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Comparison of Identity Styles, Body Image Disturbance, and Vulnerable Narcissism in Women Aged 20–50 With and Without a History of Cosmetic Surgery

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ABSTRACT

Purpose: The aim of the present study was to compare identity styles, body image disturbance, and vulnerable narcissism in women aged 20 to 50 with and without a history of cosmetic surgery.

Methods and Materials: The research design was causal-comparative (ex post facto). The statistical population included all women aged 20 to 50 living in Tehran during the spring and summer of 2020, both with and without a history of cosmetic surgery. From this population, a total of 80 women with and 80 women without cosmetic surgery history were selected using convenience sampling. To measure the research variables, the Identity Style Inventory (Berzonsky, 1992), the Multidimensional Body-Self Relations Questionnaire (Cash et al., 1997), and the Hypersensitive Narcissism Scale (Hendin & Cheek, 2013) were used. Data were analyzed using independent samples t-test, one-way and multivariate analysis of variance, with SPSS-24 software.

Findings: The results indicated that the mean scores of informational identity style and attitude toward body self-relations were higher in women without a history of cosmetic surgery, while normative and diffuse-avoidant identity styles and vulnerable narcissism were higher in women with a history of cosmetic surgery. Furthermore, the findings showed a statistically significant difference at the $p \leq .05$ level between the two groups in terms of identity styles, body image disturbance, and vulnerable narcissism.

Conclusion: Therefore, it can be concluded that by identifying individuals' identity styles, body image attitudes, and narcissistic traits, effective predictive measures can be taken to reduce the tendency toward cosmetic surgery.

Keywords: identity styles, body image disturbance, vulnerable narcissism, cosmetic surgery

1. Introduction

The desire for beauty has long accompanied humanity throughout history, and human beings are inherently beauty-loving creatures (Suhag & Rauniyar, 2024). Today, with the growth of consumer culture and the global movement toward modernization and globalization, the appearance of the body has gained significant importance in shaping social relationships. Individuals strive to possess a socially acceptable and blame-free personality that aligns with contemporary societal values (Valledor et al., 2024). Cosmetic surgery is one of humanity's most recent innovations in creating beauty and, in the absence of illness, trauma, or congenital deformities, can serve as a means to enhance quality of life (Pascual et al., 2024). In general, cosmetic surgery refers to surgical procedures that are performed solely for aesthetic purposes without a specific medical necessity (Glaser et al., 2024). For individuals who opt for such procedures, cosmetic surgery may serve as a form of psychological withdrawal from reality or a defense mechanism. These individuals believe they can reinvent themselves or pursue a self-reconstruction illusion, thereby retreating from reality (Suhag & Rauniyar, 2024). The primary goal of cosmetic surgery is to enhance the appearance of individuals who perceive their looks as abnormal. When people realize that their physical traits do not meet social norms or personal ideals, they may experience distress and consider surgery as a final solution (Huang et al., 2024). Cosmetic surgery has now become a seductive tool and a symbol of luxury for various individuals, resulting in unrealistic expectations and distorted perceptions of its true nature (Reichen et al., 2020). Given that cosmetic procedures are largely aimed at improving self-confidence and physical appearance, it can be assumed that such decisions are influenced by specific psychological patterns. In fact, the motivation to seek cosmetic surgery emerges from a combination of psychological, emotional, and personality-related factors (Mazzeo et al., 2024).

One of the essential developmental tasks in human life is the formation of identity, which is directly related to psychological well-being (Mironica et al., 2024). Identity has been referred to as a "constructed self." From this perspective, identity functions as a personal framework that individuals use to interpret their experiences. To study individual similarities and differences in identity formation processes, three identity styles have been identified: informational, normative, and diffuse/avoidant. Individuals

