

Research Paper: The Comparison of Body Image and Depressive Symptoms in People with Gender Dysphoria and Non-Affected People

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Abstract

People with gender dysphoria experience some mental health problems, such as anxiety and depression. The present study aimed to compare body image and depressive symptoms in people with gender dysphoria and the non-affected. This research was applied in terms of purpose and casual-comparative in terms of methodology. The statistical population of the study included two groups of people with gender dysphoria approved by the Iranian legal medicine organization in 2021 and non-affected people with gender dysphoria. For sampling, 30 people from both groups (15 males and 15 females) were selected by the convenience sampling method. A Multidimensional Body-Self Relations Questionnaire (BSRQ) and The Beck Depression Inventory-II (BDI-II) were employed to gather research data. Data analysis was performed by Independent Sample T-Test using SPSS-20 software. The findings of the study indicated that the mean scores of body image (P<0.01) and depressive symptoms (P<0.05) were significantly different in people with gender dysphoria and the non-affected people. People with gender dysphoria had a more negative body image and more depressive symptoms than non-affected people.

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1. Introduction

The beginning of any sexual behavior is started by gender. The gender of every human being is defined as a female or a male from the fetal period and when he or she grows up in the womb and maybe it is the first source for future sexual behavior; since the type of gender will bring special and unique sexual behaviors (Pourkazem Mohammad Fereydoni & Eshghi Nogorani, 2018), gender identity forms a major part of human identity; it is formed around the age of 2-3 and includes the image that each person has of himself or herself as a man or a woman. One learns to think, behave and feel in a certain way by being aware of gender identity (Rahimain Ahmadabadi et al., 2020).

A person may biologically have the characteristics of a particular sex, but s/he does not psychologically belong to that group. Such a person feels and behaves like a member of the opposite sex. This dual situation significantly causes mental disorders and impairs a person's performance. This phenomenon is called gender dysphoria disorder (Barghi Irani et al., 2015).

The definition of a person with gender dysphoria disorder is a psychological identity that differs from his or her observable biological sex. In the fifth edition of the diagnostic and statistical manual of mental disorders (American Psychological Association [APA], 2013) the term gender dysphoria is used instead of gender identity disorder, which is defined as follows: Feeling anxious about one's biological sex, which is not coordinated with the sex one experiences and expresses. This discord and sense of belonging to the opposite sex include various aspects, such as aspects related to self-perception, body image, interpersonal relationships, the use of defense mechanisms, and social adjustment. For this reason, these people are under pressure and stress from various dimensions of society and the family. (Montashloo et al., 2016).

In the research background, other terms have been used for people with gender dysphoria disorder and non-affected people. A Cisgender, for example, is a person who identifies with the gender assigned to him or her from birth. For example, a person who has been assigned a female gender since birth and introduces herself as a female and considers herself to be of a female's nature gendered is a cisgender woman (Malmquist et al., 2021). Transgenders, on the other hand, are people who have а gender identity contradicting their psyche. Transgender is a term used to identify people who have an incongruous gender identity or do not have a proper cultural fit with their physical identity. Transgender means that a person's psycho diagnosis of his or her gender is different from that of his or her genitals at birth. Transgenders are interested in going through the stages of change and joining the opposite sex a lot (Afsharian et al., 2019).

People with gender dysphoria disorder or transgenders sometimes seek gender confirmation therapies, including hormone therapy or thoracic and genital change surgery¹ ("High" and "Low" gender confirmation surgeries). These treatments may improve the discomfort of a mismatch

¹ Sex/Gender reassignment surgery: SRS/GRS

between a person's physical appearance and their gender identity (Owen-Smith et al., 2018). Transgenders experience higher levels of depression and anxiety disorders than the general population. Another reason for the increased risk of transgenders suffering from mental disorders compared to normal people is the increased susceptibility to the minority stress due to being labeled by those around them followed by the presence of transgender behavior (Jenabi Ghods et al., 2020).

