

## Original Article

# The Relationship between Body Dysmorphic Disorder Symptoms and Sexual Functioning in Women mediated by Self-esteem

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## Abstract

The aim of the present study was to determine the relationship between body dysmorphic disorder symptoms and sexual functioning in women through self-esteem. Therefore, 378 married female students from the University of Tabriz were selected using a multi-stage random sampling. Data was collected using the Rosen Women's Sexual Functioning Questionnaire, the Littleton Body Image concern inventory (BICI), and the Rosenberg Self-Esteem Scale (RSES). After statistical calculations using AMOS<sub>24</sub> software and Structural equation method, data analysis indicated that the measured model had a good fit with the theoretical model, and self-esteem fully mediated the relationship. The results showed that there is no significant direct relationship between body dysmorphic disorder and sexual functioning in women. Additionally, there was a significant negative relationship between body dysmorphic disorder and self-esteem, as well as a significant positive relationship between self-esteem and sexual functioning in women. Hence, it can be concluded that a decrease in self-esteem levels in women with body dysmorphic disorder may lead to the emergence or exacerbation of their sexual functioning issues, and by increasing self-esteem in these women, it is possible to prevent a decline in their sexual functioning.

## Keywords

Body dysmorphic disorder  
Sexual dysfunction  
Self-esteem

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## Introduction

Sexual behaviors play a fundamental role in human well-being and quality of life. The considerable influence of sexual activity on intimate relationships underscores how sexual functioning can significantly affect mental health and overall life satisfaction. In recent years, factors such as increased life expectancy, changes in work-life balance, parenting practices, expanded leisure time, and the pervasive exposure to sexual content in mass media have amplified public interest in and emphasis on sexual activity (Pozza et al., 2020).

Sexual activity typically progresses through four phases, and dysfunction may occur at any stage: (1) desire, (2) arousal, (3) orgasm, and (4) resolution. Sexual dysfunction (SD) refers to disruptions in these stages or the presence of pain during sexual activity. These dysfunctions include hypoactive sexual desire disorder, sexual arousal disorder, erectile dysfunction, female orgasmic disorder, delayed ejaculation, premature ejaculation, and genito-pelvic pain/penetration disorder (APA, 2013). Research indicates that sexual functioning is a complex, multidimensional phenomenon influenced

by sociocultural norms, interpersonal dynamics, communication patterns, pharmacological interventions, cognitive variables, and underlying psychopathologies—all of which interact with one another (Thakurta et al., 2016; Herder et al., 2023; Koolwal et al., 2020).

The prevalence of female sexual dysfunction is estimated to be between 38%. (Salari et al., 2025; Erdos et al., 2023). Reports indicate that orgasmic disorder is prevalent in Iran it reaches 55.6% (Moghadam et al., 2024). Research shows that psychiatric disorders and symptoms may directly or indirectly contribute to the development of sexual dysfunction (Herder et al., 2023; Yahag et al., 2024). Psychological data suggest that sexual dysfunction is associated with certain disorders, such as body dysmorphic disorder (BDD) (Houshyar, 2018; Mojtabae et al., 2015; Hartmann et al., 2015; Pavanello Decaro et al., 2022; Tran, 2024). BDD is characterized by a preoccupation with one or more perceived or slight defects in physical appearance; individuals with this disorder often believe they are unattractive, deformed, or abnormal in appearance. BDD may be accompanied by good, poor, or absent insight (APA, 2013). While some fixate on a specific body part (e.g., the nose), many report

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dissatisfaction with multiple features (Minty & Minty, 2021; Phillips, 2017). These individuals tend to overvalue physical appearance, resulting in excessive distress over even minor imperfections (Blakey et al., 2016; Fardouly et al., 2022; Mikaeili et al., 2025). Many attempt to conceal their perceived flaws through clothing, hairstyles, or cosmetics, and frequently avoid social settings—behaviors that can significantly disrupt social, academic, and familial functioning (Arji et al., 2016; Mataix et al., 2015; Ghosh & Blair, 2025).

Studies have demonstrated a relationship between SD and BDD, indicating that individuals with BDD often report sexual dysfunction (Hoshiar, 2018; Mojtabae et al., 2015; Hartmann et al., 2015; Pavanello decaro et al., 2022; Tran, 2024, Mufassery et al., 2025). People with negative body image often avoid sexual activity due to low sexual satisfaction, which may be driven by anxiety and fear of being judged for their bodies and appearance. Chronic self-focus and concerns related to body image can interfere with sexual performance, leading to reduced sexual activity, discomfort during sex, or difficulty achieving orgasm. In more severe cases, body image disturbances can lead to specific sexual dysfunctions such as orgasmic disorder, erectile dysfunction, vaginismus, and other sexual disorders (Tran, 2024).