with an informational identity style employ problem-focused strategies, experience a sense of coherence, tend to delay judgment, have clear goals, and are committed to their values (Berzonsky, 2004). Those with a normative identity style internalize others' values and standards, require external structure, seek information consistent with their values, and often exhibit a closed-minded cognitive style (Kumar & Singh, 2024). Individuals with a diffuse/avoidant style rely on emotion-focused strategies, avoid decision-making situations, postpone decisions with significant delays, and typically possess an external locus of control (Wu et al., 2024). In this regard, Afshar-Kohan and Zamani (2019) conducted a study titled *The Medicalization of Beauty and Identity Styles among young adults in Hamedan*. Their results indicated that negative self-perception and social rejection acted as contributing factors in the tendency toward cosmetic surgery. Post-surgery, participants were classified into three identity styles based on the realization of ideal body perceptions, self-concept, and attitude toward change: restorative identity with positive experience, restorative identity with negative experience, and legitimizing identity. The outcomes of cosmetic surgery varied based on these identity styles (Afshar Kohan & Zamani, 2019).

The decision to undergo cosmetic surgery is strongly influenced by psychological issues (Ericksen & Billick, 2012). Studies on the characteristics of individuals prior to surgery have shown that these individuals typically experience greater dissatisfaction with their physical features targeted for surgery compared to others. As a result, their motivation for cosmetic procedures often lies in improving specific physical traits (Nerini et al., 2024). Body image has been identified as a crucial factor in motivating individuals to undergo cosmetic surgery (Wu et al., 2024). Body image refers to the mental representation individuals hold of their bodies, regardless of how their bodies actually appear. A negative body image and dissatisfaction with one's physical appearance refer to a discrepancy between an individual's current appearance and their idealized image (Zamani et al., 2014). Negative body image includes cognitive, emotional, perceptual, and behavioral components, often manifesting as dissatisfaction with physical appearance and behaviors such as frequent weighing, mirror checking, or avoiding public situations (Alleva et al., 2015). Negative body image can affect individuals across all ages, genders, sexual orientations, and ethnic backgrounds. These negative perceptions are rooted in the complex interplay of sociocultural influences and have

serious consequences for physical and psychological health (Gillen & Markey, 2016).

Given that narcissism is defined as a rigid and stable personality trait characterized by grandiosity, self-absorption, and a need for admiration (Shiri et al., 2015), it is likely related to cosmetic surgery decisions. Pathological narcissism is an unhealthy behavioral pattern marked by arrogance, entitlement, a desire for dominance and superiority, low levels of empathy and emotional intimacy, and inflated self-esteem (Pincus & Lukowitsky, 2010; Wright et al., 2013). Narcissism is a complex, multidimensional construct. Wink (1991) distinguished between two statistically independent types of narcissism: overt narcissism, characterized by grandiosity, entitlement, and self-absorption, and covert narcissism, defined by hypersensitivity, vulnerability, and dependency on others (Gillen & Markey, 2016; Given-Wilson et al., 2011). Individuals identified as covert narcissists are thought to be more sensitive to criticism and more likely to experience negative emotional reactions such as anxiety and shame (Atlas & Them, 2008). Accordingly, Morf and Rhodewalt's (2001) dynamic self-regulatory processing model posits that narcissistic individuals attempt to regulate their behaviors to elicit maximal positive feedback from others, thereby reinforcing their inflated self-concepts (Morf & Rhodewalt, 2001). Thus, higher levels of attractiveness among narcissistic individuals may be a function of their self-regulatory strategies.

Based on the foregoing, this study aims to examine the motivations behind cosmetic surgery in individuals who do not suffer from any significant medical or aesthetic disorders but may instead experience underlying psychological difficulties. Previous research has addressed identity styles, body image disturbance, and narcissistic traits either in isolation or only among individuals who had undergone cosmetic surgery. However, few studies have simultaneously examined these three variables in both groups (with and without surgery history). Therefore, the present study seeks to investigate these psychological factors in both populations, allowing for the development of psychological interventions for individuals inclined toward cosmetic surgery. Moreover, given the increasing number of cosmetic surgery applicants annually—which may lead to negative psychological, economic, social, cultural, and familial consequences—more comprehensive and cohesive studies on the subject are needed. Accordingly, this study aims to investigate whether there are differences in identity styles, body image disturbance, and covert narcissism

between women aged 20 to 50 with and without a history of cosmetic surgery.

