

Research

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Preliminary Findings on Gender Differences in Aesthetic Rhinoplasty Patients: Body Appreciation and Appearance Comparisons

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ABSTRACT

Objective: Body image has a crucial role in considering elective aesthetic surgery. Yet, gender differences have not been well studied in this respect. The present study aimed to provide preliminary comparisons between male and female patients regarding body appreciation and appearance comparisons.

Materials and Methods: A consecutive sample of 70 rhinoplasty patients was selected in a private surgical clinic in Tehran, Iran. The Persian versions of Body Appreciation Scale (BAS) and Physical Appearance Comparison Scale-Revised (PACS-R) were used to gather data. Independent t-test was used to compare the scores between male and female participants.

Results: Male patients had higher scores in body appreciation ($p < 0.05$) and women had higher scores in physical appearance comparisons. The magnitude of the relationship was large for body appreciation ($d = 0.71$) and small for appearance comparisons ($d = 0.08$).

Conclusion: Findings of the present study showed that Iranian male rhinoplasty patients hold more positive attitudes toward their body and tend to compare their physical appearance less often. It is suggested for future research to conduct studies on gender differences among rhinoplasty patients regarding other body image variables.

KEYWORDS: Rhinoplasty; Body image; Psychology; Gender differences.

ABBREVIATIONS: BAS: Body Appreciation Scale; PACS-R: Physical Appearance Comparison Scale-Revised; TUMS: Tehran University of Medical Sciences; BDD: Body Dysmorphic Disorder.

INTRODUCTION

Modern lifestyle, constantly influenced by media exposure of universal beauty standards, gives aesthetic values a pivotal role in social life. Beauty has always been admired and important; however, nowadays the awareness of various methods to improve beauty along with advancements in medicine has motivated many people toward these methods of improving attractiveness, shifting the balance of medical priority in favor of various, sometimes unnecessary, interventions. Whether a patient's decision to have aesthetic plastic surgery is a fully autonomous and conscious is still debatable. In that respect, as the face is the centre of attention in human encounters, facial plastic surgery has gained a special role in plastic surgery practice.¹

It has been suggested² that cosmetic surgery is body-image surgery in nature. Physical modifications will therefore enhance one's body image as well as the physical appearance

of the body. An interesting review of the available evidence³ concluded that it was scientifically premature to assume that cosmetic surgery necessarily leads to significant mental health benefits such as improved body image or decreased depression. There appears a general lack of well-controlled research into the scope of possible psychological outcomes following different cosmetic surgeries.⁴

Among different cosmetic surgeries, rhinoplasty is considered to be very popular; however, research suggests that aesthetic rhinoplasty applicants report stronger psychopathological symptoms.⁵⁻⁷ Findings indicate that patients who seek aesthetic rhinoplasty are more disturbed in somatization, anxiety, depression, social dysfunction, depression, general health,⁸ self-esteem,⁹ perfectionism,¹⁰ narcissism,¹¹ schizotypal personality, and paranoid personality disorder.¹² Recent findings also suggest that interest in rhinoplasty is associated with lowered body appreciation¹³ and high levels of physical appearance comparisons in social settings.¹⁴

In this respect, gender differences have not been well researched. Women are generally more interested in cosmetic procedures and would consider them more frequently in comparison with men.¹⁵ Furthermore, it has been reported that women obtain lower scores in general body appreciation^{16,17} as a measure of positive body image. The available evidence also suggests that women report higher levels of body-image concerns in comparison with men,¹⁸ which have been explained as a function of the greater sociocultural pressure on women to attain ideals of physical attractiveness.¹⁹

Moreover, recent work has reported that women are significantly more interested than men to undergo cosmetic procedures,^{20,21} which is consistent with the actual female-to-male ratio of cosmetic patients standing at 9:1.²² Another research²³ investigated the gender differences in rhinoplasty patients in dimensions of psychopathology. Results suggested that female patients had significantly higher symptoms in four dimensions out of total ten subscales of psychopathology. Nevertheless, women showed stronger symptoms in all subscales. Inspection of effect sizes indicated that women had significantly higher scores in anxiety, obsessive-compulsive symptoms, depression, and paranoid ideation.