In addition to social difficulties, this disorder causes individual differences in these people compared to non-affected ones (Shairi et al., 2019). Gender dysphoria disorder has a long history in psychiatry and psychology. In terms of semiology, diagnostic criteria. and intervention methods, this disorder has been influenced by social norms related to the concept of gender identity and medical advances. Each of the biological, psychological, social, and cultural approaches to gender dysphoria disorder and its occurrence have put emphasis on different factors. Evidence indicates that people with dysphoria or gender dissatisfaction have other types of mental health problems, such as anxiety and depression, as well as family conflicts (Ghazanfari et al., 2018).

Transgenders have problems with their Body body image. image is a multidimensional structure consisting of thoughts, beliefs, feelings, and behaviors related to the perceived image of body. Body image is considered as a continuum, on the one hand, there are people without distortion in their perception of body image, and on the other hand, there are people with severe distortion in their body image (Ahmadpour torki et al., 2018). A mental image of the body is defined as the degree of satisfaction with a physical appearance, meaning the size, shape, and general appearance of the body, including sameness between the current body image and the ideal body image. According to Noroozi et al. (2021), the mental image of the body can be defined as an individual's experience of the physical self. Research has indicated a more negative body image in people with gender dysphoria disorder non-affected compared to people (Montashloo et al., 2016). People who are more satisfied with their gender identity indicate more satisfaction with their body (McGuire et al., 2016). Transgender women and men indicate higher shame scores than cisgender women and men (Strubel et al., 2020).

Hepp et al. (2005) report the highest comorbidity with anxiety and mood disorders in research on the comorbidity of gender dysphoria disorder with mental disorders. The prevalence of depression in people with gender dysphoria disorder is high (Mazaheri Meybodi et al., 2014; Dhejne et al., 2016; Catelan et al., 2022). Depression is considered to be the second cause of human disability all over the world. The main component of depression disorder is sadness. People with depression describe their mood as sad and helpless (Abdolpour et al, 2019).

Depression, anxiety, and stress can be mentioned as common psychiatric disorders in transgenders. Depression and stress anxietv subsequent and are associated with decreased self-confidence and increased incidence of other psychiatric disorders in this group (Jenabi Ghods et al., 2020). In previous studies, there has been a difference in terms of the level of depression between people with gender dysphoria disorder and non-affected people (Montashloo et al., 2016; Rahimi Ahmadabadi et al., 2016; Afsharian et al., 2019; Owen-Smith et al., 2016; Strubel et al., 2020; Morafi et al., 2020).

According to the differences between people with and without gender dysphoria disorder, it seems that conditions related to gender issues can cause psychological disorders in a person. Therefore, paying attention to such differences can create clear frameworks for solving the problems and disorders of the relevant people and identify clear ways to reduce the individual and social problems of these people. Thus the researchers in the present study compare body image and depression symptoms in people with and without gender dysphoria disorder. The main question of this study is whether there is a difference between body image and depressive symptoms in people with and without gender dysphoria disorder?

2. Method

The present research was applied in terms of purpose and casual-comparative in terms of methodology. The statistical population included two groups: The first group of people with gender dysphoria disorder who were diagnosed with this disorder by the Iranian legal medicine organization and were the members of the telegram channels related to these people in 2021. Thirty individuals affected with gender dysphoria disorder (15 females and 15 males) were selected by convenience sampling method from these individuals. To ensure the diagnosis of the disorder, the participants sent a copy of their authorization of gender reassignment or their gender dysphoria disorder diagnosis to the researchers. The second group were 30 people without

gender dysphoria disorders, (15 females and 15 males) were selected from the other Telegram groups by convenience sampling. Inclusion criteria comprised of satisfaction to participate in the research, having at least diploma and not having gender a reassignment surgery in the group affected with gender dysphoria disorder, and not being affected with gender dysphoria disorder in the non-affected group. Exclusion criteria comprised of dissatisfaction to participate in the research, and lack of at least a diploma, undergoing psychotherapy or drug treatment for psychiatric disorders (included in the questionnaire).