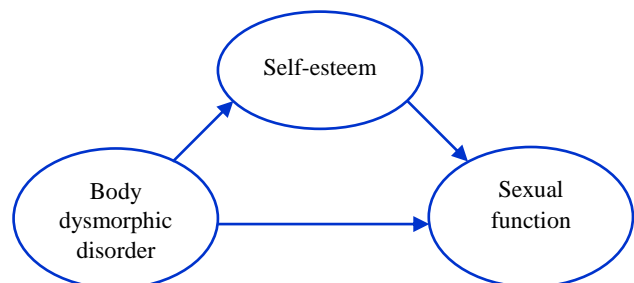
However, a review of previous research suggests that the relationship between BDD and SD symptoms is not straightforward or uniform, as conflicting findings have been reported. Some studies have confirmed the association between BDD and SD (Houshyar, 2018; Pavanello Decaro et al., 2022; Tran, 2024), while others have not found such a relationship (Haghtalab et al., 2022; Noroozi Dashtaki et al., 2024). These inconsistencies suggest that certain mediating factors may influence the relationship between BDD and SD symptoms—factors that, depending on their intensity, can either amplify or neutralize the effects of BDD on sexual dysfunction.

From this perspective, one factor that may play a mediating role in the relationship between BDD and SD is self-esteem (Noroozi Dashtaki et al., 2024). The Canadian Mental Health Association defines self-esteem as the degree to which individuals view themselves as capable, valuable, and worthy of respect. It involves accepting one's strengths and limitations while striving toward realistic goals (Murad, 2020). Self-esteem is shaped by a series of personal evaluations and experiences, resulting in either a positive or negative self-perception (Murad, 2020; Tabrizi Shahrovi, 2023). Several factors—such as the environment, personal behaviors and habits, abilities and skills, values and beliefs, and achievement attributions—can influence self-esteem (Tabrizi Shahrovi, 2023).

Research indicates a negative relationship between BDD and self-esteem; in other words, BDD symptoms tend to lower self-esteem. Individuals with BDD often have a negative body image and reduced self-worth (Kuck et al., 2021). Simultaneously, self-esteem has been shown to play a critical role in sexual functioning. Low self-esteem can exacerbate cognitive distortions, increase sexual

anxiety, and contribute to various sexual disorders (Cole, 1997; Cihan & Cihan, 2023; Kong et al., 2024). Individuals with low self-esteem and negative body image frequently report lower levels of sexual assertiveness and satisfaction (Yamamiya et al., 2006; Gökçe & Karakas, 2024). In contrast, individuals with a positive body image and high self-esteem experience better sexual functioning (Mojtabae et al., 2015).

Given the significant impact of sexual dysfunction on various aspects of individuals' lives, understanding the underlying cognitive, emotional, and mediating factors involved in the pathology of this disorder is crucial for effective treatment, prevention, and reduction of its psychological and medical costs (Mikaeili et al., 2023). However, there is still a lack of research specifically exploring the exact variables that initiate or intensify SD (Koolwal et al., 2020). If the hypothesis of the present study is confirmed, it will enhance the existing body of knowledge and suggest that targeting self-esteem in therapeutic settings for women with negative body image may help prevent the development of sexual dysfunction. Although prior studies have explored the relationship between BDD and SD symptoms, the potential mediating role of other variables—such as self-esteem—has not been simultaneously examined. Furthermore, no integrated model has yet been developed to clarify the structural relationships among these variables and SD. Accordingly, the aim of the present study is to examine the following hypothesis: self-esteem significantly mediates the relationship between body dysmorphic disorder and sexual dysfunction in women.



**Figure 1.** Conceptual model of the relationship between Body Dysmorphic Disorder (BDD) symptoms and women's sexual functioning, mediated by self-esteem

## Method

### Participants

This study is fundamental in nature and descriptive-correlational in terms of data collection method, with a cross-sectional design. The population comprised married female students at the University of Tabriz during the 2024–2025 academic year. Based on preliminary estimates obtained from the office of academic affairs at the University of Tabriz, the population consists of approximately 1080 married female students enrolled at the university. A multi-stage random sampling method was used, and based on Krejcie and Morgan's table (1970), a sample size of 378 participants was determined. Several faculties were randomly selected, and within each

faculty, classes were randomly chosen. All married female students attending those classes were included as the final sample.

The questionnaires were then distributed for completion. Data were analyzed using descriptive statistics (mean, standard deviation, minimum and maximum scores, skewness, kurtosis, frequency, and percentage), Pearson correlation tests, structural equation modeling (SEM), and bootstrapping to examine the mediating effect. SPSS version 26 and AMOS version 24 were used for statistical analyses.

