tendency to conceal and avoid behavioural displays of imperfection significantly predicted BDD-D and AAI scores. In particular, Nondisclosure of Imperfection (i.e., avoiding and evading verbal displays that reveal oneself as imperfect) was associated with BDD-D and Nondisplay of Imperfection was a significant predictor of AAI score.

In the present sample, according to our hypothesis, we found a significant role of DSM-5 dysfunctional personality domains in predicting both BDD-D and AAI scores. In particular, Negative Affectivity, Detachment, Antagonism, and Psychoticism seemed to represent significant predictors of BDD-D score whereas Negative Affectivity, Detachment and Antagonism were associated with AAI score. Consistent with previous studies [21,23,35], in the

TABLE III. *The Perfectionistic Self-Presentation Scale Scales, and the Personality Inventory for DSM-5-Brief Form domains scales as Predictors of the Body Dysmorphic Disorder Dimensional Scale and the Appearance Anxiety Inventory: summary table of hierarchical regression analyses (N = 494).*

	BDD-D		AAI	
	β	*VIF*	β	*VIF*
Age	-.34***	1.001	-.46***	1.0
Change in R^2 value	.12***		.21***	
Age	-.24***	1.109	-.36***	1.099
Negative affectivity	.27***	1.642	.31***	1.371
Detachment	.15**	1.339	.15***	1.218
Antagonism	.11*	1.325	.16***	1.203
Psychoticism	.10*	1.221	-	-
Change in R^2 value	.21***		.21***	
Age	-.21***	1.170	-.28***	1.202
Negative affectivity	.21***	1.642	.23***	1.469
Detachment	.11*	1.644	.12**	1.260
Antagonism	.06	1.358	.08*	1.309
Psychoticism	.11*	1.621	-	-
Perfectionistic self-promotion	.14*	2.059	.17**	2.635
Nondisplay of imperfection	.08	2.090	.13*	2.729
Nondisclosure of imperfection			-	-
Change in R^2 value	.03***		.05***	
Model R^2	.36***		.47***	

*** $p < .001$; ** $p < .005$; * $p < .05$

present sample, BDD was associated with personality psychopathology. In particular, the personality profile of BDD was characterized by the tendency to experience high levels of negative emotions (i.e. Negativity Affectivity, the dysfunctional variant of high Neuroticism) and by the avoidance of socioemotional experiences (i.e. Detachment, the dysfunctional variant of low Extraversion). Moreover, in line with other data [17,18,23], behaviors that put the individual in contrast with other people, including for example expectations of special treatment, as well as callous antipathy towards others (i.e. Antagonism, the dysfunctional variant of low Agreeableness) and unusual behaviors and cognitions (i. e. Psychoticism) represented core components of the dysfunctional personality profile associated with BDD.

Interestingly, the results of the hierarchical regression analyses showed that the PSPS scales produced a modest but significant increase in the prediction of BDD features when controlling for the PID-5-BF domains (i.e., beyond the effect of the PID-5-BF domain scales). In other words, at least in our sample of adult females, these results seemed to suggest the importance of the self-presentation components of perfectionism in BDD features over and above the role of dysfunctional personality traits. Our data could have relevant theoretical and clinical implications. For example, the extent to which individuals are invested in appearing perfect to others and in avoiding displays or disclosures of their perceived imperfections could clarify why they are excessively concerned with perceived physical flaws, experiencing anxiety and shame, and they try to hide or repeatedly check them [25]. Our results, if replicated, suggest that BDD risk is influenced by multiple factors [12] and support the usefulness of considering PSP as a clinical marker for BDD vulnerability. Moreover, our data suggest assessing both dysfunctional personality features and the interpersonal dimensions of PSP in prevention and early intervention programs for BDD.

Our findings should be considered in light of several limitations. First, participants were female adult volunteers; this represents a convenient study group that limits the generalizability of the data. All participants were nonclinical volunteers; this limits the generalizability of our findings to clinical populations. Moreover, we relied only on self-report measures for both dependent variables and independent variables; method effects may

have spuriously biased our results. These limitations stress the need for further replications and extensions before accepting our results.

Conclusions

Notwithstanding these limitations, our results seemed to suggest the importance to consider the perfectionistic self-presentation style as a relevant component of BDD. Therefore, the hope for future studies is to further investigate the role of PSP and personality domains in male participants and in clinical samples. Moreover, it could be interesting to evaluated PSP and personality domains among cosmetic surgery patients or dermatologic patients with BDD.