2. Methods and Materials

2.1. Study Design and Participants

The present study employed a causal-comparative (ex post facto) research design. The statistical population consisted of all women aged 20 to 50 years in Tehran during the spring and summer of 2020, both with and without a history of cosmetic surgery. The study sample comprised 80 women with a history of cosmetic surgery and 80 women without such a history, selected through convenience sampling. These participants were invited to take part in the study and were matched on demographic variables. After obtaining permission from the Research Unit of Islamic Azad University, Islamshahr Branch, the researcher visited several specialized cosmetic surgery centers in Tehran. Upon coordination with the management of the centers, 80 women from each group—those who had undergone cosmetic surgery and those who had not—within the age range of 20 to 50 were selected. The researcher explained the purpose of the study to participants and assured them of the confidentiality of their responses. The research instruments were then distributed, and participants were asked to respond to the items. During the response process, the researcher addressed any questions raised by the participants.

2.2. Measures

The Identity Style Inventory developed by Berzonsky (1992) consists of 40 items that assess three subscales: informational (e.g., items 2, 5, 6, 16, 18, 25, 26, 30, 33, 35, 37), normative (e.g., items 4, 10, 19, 21, 23, 28, 32, 34, 40), and diffuse/avoidant (e.g., items 3, 8, 13, 17, 24, 27, 29, 31, 36, 38). An additional 10 items measure identity commitment, which was excluded from this study. Items are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Berzonsky (1992) reported Cronbach's alpha coefficients of 0.62, 0.66, and 0.73 for the informational, normative, and diffuse/avoidant subscales, respectively. Khodaei, Shokri, Crocetti, and Garavand (2009) reported reliability coefficients ranging from 0.53 to 0.71 for identity styles. Crocetti, Rubini, Berzonsky, and Meeus (2008) validated the factor structure and psychometric properties of the ISI among Italian adolescents and university students, confirming a three-factor structure for identity styles and a one-factor structure for commitment

across age and gender groups (Khodaei et al., 2009). In the present study, Cronbach's alpha values were 0.66 for informational, 0.64 for normative, and 0.71 for diffuse/avoidant styles, indicating acceptable internal consistency. Validity was also confirmed using item-total correlations for a representative item from each subscale, with correlation values of 0.60, 0.72, and 0.69, respectively, all statistically significant at $p \leq .001$.

Originally developed by Cash et al. in 1986 and 1987 and finalized in 1997, the MBSRQ contains 46 items assessing multidimensional aspects of body image (Thompson, 1990). The subscales include Appearance Evaluation (items 5, 7, 13, 19, 25, 28, 31), Appearance Orientation (items 1, 2, 8, 9, 14, 15, 20, 21, 26, 27, 32, 33), Fitness Evaluation (items 16, 22, 34), Fitness Orientation (items 3, 4, 6, 10, 11, 12, 17, 18, 23, 24, 29, 30, 35), Overweight Preoccupation (items 36, 37), and Body Areas Satisfaction (items 38–46). Items are scored on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Brown, Cash, and Mikulka (1990) reported an overall reliability coefficient of 0.81. Rahati (2007) found Cronbach's alphas ranging from 0.54 to 0.92 across subscales and gender-specific groups. In the current study, the Cronbach's alpha coefficients were 0.66 (Appearance Evaluation), 0.76 (Appearance Orientation), 0.69 (Fitness Evaluation), 0.70 (Fitness Orientation), 0.82 (Overweight Preoccupation), and 0.71 (Body Areas Satisfaction), confirming acceptable reliability. Construct validity was verified by computing item-total correlations for a representative item per subscale, yielding values of 0.70, 0.78, 0.80, 0.69, 0.73, and 0.79, respectively, all significant at $p \leq .001$.