## Instrument

### *Body Image Concern Inventory (BICI) – Littleton et al. (2005):*

The BICI consists of 19 items across two components: (1) dissatisfaction and embarrassment regarding one's appearance, checking, and concealing perceived flaws; (2) the degree to which appearance-related concerns interfere with social functioning. Each item is rated on a 5-point Likert scale ranging from (1) never to (5) always. The total score ranges from 19 to 95, with higher scores indicating greater dissatisfaction. In Iran, [Bassaknejad and Ghaffari \(2007\)](#) reported Cronbach's alpha: 0.87, indicating high internal consistency and validity supported through exploratory factor analysis and convergent validity.

### *Rosenberg Self-Esteem Scale (RSES) - Rosenberg (1965):*

The Rosenberg Self-Esteem Scale, consisting of 10 items, was used to measure self-esteem. All items are rated on a 5-point Likert scale (strongly agree to strongly disagree). A cutoff score of 34 was used to differentiate high and low self-esteem. [Kendler et al. \(2000\)](#) reported an internal consistency (Cronbach's alpha) of 0.89. [Tafarodi and Sawan \(2001\)](#) reported a test-retest reliability of 0.80,

indicating acceptable reliability. In Iran [Sharifi Daramadi \(1999\)](#) reported Cronbach's alpha: ranges between 0.79 and 0.85 and validity confirmed through construct and convergent validity.

### *Female Sexual Function Index (FSFI) – Rosen et al. (2000):*

This questionnaire was developed by Rosen and colleagues in 2000 and validated in Iran [Mohammadi et al. \(2008\)](#), reported Cronbach's alpha: 0.94 for the total scale, ranges from 0.81 to 0.91 for subscales. Validity supported through confirmatory factor analysis and correlation with marital satisfaction. The FSFI contains 19 items covering six domains: desire, arousal, lubrication, orgasm, satisfaction, and pain. Each domain has a maximum score of 6, with a total possible score of 36.

### *Procedure*

Participants were included in the study if they met the following conditions: being legally married at the time of data collection. Identifying as female. Providing informed consent for voluntary participation in the research.

Participants were excluded from the study based on the following criteria: self-reported history of severe psychiatric disorders (schizophrenia, bipolar disorder). Self-report of chronic physical illnesses or gynecological conditions that may independently affect sexual functioning. Current pregnancy. Submission of incomplete or inconsistent questionnaire responses.

## Results

The initial sample included data from 378 participants. After removing outliers, the final dataset comprised 310 married female students aged between 20 and 52 years. Descriptive statistics including mean, standard deviation, skewness, and kurtosis for the study variables are presented in Table 1.

**Table 1.** Descriptive statistics and normality indicators for study variables

| Variables       | mean | SD   | skewness | kurtosis |
|-----------------|------|------|----------|----------|
| Bodydysmorphic  | 49.7 | 15.4 | 0.46     | 0.02     |
| Self-esteem     | 16.2 | 2.5  | -0.44    | -0.03    |
| Sexual function | 31.4 | 11.7 | 0.31     | -0.51    |

Table 1 indicators show that the assumption of normality for the distribution of the studied variables has been met, as the values of skewness and kurtosis for all variables fall within the acceptable range of -3 to +3.

Table 2 examines the bivariate correlations among the latent variables of the study. Also, based on the correlation matrix, the data were analyzed using structural

equation modeling (SEM). The assumptions underlying SEM—such as the interval scale measurement of variables, absence of multicollinearity (assessed via Variance Inflation Factor (VIF) and Tolerance indices), and independence of residuals (checked via Durbin-Watson test)—were examined. The results are shown in Table 2.

**Table 2.** Correlation matrix of the studied variables and Assumptions of multicollinearity and independence of residuals for predictor variables

| Variables       | 1        | 2       | 3 | VIF  | tolerance | Durbin-Watson |
|-----------------|----------|---------|---|------|-----------|---------------|
| Bodydysmorphic  | 1        |         |   | 1.48 | 0.67      | -             |
| Self-esteem     | -0.57*** | 1       |   | 1.48 | 0.67      | -             |
| Sexual function | -0.17**  | 0.19*** | 1 | -    | -         | 1.9           |

\*:  $p < 0.05$  \*\*:  $p < 0.01$  \*\*\*:  $p < 0.0001$

The results presented in Table 2 indicate that: There is a significant negative correlation between body dysmorphic disorder and self-esteem ( $r = -0.57$ ,  $p < 0.0001$ ),

A significant negative correlation exists between body dysmorphic disorder and sexual function ( $r = -0.17$ ,  $p < 0.001$ ), and a significant positive correlation is observed

between self-esteem and sexual function ( $r=0.19, p < 0.0001$ ).