Conflict of interest statement

The Authors declare no conflict of interest.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Author contributions

SB: conceptualization, data collection, analysis and interpretation of data, writing -original draft; GR: data collection, analysis and interpretation of data, writing -original draft; VG: data collection, review and editing; AF: revising article critically, supervision.

Ethical consideration

At the beginning of the questionnaire ethical considerations of the study were explained. All participants volunteered to take part in the study, they did not receive incentive for participating. Moreover, they provided a written informed consent. The confidentiality and anonymous nature of the information was guaranteed. The study was conducted in line with the Code of Ethics of the World Medical Association (Declaration of Helsinki).

References

1 Frost RO, Marten P, Lahart C, et al. The dimensions of perfectionism. Cogn Behav Ther 1990;14:449-468. https://doi.org/10.1007/BF01172967

2 Hewitt PL, Flett, GL. Perfectionism in the self and social contexts: conceptualization, assessment, and association with psychopathology. J Pers Soc Psychol 1991;60:456. https://doi.org/10.1037/0022-3514.60.3.456

3 Hewitt PL, Habke AM, Lee-Baggley DL, et al. The impact of perfectionistic self-presentation on the cognitive, affective, and physiological experience of a clinical interview. Psychiatry 2008;71:93-122. https://doi.org/10.1521/psyc.2008.71.2.93

4 Flett GL, Hewitt PL, Blankstein KR, et al. Psychological distress and the frequency of perfectionistic thinking. J Pers Soc Psychol 1998;75:1363-1381. https://doi.org/10.1037/0022-3514.75.5.1363

5 Hewitt PL, Flett GL, Sherry SB, et al. The interpersonal expression of perfection: perfectionistic self-presentation and psychological distress. J Pers Soc Psychol 2003;84:1303. https://doi.org/10.1037/0022-3514.84.6.1303

6 Sherry SB, Hewitt PL, Flett GL, et al. Trait perfectionism and perfectionistic self-presentation in personality pathology. Pers Individ 2007;42:477-490. https://doi.org/10.1016/j.paid.2006.07.026

7 Stoeber J. Multidimensional perfectionism and the DSM-5 personality traits. Pers Individ 2014;64,115-120. https://doi.org/10.1016/j.paid.2014.02.031

8 Egan SJ, Wade TD, Shafran R. Perfectionism as a transdiagnostic process: a clinical review. Clin Psychol Rev 2011;31:203-212. https://doi.org/10.1016/j.cpr.2010.04.009

9 Pinto A, Dargani N, Wheaton MG, et al. Perfectionism in obsessive-compulsive disorder and related disorders: what should treating clinicians know? Journal of Obsessive-Compulsive and Related Disorders 2017;12:102-108. https://doi.org/10.1016/j.jocrd.2017.01.001

10 Veale D. Advances in a cognitive behavioural model of body dysmorphic disorder. Body Image 2004;1:113-125. https://doi.org/10.1016/S1740-1445(03)00009-3

11 American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed. Washington, DC: APA 2013.

12 Wilhelm S. Feeling good about the way you look: a program for overcoming body image problems. New York, NY: Guilford Press 2006

13 Bartsch D. Prevalence of body dysmorphic disorder symptoms and associated clinical features among Australian university students. Clin Psychol 2007;11:16-23. https://doi.org/10.1080/13284200601178532

14 Johnson S, Williamson P, Wade TD. Perfectionism and selective attention predict dysmorphic concern in an Australian university population. Aust Psychol 2020;55:143-155. https://doi.org/10.1111/ap.12423

15 Krebs G, Quinn R, Jassi A. Is perfectionism a risk factor for adolescent body dysmorphic symptoms? Evidence for a prospective association. J Obsessive Compuls Relat Disord 2019;22:100445. https://doi.org/10.1016/j.jocrd.2019.100445

16 McGee BJ, Hewitt PL, Sherry SB, et al. Perfectionistic self-presentation, body image, and eating disorder symptoms. Body Image 2005;2:29-40. https://doi.org/10.1016/j.bodyim.2005.01.002

17 Veale D, Boocock A, Gournay K, et al. Body dismorphic disorders: a survey oh fifty cases. B J Psych 1996;169;196-201. https://doi.org/10.1192/bjp.169.2.196