The HSNS is a self-report instrument developed by Cheek, Wink, Hargreaves, and Dur (2013) to assess

vulnerable (covert) narcissism and pseudo-grandiose beliefs. It measures two dimensions of pathological narcissism: grandiosity/exhibitionism (overt) and vulnerability/sensitivity (covert). The full scale includes 23 items, rated on a 5-point Likert scale from 1 (not at all) to 5 (very much). The current study used only the first 10 items, which specifically measure hypersensitive narcissism. Cheek et al. (2013) reported a Cronbach's alpha of 0.89 in a sample of 420 participants. In Iran, Jalali (2012) found a Cronbach's alpha of 0.72. Cheek et al. also reported correlations of 0.65 with the MMPI narcissism subscale, 0.30 with overt narcissism, and -0.16 with healthy narcissism. For validation in Iran, Jalali (2012) obtained face validity approval from four faculty members in clinical and special education psychology at Allameh Tabataba'i University. In this study, the Cronbach's alpha was 0.80, indicating acceptable reliability. Construct validity was established via the item-total correlation for a representative item, which was 0.73 and significant at $p \leq .001$.

2.3. Data Analysis

To test the research hypotheses, independent samples *t*-tests, one-way ANOVA, and multivariate analysis of variance (MANOVA) were conducted using SPSS version 24.

3. Findings and Results

Table 1 presents the descriptive statistics of the research variables for the group of women with a history of cosmetic surgery.

Table 1

Descriptive Statistics of Research Variables in Women With and Without a History of Cosmetic Surgery

Variable	Mean	SD	Min	Max
Women with History of Surgery				
Informational Identity	26.65	7.24	19	40
Normative Identity	27.00	3.76	21	32
Diffuse Identity	28.65	6.64	19	38
Appearance Evaluation	17.03	2.25	14	21
Appearance Orientation	26.67	7.36	16	42
Fitness Evaluation	8.61	1.48	7	11
Fitness Orientation	31.42	7.15	24	44
Overweight Preoccupation	5.01	1.01	4	7
Body Areas Satisfaction	22.18	2.96	18	27
Total Body Image Score	110.95	17.92	88	142
Vulnerable Narcissism	31.65	6.52	21	40
Women without History of Surgery				

Informational Identity	29.40	3.63	25	35
Normative Identity	23.47	5.25	17	33
Diffuse Identity	20.78	1.33	19	23
Appearance Evaluation	21.00	3.05	17	25
Appearance Orientation	33.81	8.25	22	42
Fitness Evaluation	9.79	1.73	7	12
Fitness Orientation	33.60	6.69	24	43
Overweight Preoccupation	6.00	1.42	4	8
Body Areas Satisfaction	29.63	3.28	25	34
Total Body Image Score	133.80	20.12	105	157
Vulnerable Narcissism	25.01	4.02	20	31

As shown in Table 1, the mean and standard deviation scores for women with a history of cosmetic surgery are as follows: Informational Identity ($M = 26.65$, $SD = 7.24$), Normative Identity ($M = 27.00$, $SD = 3.76$), Diffuse Identity ($M = 28.65$, $SD = 6.64$), Total Body Image Score ($M = 110.95$, $SD = 17.92$), and Vulnerable Narcissism ($M = 31.65$,

$SD = 6.52$). For women without a history of cosmetic surgery, the scores are: Informational Identity ($M = 29.40$, $SD = 3.63$), Normative Identity ($M = 23.47$, $SD = 5.25$), Diffuse Identity ($M = 20.78$, $SD = 1.33$), Total Body Image Score ($M = 133.80$, $SD = 20.12$), and Vulnerable Narcissism ($M = 25.01$, $SD = 4.02$).