Also As illustrated in Table 2, the assumption of no multicollinearity among the predictor and mediator variables has been met, as VIF values are below the critical threshold of 2 and Tolerance values exceed 0.5. Additionally, the assumption of independent residuals is supported since the Durbin-Watson value (1.85) falls within the acceptable range of 1.5 to 2.5.

Following the verification of assumptions, structural equation modeling was conducted to address the main research question: Does the proposed model fit the empirical data? The initial model showed a poor fit and thus required modifications. In order to refine the model, the significance of direct and indirect paths was examined. The direct path from body dysmorphic disorder to sexual function was statistically non-significant ( $p = 0.34$ ) and therefore removed. Modification indices suggested a covariance adjustment between two self-esteem indicators.

After these modifications, model fit indices demonstrated a good fit with the data. All observed variables significantly loaded onto their respective latent variables, with factor loadings exceeding the critical value of 0.50. This confirms that all latent variables were sufficiently operationalized by their indicators. To assess construct validity, confirmatory factor analysis was conducted. The model fit indices indicated desirable relationships among the latent variables, and all indicators showed satisfactory factor loadings, thus confirming the construct validity. Reliability was confirmed as well, with composite reliability (CR) values for all variables exceeding the acceptable threshold of 0.70. Additionally, convergent validity was supported as the Average Variance Extracted (AVE) values exceeded 0.50 and were lower than their corresponding CR values. Given that all standardized factor loadings were above 0.50 and AVE values exceeded 0.50, convergent validity was established. Moreover, discriminant validity was also met, as all MSV and ASV values were lower than the AVE values for each construct.

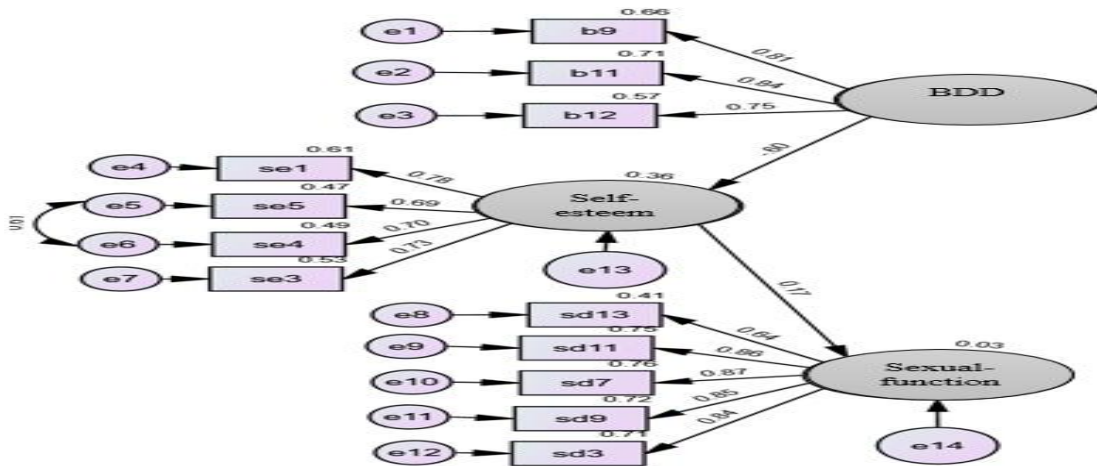


Figure 2. The Modified Model of the Present Study

Table 3 shows the fit indices of the model:

Table 3. Model Fit Indices

| indicator        | X <sup>2</sup> /df | CFI   | NFI   | IFI   | RMSEA | TLI   | RFI   | GFI   | AGFI  | RMR  |
|------------------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Calculated value | 1.3                | 0.99  | 0.96  | 0.99  | 0.03  | 0.98  | 0.95  | 0.96  | 0.94  | 0.50 |
| Acceptable level | 3>                 | 0.85< | 0.85< | 0.85< | 0.08> | 0.85< | 0.85< | 0.90< | 0.80< | Low  |

According to the contents of the table 3, given the satisfactory fit indices, it can be inferred that the theoretical model fits well with the measured model, as

all relative, absolute, and parsimonious fit indices are at an acceptable level.

Table 4 presents the results related to the estimation of the direct path coefficients of the research variables.