18 Bellino S, Zizza M, Paradiso E, et al. Dysmorphic concern symptoms and personality disorders: a clinical investigation in patients seeking cosmetic surgery. Psychiatry Res 2006;144,73-78. https://doi.org/10.1016/j.psychres.2005.06.010

19 He W, Shen C, Wang C, et al. Body dysmorphic disorder patients: Their affective states, personality disorder functioning styles and body image concerns. Pers Individ 2018;131:1-6. https://doi.org/10.1016/j.paid.2018.04.015

20 Cohen LJ, Kingston P, Bell A, et al. Comorbid personality impairment in body dysmorphic disorder. Compr 2000;41:4-12. https://doi.org/10.1016/S0010-440X(00)90124-X

21 Phillips KA, McElroy SL. Personality disorders and traits in patients with body dysmorphic disorder. Compr 2000;41:229-236. https://doi.org/10.1053/comp.2000.7429

22 Neziroglu F, McKay D, Todaro J, et al. Effect of cognitive behavior therapy on persons with body dysmorphic disorder and comorbid axis II diagnoses. Behav Ther 1996;277:67-77. https://doi.org/10.1016/0887-6185(95)00034-8

[23] Somma A, Krueger RF, Markon KE, et al. Body dysmorphic disorder in the perspective of the alternative DSM-5 model for personality disorder: a study on italian community-dwelling women. J Nerv Ment Dis 2020;208:974-981. https://doi.org/10.1097/NMD.0000000000001239

[24] Higgins S, Wysong A. Cosmetic surgery and body dysmorphic disorder – an update. Int J Womens Dermatol 2018;4:43-48. https://doi.org/10.1016/j.ijwd.2017.09.007

[25] Phillips KA, Menard W, Fay C. Gender similarities and differences in 200 individuals with body dysmorphic disorder. Compr Psychiatry 2006;47:77-87. https://doi.org/10.1016/j.comppsych.2005.07.002

[26] Krueger RF, Derringer J, Markon KE, et al. The Personality Inventory for DSM-5-Brief Form (PID-5-BF)-Adult. Washington, DC: APA 2013a.

[27] Fossati A, Borroni S, Somma A, et al. PID-5 Manuale e guida all'uso clinico della versione italiana [PID-5 manual and guide to clinical use for the Italian version]. Milan: Raffaello Cortina 2021.

[28] Borroni S, Bortolla R, Lombardi LM, et al. The Italian version of Perfectionistic Self-Presentation Scale: psychometric proprieties and its associations with pathological narcissism and adult attachment in an adult non clinical sample. Personal Ment Health 2016;10:130-141. https://doi.org/10.1002/pmh.1328

[29] LeBeau RT, Mischel ER, Simpson HB, et al. Preliminary assessment of obsessive-compulsive spectrum disorder scales for DSM-5. J Obsessive Compuls Relat Disord 2013;2:114-118. https://doi.org/10.1016/j.jocrd.2013.01.005

[30] Veale D, Eshkevari E, Kanakam N, et al. The appearance anxiety inventory: validation of a process measure in the treatment of body dysmorphic disorder. Behav Cogn Psychother 2014;42:605-616. https://doi.org/10.1017/S1352465813000556

[31] Midi H, Sarkar SK, Rana S. Collinearity diagnostics of binary logistic regression model. J. Interdiscip Math 2010;13:253-267. https://doi.org/10.1080/09720502.2010.10700699

[32] Buhlmann U, Glaesmer H, Mewes R, et al. Updates on the prevalence of body dysmorphic disorder: a population-based survey. Psychiatry Res 2010178:171-175. https://doi.org/10.1016/j.psychres.2009.05.002

[33] Malcolm A, Pikoos TD, Castle DJ, et al. An update on gender differences in major symptom phenomenology among adults with body dysmorphic disorder. Psychiatry Res 2021;295:113619. https://doi.org/10.1016/j.psychres.2020.113619

[34] Arji M, Borjali A, Sohrabi F, et al. Role of perfectionism and body image in the prediction of body dysmorphic disorder symptoms. J Neur Psych Phys 2016;3:62-65. https://doi.org/10.5812/ajnpp.42560

[35] Fang A, Porth R, Phillips KA, et al. Personality as a predictor of treatment response to escitalopram in adults with body dysmorphic disorder. J Psych Pract 2019;25:347. https://doi.org/10.1097/PRA.0000000000000415