Table 2

Independent Samples t-Test for Identity Styles in Women With and Without a History of Cosmetic Surgery

Variable	Levene's F	p	t	df	p	Mean Diff	Std. Error
Informational Style	49.47	0.060	-3.03	158	0.003	-2.75	0.90
Normative Style	25.97	0.074	4.87	158	0.001	3.52	0.72
Diffuse Style	29.36	0.001	10.35	158	0.001	7.85	0.75

As shown in Table 2, Levene's test for equality of variances indicates that variances are equal for the Informational Identity ($F = 49.47$, $p = 0.060$) and Normative Identity ($F = 25.97$, $p = 0.074$) subscales ($p > .05$), but not for the Diffuse Identity subscale ($F = 29.36$, $p = 0.001$). This means the assumption of equal variances holds for the first two identity styles but not for the third. The independent t-

test results are statistically significant for Informational Identity ($t = -3.03$, $p = 0.003$), Normative Identity ($t = 4.87$, $p = 0.001$), and Diffuse Identity ($t = 10.35$, $p = 0.001$), indicating that women without cosmetic surgery history scored higher on Informational Identity, while women with surgery history scored higher on Normative and Diffuse Identity styles.

Table 3

One-Way ANOVA Results Within MANOVA for Comparing Identity Styles in Women With and Without a History of Cosmetic Surgery

Dependent Variable	SS	df	MS	F	p	η^2	Power
Informational Identity	302.50	1	302.50	9.21	0.003	0.05	0.65
Normative Identity	497.02	1	497.02	23.76	0.001	0.13	0.79
Diffuse Identity	2464.90	1	2464.90	107.31	0.001	0.40	0.80

The results of the one-way ANOVA show significant differences between women with and without a history of cosmetic surgery in all three identity styles. Specifically, women without a surgery history scored higher in

Informational Identity ($M = 29.40$ vs. 26.65), while women with surgery history scored higher in Normative Identity ($M = 27.00$ vs. 23.47) and Diffuse Identity ($M = 28.65$ vs. 20.78). These results support the research hypothesis.

Table 4

Independent Samples t-Test for Body Image Disturbance Subscales in Women With and Without a History of Cosmetic Surgery

Variable	Levene's F	p	t	df	p	Mean Difference	Std. Error
Appearance Evaluation	1.51	0.140	-9.33	158	0.001	-3.96	0.42
Appearance Orientation	15.20	0.001	-5.75	158	0.001	-7.12	1.23
Fitness Evaluation	0.39	0.533	-4.65	158	0.001	-1.18	0.25
Fitness Orientation	2.36	0.126	-1.98	158	0.049	-2.17	1.09
Overweight Preoccupation	14.98	0.001	-5.05	158	0.001	-0.98	0.195
Body Areas Satisfaction	1.98	0.161	-0.15	158	0.001	-7.41	0.49

As presented in Table 4, Levene's test for equality of variances is not significant for Appearance Evaluation ($F = 1.51$), Fitness Evaluation ($F = 0.39$), Fitness Orientation ($F = 2.36$), and Body Areas Satisfaction ($F = 1.98$) ($p > .05$), indicating homogeneity of variances. However, for Appearance Orientation ($F = 15.20$) and Overweight Preoccupation ($F = 14.98$), the test is significant ($p \leq .05$), meaning the assumption of equal variances is not met for these variables.

The t-test results are statistically significant for all subscales: Appearance Evaluation ($t = -9.33$, $p = 0.001$),

Appearance Orientation ($t = -5.75$, $p = 0.001$), Fitness Evaluation ($t = -4.65$, $p = 0.001$), Fitness Orientation ($t = -1.98$, $p = 0.049$), Overweight Preoccupation ($t = -5.05$, $p = 0.001$), and Body Areas Satisfaction ($t = -0.15$, $p = 0.001$). These results indicate that women without a history of cosmetic surgery scored higher on Appearance Evaluation, Appearance Orientation, Fitness Evaluation, Fitness Orientation, Overweight Preoccupation, and Body Areas Satisfaction.