2.1. Research Tools

The Multidimensional **Body-Self Relations Questionnaire (BSRQ): It was** devised by Cash, Winsted and Janda (1985). This questionnaire consists of 68 items designed to assess the individual's attitude about the various dimensions of the body image structure. The first edition of this questionnaire was designed in 1983 and included 294 items. In the second edition, duplicated sections were removed and some sections were moved according to the new criteria. The validity of the main sections of the questionnaire was examined and confirmed by Brun, Cash, and Mulka (1990), and its reliability was also reported to be 0.81. The reliability of this tool in Iran has been confirmed by Zarshenas et al. (2015). The reliability of appearance awareness subscale was 0.87, evaluation of appearance was 0.85, concern about weight gain was 0.82, different body parts satisfaction was 0.79, and evaluation of weight from the individual's point of view was 0.75. The Cronbach's alpha coefficient of the questionnaire in the present study was 0.87.

The Beck Depression Inventory-II (BDI-II): This questionnaire was developed by Beck in 1996 to assess the feedback and symptoms of depressed patients. Its items were based on the observation and summary of common attitudes and symptoms among depressed mental patients. This is a self-assessment questionnaire and is completed in five to ten minutes. The Beck Depression Inventory consists of a total of 21 items related to various symptoms for the participants to answer on a four-point scale from zero to three. Thus 2 items are dedicated to affection, 11 items to cognition, 2 items to overt behaviors, 5 items to physical symptoms, and 1 item to interpersonal semiotics. Consequently, this scale determines the different levels of depression from mild to very severe, and its score range is from the minimum of zero to the maximum of 63. In his research, Kaviani (2008) reported the validity coefficient as 0.70, the reliability coefficient as 0.77, and an internal consistency of 0.91, and Besharat (2004) conveyed Cronbach's alpha coefficient for a sample of normal participants from 0.85 to 0.92 and a sample of patient participants from 0.83 to 0.91. The alpha coefficient calculated for the questionnaire in the present study was 0.93.

Descriptive statistics measures and inferential statistics techniques (Kolmogorov-Smirnov test and independent t-test) were employed to analyze the data. The statistical software used in this study was SPSS-20.

3. Results

50% (n=30) of the participants were men and 50% (n=30) were women. In both affected groups with gender dysphoria and the non-affected, most respondents were under 30 years old, which formed 46.6% of the respondents (n=28) and 31.7% of the (n=19). respondents respectively. In addition, the lowest number of respondents were in the age group over 50 years; that is to say, in the affected group with gender dysphoria, no one was in this age range, and in the non-affected group without gender dysphoria, 1.7% of the respondents (n=1) was in this age range of more than 50 years. Most of the respondents in the affected group gender dysphoria with had associate's degree and lower, i.e., n=16 (26.7% of the respondents). Moreover, in the non-affected group, without gender dysphoria, the most responsive group was people with undergraduate degree, which formed 18.3% of the respondents (n=11).

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Group	Variable	Ν	Minimum	Maximum	М	SD
Non- affected	Body Image	30	190.00	322.00	235.7000	28.87565
group	Depression	30	.00	47.00	14.6667	13.32960
Affected	Body	30	180.00	266.00	213.7333	21.57255
group	Depression	30	.00	60.00	20.3333	13.36060

As can be seen in Table 1, the mean of score of depression in the affected group

was lower than the non-affected group and the mean of score of body image of the affected group was lower than the non-affected group.

To perform a suitable statistical test, first, the assumption of normal distribution in scores of body image and depression variables was studied using the Kolmogorov-Smirnov test and the Z statistic for body image and depression variables was 0.851 and 0.759, respectively, not being meaningful; this means that the distribution of variables in the sample was normal. Therefore, an independent t-test was run to evaluate the significant difference between the mean scores of people with gender dysphoria disorder and non-affected people regarding the studied variables, namely body image, and depression. The results are given in Table 2.