In contrast, several researchers have proposed that male patients are more difficult to manage in surgical settings. Wright²⁴ reported that male patients brought a set of unexplored motivations and expectations to the surgeon along with unresolved emotional conflicts resulting in feelings of ambivalence, emotional instability, and sometimes even hostility toward the surgeon. It has also been suggested that in general, men tend to have a poorer understanding of their deformity than do women. Thus, they cannot describe the changes they expect from the surgery.^{24,25} This tendency, combined with a tendency toward selective hearing among male patients, makes it more important for

the surgeon to determine the patient's goals and expectations.

The current study primarily aimed to compare body appreciation and physical appearance comparisons between female and male rhinoplasty patients. Another purpose of the study was to explore the ratio of female-to-male patients in a consecutive sample of the patients in Iran.

METHOD

Participants

A total of 70 rhinoplasty applicants were recruited in a consecutive manner from a private surgical clinic in Tehran, Iran. All applicants were willing to participate and fill a short survey concerning body and appearance. Sixty women and 10 men were included in the study. Demographic details were self-reported by participants. Baseline characteristics of both female and male patients are presented in Table 1.

| Variable | Men | Women |
|----------------------------|--------------|--------------|
| Age(M, SD) | 27.00, 7.19 | 23.56, 6.1 |
| Weight(M, SD) | 84.10, 16.98 | 56.12, 9.34 |
| Height(M, SD) | 181.80, 6.34 | 164.19, 4.42 |
| BMI(M, SD) | 25.39, 4.77 | 20.81, 3.27 |
| History of Nasal Trauma(N) | 0 | 0 |
| Previous rhinoplasty(N) | 0 | 0 |
| Breathing problems(N) | 1 | 0 |

Table 1: Baseline characteristics of the sample.

Measures

Body appreciation scale: Respondents filled out the body appreciation scale (BAS; see appendix 1).²⁶ All items were rated on a 5-point Likert-type scale ranging from 1 (*never*) to 5 (*always*). Internal consistency of the scale was reported high (alpha=0.94) in the United States.²⁶ Psychometric analysis of the Persian version of this measure in Iran suggested that only ten items of the BAS have adequate psychometric characteristics.¹³ Therefore, we used 10-item version of BAS in this study (alpha=0.91). We averaged the scores of items to achieve a total score; therefore, total scores could range between 1 and 5.

Physical appearance comparison scale-revised: The 11-item revised scale of physical appearance comparison (see appendix 2)²⁷ was used. This one-dimensional scale measures the frequency that one compares his/her physical appearance with others in different settings. A 5-point Likert-type response option (coded between 0 and 4) was provided ranging from "never" to "always". Total score is acquired by summing all 11 items responses; therefore, scores may range between 0 and 44. Cronbach's alpha of the physical appearance comparison scale-revised (PACS-R) was 0.96 in the present study. Previous work suggests

that the Persian form of this scale has adequate reliability and validity.¹⁴

Procedure

Ethical approval was obtained from Tehran University of Medical Sciences (TUMS) ethics committee. Participants were recruited using convenience sampling method in a consecutive manner in a private surgical clinic. Data were collected on an individual basis by a research assistant. Respondents provided informed consent before the administration and were debriefed about the objectives of the study after administration of the tests. All data were treated confidentially and questionnaires were preserved in a safe place. All surveys were included in the study.

Statistical Analysis

Statistical data analysis was performed in a blinded fashion. Data analysts were not involved in the process of data collection. In order to examine the gender differences in body appreciation and appearance comparisons, independent t-tests were used. Levene’s test was also performed in order to assess the equality of variances between the two groups. Cohen’s d was calculated as a measure of effect size in order to overcome the shortcomings of sample size and statistical significance tests. Data analytic procedures were performed using SPSS 22.0.

RESULTS

In the present study, the ratio of female-to-male patients was 6:1. Table 2 summarizes the differences between female and male patients. As Levene’s test suggested, equal variances were assumed for both comparisons. As can be seen, men have a higher mean in body appreciation ($p < 0.05$). While women’s score in physical appearance comparison is higher, this effect is not statistically significant ($p > 0.05$). The effect size is relatively strong for body appreciation ($|d| = 0.71$) and very small for appearance comparison ($|d| = 0.08$).