Table 4. Estimation of Direct Path Coefficients of Variables

| Independent variable | Dependent variable | Estimate | Standard Estimate | S.E  | T value | P value |
|----------------------|--------------------|----------|-------------------|------|---------|---------|
| Body dysmorphic      | Sexual function    | -0.08    | -0.07             | 0.08 | -0.93   | 0.34    |
| Body dysmorphic      | Self-esteem        | -0.15    | -0.59             | 0.01 | -8.3    | <0.0001 |
| Self-esteem          | Sexual function    | 0.71     | 0.16              | 0.28 | 2.5     | 0.01    |

\*:  $p < 0.05$

The contents of Table 4 show that: The effect of body dysmorphic disorder (BDD) on sexual function with a regression coefficient of (-0.07) is not statistically significant, indicating that there is no significant relationship between BDD and sexual function.

The effect of BDD on self-esteem with a regression coefficient of (-0.59) is statistically significant at the level of 0.0001 ( $p < 0.0001$ ), suggesting a significant negative relationship between BDD and self-esteem. The effect of self-esteem on sexual function with a

regression coefficient of (0.16) is statistically significant at the level of 0.0001 ( $p < 0.0001$ ), indicating a significant positive relationship between self-esteem and sexual function.

**Table 5.** Estimation of Indirect Path Coefficients Using the Bootstrap Method

| Independent variable | Mediating variable | Dependent variable | bootstrap   |             | estimate | S.E  | P value |
|----------------------|--------------------|--------------------|-------------|-------------|----------|------|---------|
|                      |                    |                    | Lower bound | Upper bound |          |      |         |
| Body dysmorphic      | Self-esteem        | Sexual function    | -0.21       | -0.03       | -0.10    | 0.04 | 0.008   |

\*:  $p < 0.05$

The contents of Table 5 show that the indirect effect of BDD on sexual function through self-esteem (-0.10) is statistically significant at the level of ( $p < 0.05$ ).

## Discussion

The present study came out with several key findings. The first finding revealed that there is no significant direct relationship between body dysmorphia and sexual function in women. This result aligns with the findings of Haghtalab et al. (2022) and Noroozi Dashtaki et al. (2024), but contradicts the findings of Tran (2024).

The second finding showed a negative relationship between body dysmorphia and self-esteem. This result is consistent with the findings of Kuck et al. (2021). In explaining this result, Cash and Smolak (2011) state that individuals with body dysmorphia tend to focus on their perceived physical flaws, which can decrease their self-esteem and sense of self-worth. Tiggemann (2004) further argues that people with body dysmorphia often compare themselves to others, feeling that their flaws are more pronounced than those of others, which leads to a reduction in their self-esteem. Phillips et al. (2006) also suggest that many individuals with this disorder avoid social situations due to concerns about being judged, which may lead to feelings of isolation and non-acceptance, further lowering their self-esteem. Additionally, Veale (2004) indicates that individuals with body dysmorphia often have negative and self-critical thoughts, which can result in lower self-esteem.

The third finding indicated a positive relationship between self-esteem and sexual function in women. This finding aligns with the results of Kong et al. (2024) and Cihan and Cihan (2023). Brennan and Shaver (1998) explain that high self-esteem leads to a positive self-concept, which enhances sexual function. Women with a positive self-concept feel better during sexual activity, positively affecting the quality of their sexual function. Women with high self-esteem also tend to feel more control over their bodies, which enhances both the quality of their sexual activity and performance. Furthermore, high self-esteem can reduce anxiety and stress related to sexual performance, further improving sexual function. Basson and Gilks (2018) indicates that High self-esteem in women leads to lower levels of anxiety during sexual activity. Anxiety can disrupt concentration and interfere with the ability to reach orgasm. Elevated self-esteem fosters a greater sense of sexual self-efficacy, enabling individuals to engage more actively and experience higher-quality sexual relationships. Conversely, low self-esteem is associated with heightened sexual shame, which

Next, to examine the relationship between body dysmorphic disorder (BDD) and sexual function with the mediating role of self-esteem, the bootstrap method was used, as shown in Table 5.

often manifests as feelings of guilt and fear of being judged. Additionally, Chesli et al.'s (2024) indicates that women with higher self-esteem demonstrate more effective cognitive and emotional regulation, allowing them to better manage and control negative or anxiety-provoking thoughts during sexual activity.