Table 2

Independent t-test results to compare the mean of body image variables and depression in people with gender dysphoria disorder and non-affected ones

Factors	Affected	Non-Affected			
examined in	people's	people's	df	t	sig
the study	mean scores	mean scores			
Body Image	213.73	235.70	58	3.338	0.001
Depression	20.33	14.67	58	-1.964	0.048

According to the findings of Table 2, the mean score for body image at the alpha level of 0.01 and the mean score for depression at the alpha level of 0.05 were significantly different in terms of affliction of respondents with gender dysphoria disorder and lack of it. People with gender dysphoria have a mean score of 213.73 for the body image variable and non-affected people have a mean score of 235.70. Furthermore, regarding the depression variable, the mean score of people with gender dysphoria was 20.33, and nonaffected people with 14.67. People with gender dysphoria had lower mean scores on body image as well as higher scores on the depression variable.

4. Discussion

Affliction with a gender dysphoria disorder in some people causes some differences in them compared to others; it should be considered in appropriate circumstances in the field of reducing psychological problems for these people, both individually and as a member of society. People with gender dysphoria disorder tend to dress and behave like the opposite sex. The desire of these people is not limited to being in a position or having the membership of another gender but focuses on having different gender. Such a situation creates contradictions naturally and differences for the affected people which can be considered in the field of psychology. Body image and depression symptoms are among the issues in which those affected with gender dysphoria disorder or non-affected ones can have different manifestations within individuals. Therefore, body image and depression symptoms in people with and without gender dysphoria disorder were compared in this study.

The results of the present study indicated that people with gender dysphoria had a more negative attitude toward their bodies than non-affected people. The results of the present study are in line with the results of studies conducted in this field (Montashloo et al., 2016; McGuire et al., 2016; Strubel et al., 2020; Romito et al., 2021). Creating a satisfactory body image, and subjective experience of physical appearance is difficult for people with gender dysphoria disorder, which can sometimes lead to disturbance in body image. In addition to being under pressure in the environment and society due to their appearance, people with gender dysphoria disorder, have a lot of preoccupation with their body and obsessively explore their bodies, and always tend to have body dysmorphia. A person who has a noticeable discrepancy between his or her experienced gender and his or her assigned gender has a special focus on his or her body and does not consider any part of the body, especially the genital and sexual parts, to belong to him or her. As a result, s/he will have a negative body image towards herself/himself and is always thinking about gender reassignment and making her/his body more beautiful.

The results of the study also indicated that the depression symptoms in people with gender dysphoria disorder were more than in non-affected people (Rahimi Ahmadabadi et al., 2016; Jenabi Ghods et al., 2020; Strubel et al., 2020; Morafi et al., 2020). In the cultural context of our country, social acceptance of people with the behavior attributed to gender dysphoria disorder is very difficult and it is a stressful process for the affected person (Mantashloo et al. 2016). On the other hand, when a norm is accepted by a person but is in conflict with social reality, it causes stress and leads to personality and mental disorders in these people. People with gender dysphoria disorder also experience significant levels of psychological distress, including depression, as a result of multiple

stressors, including family and social exclusion, financial and work issues, as well as difficulties in going through the legal proceedings of gender reassignment. This is why researchers express that the cause of depression, especially in transgenders, is not only the chemical mediators' disequilibrium in the brain, but many factors including social, also economic, health, and relationships with others which are involved in the occurrence of these disorders (Jenabi Ghods et al., 2020).

5. Conclusion

In general, the results revealed that people with gender dysphoria disorder had a more negative body image and experience depression more than non-affected people. Therefore, it seems necessary to pay attention to creating a more positive body image for them and treating depression in these people. Consequently, to prevent the negative effects of these problems it is suggested that centers for the identification and psychotherapy of people with this disorder be established. Since the present study was cross-sectional, it is suggested that longitudinal research be conducted in this field and the role of factors such as education level, social status, etc. in the level of depression and the situation of body image of these people be investigated.