DISCUSSION

The present study aimed to explore gender differences among rhinoplasty patients. Very few studies have systematically assessed potential differences between female and male

patients. Using a consecutive sample of patients from a surgical clinic in Tehran, we compared body appreciation and physical appearance comparison between females and males who applied for aesthetic rhinoplasty.

Findings suggested that male rhinoplasty patients had higher levels of positive body image and lower frequency of comparing their physical appearance in social settings such as restaurants and gyms. Therefore, male rhinoplasty patients have a better condition in terms of body image. Research suggests that men’s tendency to engage in appearance comparisons is associated with self-esteem, anxiety, drive for muscularity, sexual satisfaction, obligatory exercise, and Body Dysmorphic Disorder (BDD) symptoms^{28,29} which may result in request for cosmetic surgeries^{30,31} and depression.³² As a result, it is very important for facial plastic surgeons to screen patients prior to confirmation of surgery because some patients may be mainly in need of psychological consultation rather than a cosmetic surgery.

There is evidence that men generally have higher scores of body appreciation¹⁶ which is consistent with the present results. Moreover, present findings are consistent with the notion that generally males engage in appearance-related comparisons to a lesser degree compared to their female counterparts.³³⁻³⁵ Gender moderated this relationship, with women showing a stronger relationship between appearance comparison and body dissatisfaction in comparison with men. Therefore, it may be concluded that women who have higher degrees of appearance-related comparisons are more likely to apply for a cosmetic surgery.

The present study has several limitations. First, the sample is recruited from a single site using a non-probability sampling strategy. Second, symptoms of BDD were not compared between males and females in the present sample. Third, the number of male participants was small. Therefore, findings of the present study may be considered as preliminary results in studying gender differences among rhinoplasty patients. Consequently it is strongly recommended for future research to consider gender differences in regards to investigating psychological aspects of rhinoplasty.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

| Variable | Gender(N) | M | SD | t-test statistic | df | p-value | Cohen’s d |
|---------------------------------|------------|-------|-------|------------------|----|---------|-----------|
| Body appreciation | Male(10) | 4.75 | 0.35 | 2.144 | 68 | 0.036 | 0.71 |
| | Female(60) | 4.33 | 0.59 | | | | |
| Physical appearance comparisons | Male(10) | 27.25 | 13.92 | -0.261 | 68 | 0.795 | -0.08 |
| | Female(60) | 28.27 | 11.07 | | | | |

Table 2: Multiple comparisons of body image between female and male patients.

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Appendix 1

| S.NO | The Body Appreciation Scale (BAS) items: ²⁶ |
|------|--|
| 1 | I respect my body |
| 2 | I feel good about my body |
| 3 | On the whole, I am satisfied with my body |
| 4 | Despite its flaws, I accept my body for what it is |
| 5 | I feel that my body has at least some good qualities |
| 6 | I take a positive attitude toward my body |
| 7 | I am attentive to my body's needs |
| 8 | My self-worth is independent of my body shape or weight |
| 9 | I do not focus a lot of energy being concerned with my body shape or weight |
| 10 | My feelings toward my body are positive, for the most part |
| 11 | I engage in healthy behaviors to take care of my body |
| 12 | I do not allow unrealistically thin images of women presented in the media to affect my attitudes toward my body |
| 13 | Despite its imperfections, I still like my body |

Appendix 2

| S. NO | The Physical Appearance Comparison Scale-Revised (PACS-R) items: ²⁷ |
|-------|---|
| 1 | When I'm out in public, I compare my physical appearance to the appearance of others. |
| 2 | When I meet a new person (same sex), I compare my body size to his/her body size. |
| 3 | When I'm at work or school, I compare my body shape to the body shape of others. |
| 4 | When I'm out in public, I compare my body fat to the body fat of others. |
| 5 | When I'm shopping for clothes, I compare my weight to the weight of others. |
| 6 | When I'm at a party, I compare my body shape to the body shape of others. |
| 7 | When I'm with a group of friends, I compare my weight to the weight of others. |
| 8 | When I'm out in public, I compare my body size to the body size of others. |
| 9 | When I'm with a group of friends, I compare my body size to the body size of others. |
| 10 | When I'm eating in a restaurant, I compare my body fat to the body fat of others. |
| 11 | When I'm at the gym, I compare my physical appearance to the appearance of others. |