The fourth finding of the study revealed that self-esteem significantly mediates the relationship between body dysmorphia and sexual function in women. Since no prior studies have specifically investigated the mediating role of self-esteem in the relationship between body dysmorphia and sexual function in women, there are no similar or contradictory findings available. However, in explaining this result, it can be stated that women with body dysmorphia, due to their negative self-image and self-evaluation, tend to have low levels of self-esteem. Low self-esteem leads to the formation of a negative self-concept, negative evaluations of their appearance and performance, and increased cognitive biases. These cognitive biases and negative self-evaluations cause these women to avoid sexual activity, often due to fears of negative judgment and concerns about the quality of their sexual performance, resulting in decreased sexual function. Therefore, low levels of self-esteem can contribute to the onset or exacerbation of sexual dysfunction in women with body dysmorphia (Yamamiya et al., 2006; Mojtavaee et al., 2015; Kong et al., 2024).

## Conclusion

Based on the results of the study, it seems that body dysmorphic disorder symptoms and self-esteem levels are two important factors in determining sexual dysfunction in women. Women who experience body dysmorphic disorder tend to have low self-esteem due to their negative image of their appearance and body. Low self-esteem in these individuals leads to the formation of a negative self-concept and a negative evaluation of their appearance and performance, which increases cognitive biases. These cognitive biases and negative self-evaluations cause these individuals to fear negative judgments and worry about the quality of their performance to the extent that they may avoid sexual activities or experience sexual dysfunction.

The limitation of this study's sample to married female students at Tabriz University restricts the generalizability of the results to other groups. It is recommended that this study be replicated with married students from other universities, as well as with male participants and married individuals who are not students. Based on the results of this study, it is suggested that health service providers,

especially treatment centers, focus on improving self-esteem levels in women with body dysmorphic disorder as part of their treatment plan. Additionally, increasing self-esteem in women with body dysmorphia could help prevent or mitigate sexual dysfunction in these individuals.

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### Disclosure Statement

No potential conflict of interest was reported by the authors.

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### References

- American Psychiatric Association (2013): Diagnostic and statistical manual of mental disorders. 4 ed. American Psychiatric Association.
- Arji, M., Borjali, A., Sohrabi, F. & Farrokhi, N. A. (2016). Role of perfectionism and body image in the prediction of body dysmorphic disorder symptoms. *Avicenna Journal of Neuro Psycho Physiology*, 3(3), 62-65. doi:2010.5812/ajnpp.42560
- Bassak Nejad, S. & Ghafari, M. (2008). The relationship between body dysmorphic concern and psychological problems among University students. *International Journal of Behavioral Sciences*, 1(2), 179-187. [In Persian]  
[https://www.behavsci.ir/%26url/x3dhttp://www.behavsci.ir/article\\_67573.html](https://www.behavsci.ir/%26url/x3dhttp://www.behavsci.ir/article_67573.html)
- Basson, R., & Gilks, T. (2018). Women's sexual dysfunction associated with psychiatric disorders and their treatment. *Women's health*, 14, 1745506518762664. doi:10.1177/1745506518762664