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Conflict of Interest

The Authors declare that there is no conflict of interest with any organization. Also, this

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References

- Aabdolpour, G., Hashemi, T., Shairi, M., R., Alizadeh, F. (2018). The relationship of the Intolerance of uncertainty and worry and metacognitive beliefs in people with depressive symptoms. *Shenakht Journal of Psychology and Psychiatry*, 5 (2) ,15-26. http://dx.doi.org/10.29252/shenakht.5.2.15
- Afsharian, M., Mahmoodi, H., Ghanbari, H. R. (2019). Assessing the level of anxiety and depression in trans people and comparing it with the normal population. 1st International Conference Interdisciplinary Studies in Management and Engineering. University of Tehran. https://www.sid.ir/FileServer/SF/9611397H 0135.pdf
- Ahmadpour torki, Z., Abolghasemi, A., Poorsoheili, S. (2018). Comparison of mood dimensions and physical body image concern in depressed women with and without sexual dysfunction. *Women's Studies Sociological and Psychological*, *15*(4), 123-148. https://dx.doi.org/10.22051/jwsps.2018.177 12.1585
- Barghi Irani, Z., Goshtasbi Asl, S., Goshtasbi Asl, S. (2015). A Comparative Study of Defense Styles and Mechanisms of Gender Dysphoric Patients with Normal People. *Journal of Personality & Individual Differences, 4*(3), 139-156. https://www.sid.ir/en/journal/ViewPaper.as px?id=528488
- Catelan, R. F., Saadeh, A., Lobato, M. I. R., Gagliotti, D. A. M., Nardi, H. C., & Costa, A. B. (2022). Depression, Self-Esteem, and Resilience and its Relationship with Psychological Features of Sexuality among Transgender Men and Women from Brazil.

Archives of Sexual Behavior, 1-10. https://doi.org/10.1007/s10508-021-02189-0

- Ceruti, C.; D'Agata, F.; Sibona, M.; Preto, M.;
 Gualerzi, A.; Crespi, C.; Molo, ZM. T. (2020). P-01-4 a new tool to explore brain functional basis of gender disphoria:
 Validation of a functional MRI protocol to investigate patterns of brain activation related to body image and gender identity. *The Journal of Sexual Medicine*, 17(6), 171.
- Corda, E., Bandecchi, C., Deiana, V., Pintore,
 S., Pinna, F., Pusceddu, R., ... & Carpiniello,
 B. (2016). Body image and gender role perceived in gender dysphoria: cross-sex hormone therapy effects. European Psychiatry, 33(S1), S589-S589. https://doi.org/10.1016/j.eurpsy.2016.01.21
 92
- Delavar, A. (2007). *Educational and psychological Research*. Tehtran: Virayesh.
- Dhejne, C., Van Vlerken, R., Heylens, G., & Arcelus, J. (2016). Mental health and gender dysphoria: A review of the literature. *International review of psychiatry*, 28(1), 44-57.

https://doi.org/10.3109/09540261.2015.111 5753

- Ghazanfari, F., & Khodarahimi, S. Poorkord, M., Karami, A. (2018). Gender Dysphoria Disorder: Diagnosis, Theory and Intervention. *Rooyesh-e-Ravanshenasi Journal*, 6(4), 9-28. http://dorl.net/dor/20.1001.1.2383353.1396 .6.4.12.0
- Hepp, U., Kraemer, B., Schnyder, U., Miller, N., & Delsignore, A. (2005). Psychiatric comorbidity in gender identity disorder. *Journal of psychosomatic research*, 58(3), 259-261.
 https://doi.org/10.1016/j.jpsychores.2004.0 8.010
- Jenabi Ghods, M., Rahgoi, A., Fallahi-Khoshknab, M., Nourozi, M. (2020). The Effect of Cognitive-Behavioral Group

Therapy on Depression, Stress, Anxiety of Male to Female Transsexuals. *Iranian Journal of Rehabilitation Research in Nursing*, 7 (1), 1-10. http://dx.doi.org/10.29252/ijrn.7.1.1

Malmquist, A., Wikström, J., Jonsson, L., & Nieminen, K. (2021). How norms concerning maternity, femininity and cisgender increase stress among lesbians, bisexual women and transgender people with a fear of childbirth. *Midwifery*, 93, 102888.
https://doi.org/10.1016/j.midw.2020.10288