- Blakey, S. M., Abramowitz, J. S., & Mahaffey, B. L. (2016). Do obsessive beliefs predict body image disturbance?. *Journal of Obsessive-Compulsive and Related Disorders*, 11, 96-100. doi:10.1016/j.jocrd.2016.08.007
- Brennan, K. A. & Shaver, P. R. (1998). Attachment styles and personality disorders: Their connections to each other and to parental divorce, parental death, and perceptions of parental caregiving. *Journal of personality*, 66(5), 835-878. doi:10.1111/1467-6494.00034
- Cash, T. F., & Smolak, L. (Eds.). (2011). *Body image: A handbook of science, practice, and prevention*. Guilford press. [Link]
- Chesli, S. R., Khalesi, Z. B., & Chenari, S. S. (2024). The role of sexual self-esteem, sexual desire, and sexual assertiveness in the female sexual function. *Psicologia: Reflexão e Crítica*, 37, 21. doi:10.1186/s41155-024-00303-4
- Cihan, A. & Cihan, E. (2023). Self-esteem and positive body image to overcome female sexual dysfunction. *Call for Papers*, 52(4), 170-171. doi:10.47102/annals-acadmedsg.202381
- Cole, F. L. (1997). The role of self-esteem in safer sexual practices. *Journal of the Association of Nurses in AIDS Care*, 8(6), 64-70. doi:10.1016/S1055-3290(97)80059-3
- Erdős, C., Kelemen, O., Pócs, D., Horváth, E., Dudás, N., Papp, A., & Paulik, E. (2023). Female sexual dysfunction in association with sexual history, sexual abuse and satisfaction: A cross-sectional study in Hungary. *Journal of Clinical Medicine*, 12(3), 1112. doi:10.3390/jcm12031112
- Fardouly, J., Levin, T., Vartanian, L. R., & Rapee, R. M. (2024). Isolating the effects of body size and sexualisation in social media images on body image-related constructs among young women. *Body Image*, 51, 101800. doi:10.1016/j.bodyim.2024.101800
- Ghosh, T., & Blair, E. (2025). The management of body dysmorphic disorder in adolescents: A systematic literature review. *Open Health*, 6(1), 20250057. doi:10.1515/ohe-2025-0057
- Gökçe, E., & Karakaş, S. (2024). The relationship between body image and sexual satisfaction in women who have undergone hysterectomy. *Revista da Associação Médica Brasileira*, 70, e20240776. doi:10.1590/1806-9282.20240776
- Haghtalab, T., Ahmadpanah, M., & Madanchi, F. (2022). Prediction of Female Sexual Dysfunction Based on Perceived Stress and Body Dysmorphic Disorder. *Avicenna Journal of Neuro Psycho Physiology*, 9(3), 131-136. doi:10.32592/ajnpp.2022.9.3.106
- Hartmann, A. S., Thomas, J. J., Greenberg, J. L., Elliott, C. M., Matheny, N. L., & Wilhelm, S. (2015). Anorexia nervosa and body dysmorphic disorder: A comparison of body image concerns and explicit and implicit attractiveness beliefs. *Body Image*, 14, 77-84. doi:10.1016/j.bodyim.2015.03.013
- Herder, T., Spoelstra, S. K., Peters, A. W. M., & Knegetering, H. (2023). Sexual dysfunction related to psychiatric disorders: a systematic review. *The Journal of Sexual Medicine*, 20(7), 965-976. doi:10.1093/jsxmed/qdad074
- Houshyar, Z. (2018). Investigating the relationship between mental image of the body and sexual performance and satisfaction in middle-aged women. [Master's Thesis]. *Ahvaz: Jundi Shapur Ahvaz Health And Medical Services*. doi:10.32592/ajnpp.2022.9.3.106
- Kendler, K. S., Myers, J. M., & Neale, M. C. (2000). A multidimensional twin study of mental health in women. *American Journal of Psychiatry*, 157(4), 506-513. doi:10.1176/appi.ajp.157.4.506
- Kong, L. V., Ting, R. S. K., Chung, K. R., Hidayat, W., Ooi, W. L., & Goh, P. H. (2024). Bidimensional self-esteem and sexual functioning among young adults: A systematic review. *Current Psychology*, 43(6), 4930-4944. doi:10.1007/s12144-023-04699-7
- Koolwal, A., Agarwal, S., Manohar, S., Koolwal, G. D., & Gupta, A. (2020). Obsessive-compulsive disorder and sexuality: A narrative review. *Journal of Psychosexual Health*, 2(1), 37-43. doi:10.1177/2631831819896171

- 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. doi:10.1186/s12888-021-03185-3
- Littleton, H. L., Axsom, D., & Pury, C. L. (2005). Development of the body image concern inventory. *Behaviour Research and therapy*, 43(2), 229-241. doi:10.1016/j.brat.2003.12.006
- Mataix-Cols, D., de la Cruz, L. F., Isomura, K., Anson, M., Turner, C., Monzani, B., ... & Krebs, G. (2015). A pilot randomized controlled trial of cognitive-behavioral therapy for adolescents with body dysmorphic disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 54(11), 895-904. doi:10.1016/j.jaac.2015.08.011
- Mikaeili, N., Teymoori, R. & Salmani, A. (2023). The relationship between the emotional nature, adult attachment and aggression in depressed patients. *Journal of Research in Psychopathology*, 4(11), 40-46. doi:10.22098/jrp.2023.9601.1043
- Mikaeili, N., Salmani, A. & Sharei, A. (2025). The Effectiveness of Emotion-Focused Therapy on Parenting Self-Efficacy and Distress Tolerance in Mothers with Insecure Attachment Styles. *Journal of Family Relations Studies*, 5(3), 1-11. doi:10.22098/jfrs.2025.17963.1255
- Minty, A., & Minty, G. (2021). The prevalence of body dysmorphic disorder in the community: a systematic review. *Global Psychiatry Archives*, 4(2), 130-154. doi:10.52095/gp.2021.8113
- Moghadam, M. M., Moradi, M., Najmabadi, K. M., Ramezani, M. A., & Shakeri, M. T. (2024). The Effect of Counseling based on PLISSIT Model Focused on Dysfunctional Sexual Beliefs among Women with Sexual Dysfunction: A Randomized Clinical Trial. *Journal of Midwifery & Reproductive Health*, 12(4), 4414-4423. doi:10.22038/jmrh.2024.63053.1846
- Mojtabae, M., Saberi, H., & Alizadeh, A. (2014). Women sexual function: the role of sexual-self schema and body image. *Health Psychology*, 3(9), 45-60. doi:10.1001.1.23221283.1393.3.9.5.2
- Mufassery, M. R., Asadnia, S., Agashte, M., Torabzade, N., Shahini, S., & Shahini, P. (2025). Developing a causal model of Body Dysmorphic Disorder with Obsessive-Compulsive Disorder: the mediating role of distress tolerance. *Journal of Research in Psychopathology*, 6(1), 14-22. doi:10.22098/jrp.2024.14076.1211
- Murad, O. S. (2020). Social Anxiety in Relation to Self-Esteem among University Students in Jordan. *International Education Studies*, 13(2), 96-103. doi:10.5539/ies.v13n2p96
- Noroozi Dashtaki, M., Zamani Zarchi, M. S., Hosseinzadeh Oskouei, A., Baghbani Nader, M., & Kianimoghadam, A. S. (2024). Body Image Concern and Sexual Function Relationship in the Postpartum Period: The Mediating Role of Sexual Self-esteem. *Journal of Holistic Nursing And Midwifery*, 34(3), 245-253. doi:10.32598/jhnm.34.3.2621
- Pavanello Decaro, S., Anzani, A., Di Sarno, M., Di Pierro, R., & Prunas, A. (2024). Men's sexual distress: the role of body image and vulnerable narcissistic traits. *Sexual and Relationship Therapy*, 39(2), 458-472. doi:10.1080/14681994.2022.2124404
- Phillips, K. A. & Kelly, M. M. (2017). Update on body dysmorphic disorder: clinical features, epidemiology, pathogenesis, assessment, and treatment. *Psychiatric Annals*, 47(11), 552-558. doi:10.3928/00485713-20171004-02
- Phillips, K. A., Pagano, M. E., Menard, W., & Stout, R. L. (2006). A 12-month follow-up study of the course of body dysmorphic disorder. *American Journal of Psychiatry*, 163(5), 907-912. doi:10.1176/ajp.2006.163.5.907
- Pozza, A., Veale, D., Marazziti, D., Delgadillo, J., Albert, U., Grassi, G., ... & Dèttore, D. (2020). Sexual dysfunction and satisfaction in obsessive compulsive disorder: protocol for a systematic review and meta-analysis. *Systematic Reviews*, 9(1), 1-13. doi:10.1186/s13643-019-1262-7
- Salari, N., Hasheminezhad, R., Hosseini-Far, A., & Mohammadi, M. (2025). Global prevalence of female sexual dysfunction based on physical activity: a systematic review and meta-analysis. *BMC Women's Health*, 25(1), 200. doi:10.1186/s12905-025-03738-8
- Sharifi Daramadi, J. (1999). Factor structure and psychometric properties of the Rosenberg self esteem scale in Iranian students. *psychological Quarterly*. [In Persian]
- Tabrizi Shahrovi, Z. (2023). The effect of weak and strong self-esteem on self-efficacy. *International conference on psychology of education sciences and lifestyle*. [In Persian] <https://sid.ir/paper/1082596/en>
- Tafarodi, R. W., & Swann Jr, W. B. (2001). Two-dimensional self-esteem: Theory and measurement. *Personality and individual Differences*, 31(5), 653-673. doi:10.1016/S0191-8869(00)00169-0
- Thakurta, R. G., Dhar, O. P. S. P., Sarkar, S., Ray, P., & Mallick, A. K. (2016). Prevalence and nature of sexual dysfunctions in OCD in a tertiary medical college. *East J Psychiatry*, 17(2), 20-30.
- Tiggemann, M. (2004). Body image across the adult life span: Stability and change. *Body image*, 1(1), 29-41. doi:10.1016/S1740-1445(03)00002-0
- Tran, L. (2024). The Mediating Role of Self-disgust on the Relationship Between Negative Body Image and Sexual Dysfunction (Master's thesis). <https://studenttheses.uu.nl/handle/20.500.12932/46486>
- Veale, D. (2004). Advances in a cognitive behavioural model of body dysmorphic disorder. *Body image*, 1(1), 113-125. doi:10.1016/S1740-1445(03)00009-3
- Yahag, M., Abdolpour, G., Lashkari, A., & Rezai, M. (2024). Sexual functioning in women based on sexual shame and sexual dysfunctional beliefs. *Journal of Research in Psychopathology*, 5(16), 52-59. doi:10.22098/jrp.2024.12360.1165
- Yamamiya, Y., Cash, T. F., & Thompson, J. K. (2006). Sexual experiences among college women: The differential effects of general versus contextual body images on sexuality. *Sex Roles*, 55, 421-427. doi:10.1007/s11199-006-9096-x