8

- Mantashloo, S., & Shairi, M., Heydarinasab, I., Izadi Dehnavi, S. (2016). Comparison of depression, Anxiety and Body Image in Patients with Gender Dysphoric Disorder and Non Patients. *Journal of Health Breeze* (*Family Health*), 4(3), 42-50. https://www.sid.ir/en/journal/ViewPaper.as px?id=573146
- Mantashloo, S., Shairi, M., Heydarinasab, L. (2018). The effect of preconditioning with interval training high intensity on cardioprotection ventricular and left function against Ischemia-reperfusion injury in male rats. Daneshvar Medicine, 26(2), 27-38. http://daneshvarmed.shahed.ac.ir/article_18 33.html?lang=en
- Mazaheri Meybodi, A., Hajebi, A., & Ghanbari Jolfaei, A. (2014). Psychiatric axis I comorbidities among patients with gender dysphoria. *Psychiatry journal*, 2014(971814). https://doi.org/10.1155/2014/971814
- McGuire, J. K.; Doty, J. L.; Catalpa, J. M. & Ola, C. (2016). Body image in transgender young people: Findings from a qualitative, community based study. *Body Image*, 18: 96-107.
 - https://doi.org/)·)?/j.bodyim.?·)?··?

- Murphy, J.; Prentice, F.; Walsh, R.; Catmur, C. & Bird, G. (2020). Autism and transgender identity: Implications for depression and anxiety. *Research in Autism Spectrum Disorders*, 69, 101466. : 1-11. https://doi.org/10.1016/j.rasd.2019.101466
- Noroozi, F., Ghorban Shiroodi, S., Khalaj, A. R. (2021). Effectiveness of Compassion-Focused Therapy on Self-Control and Flexibility of Body Image in Obese Patients Volunteering for Sleeve and Gastric Bypass Surgery. *Journal of Research in Behavioral Sciences*, 18(4), 493-502. http://rbs.mui.ac.ir/article-1-894-fa.html
- Owen-Smith, A. A.; Gerth, J.; Sineath, R. C.; Barzilay, J.; Becerra-Culqui, T.; Getahun, D.; Goodman, M. (2018). Association between gender confirmation treatments and perceived gender congruence, body image satisfaction, and mental health in a cohort of transgender individuals. *The Journal of Sexual Medicine*, 15(4): 591-600.
- Pourkazem, F., Eshghi Nogourani, R. (2018). The Effectiveness of Treatment Based on Acceptance and Commitment to Improving Psychological Well-Being of Transsexual Individuals Esfahan. Shenakht Journal of Psychology and Psychiatry, 5 (1), 29-41. http://dx.doi.org/10.29252/shenakht.5.1.29
- Rahimi Ahmadabadi S, Hejazi A, Attaran H, Rahimi A, Kohestani L, Karashki H et al (2016). Comparison of Stress, Anxiety, Depression & Sexual Role in Subjects Involved Gender Dysphoria with Normal Subjects. *Iran Journal of Forensic Medicine*, 22 (1), 67-75. http://sjfm.ir/article-1-783-fa.html

10 21

Rahimi Ahmadabadi, S., Kalantari, M., Abedi, M., & Modarres Gharavi, S. M. (2020). Investigating Parent-Child Relationship in Predicting Gender Dysphoria in Transsexual Women and Men. *Journal of Psychology*, 2(94), 200-214. http://www.iranapsy.ir/en/Article/1399040 6237985

- Romito, M.; Salk, R. H.; Roberts, S.; Thoma,
 B. C.; Levine, M. D.; Choukas-Bradley, S. (2021). Exploring transgender adolescents' body image concerns and disordered eating: Semi-structured interviews with nine gender minority youth. *Body Image*, *37*: 50-62.
- Shairi, M., Mantashloo, S., Heydarinasab, L. (2019). An pathology approach in the realm of culture and family: differentiating the projections of people with gender dysphoria disorder in the Rorschach test. *Family Counseling and Psychotherapy*, 9(1), 1-14. https://dorl.net/dor/20.1001.1.22516654.13 98.9.1.1.5