Table 5

One-Way ANOVA Results Within MANOVA for Comparing Means of Body Image Disturbance Subscales in Women With and Without a History of Cosmetic Surgery

Dependent Variable	SS	df	MS	F	p	η^2	Power
Appearance Evaluation	628.05	1	628.05	87.13	0.001	0.35	0.77
Appearance Orientation	2030.62	1	2030.62	33.15	0.001	0.17	0.68
Fitness Evaluation	56.40	1	56.40	21.64	0.001	0.12	0.63
Fitness Orientation	189.22	1	189.22	3.94	0.049	0.02	0.50
Overweight Preoccupation	39.00	1	39.00	25.57	0.001	0.13	0.66
Body Areas Satisfaction	2197.80	1	2197.80	224.99	0.001	0.58	0.84

The results of the one-way ANOVA indicate significant differences between the two groups in all body image disturbance subscales. Specifically, women without a history of cosmetic surgery scored higher in Appearance Evaluation ($M = 21.00$ vs. 17.03) and Appearance Orientation ($M = 33.81$ vs. 26.67), while women with a

history of cosmetic surgery scored higher in Fitness Evaluation ($M = 8.61$ vs. 9.79), Overweight Preoccupation ($M = 5.01$ vs. 6.00), and had lower Body Areas Satisfaction ($M = 22.18$ vs. 29.63). These findings confirm the study hypothesis.

Table 6

Independent Samples t-Test for Vulnerable Narcissism in Women With and Without a History of Cosmetic Surgery

Variable	Levene's F	p	t	df	p	Mean Difference	Std. Error
Vulnerable Narcissism	4.35	0.114	7.76	158	0.001	6.65	0.85

As shown in Table 6, Levene's test for equality of variances for Vulnerable Narcissism is not significant ($F = 4.35$, $p = 0.114$), meaning the assumption of equal variances

is upheld. The t-test result is significant ($t = 7.76$, $p = 0.001$), indicating that women with a history of cosmetic surgery had significantly higher scores on vulnerable narcissism.

Table 7

One-Way ANOVA Results for Comparing Means of Vulnerable Narcissism in Women With and Without a History of Cosmetic Surgery

Variable	SS	df	MS	F	p	η^2	Power
Between Groups	128368.90	1	128368.90	4370.99	0.001	0.76	0.85
Within Groups	1768.90	1	1768.90	60.23	0.001	0.27	0.71
Total	134778.00	160					

The one-way ANOVA results in Table 7 reveal that the difference in vulnerable narcissism between the groups is statistically significant ($F = 4370.99$, $p = 0.001$). Comparing the group means, women with a history of cosmetic surgery scored higher on vulnerable narcissism ($M = 31.65$) than women without such history ($M = 26.01$). Therefore, the research hypothesis is confirmed.

4. Discussion and Conclusion

The present study was conducted to compare identity styles, body image disturbance, and vulnerable narcissism among women aged 20 to 50 years with and without a history of cosmetic surgery. The findings showed that the informational identity style was more prominent in women without a history of cosmetic surgery, whereas normative and diffuse/avoidant identity styles were more prevalent in women with such a history. These results are consistent with the prior findings (Afshar Kohan & Zamani, 2019; Zamani et al., 2014). Individuals with an informational identity style actively seek out, evaluate, and utilize self-relevant information. They tend to question and test identity-related constructs and revise their self-concept when confronted with contradictory feedback. Moreover, because individuals with informational identity styles generally experience greater success and receive more positive social feedback, they develop a positive self-image and higher self-esteem (Tanhaye Rashvanlou et al., 2012). As such, these individuals are less likely to feel the need for cosmetic surgery. On the other hand, individuals with normative identity styles make identity-related decisions by conforming to the expectations and directives of significant others and reference groups, internalizing values and beliefs without critical evaluation, showing low tolerance for ambiguity, and maintaining rigid self-structures (Vaziri & Lotfi Kashani, 2012). Given that beauty is a highly valued social norm in contemporary society, individuals with this identity style may perceive cosmetic surgery as a necessary step to align with societal standards. Their need for wholeness and external validation may further encourage them to overutilize cosmetic procedures.

According to the definition, individuals with diffuse/avoidant identity styles tend to procrastinate and avoid engaging with identity issues and decision-making.

Over time, environmental and situational demands lead them to adopt maladaptive behavioral responses. With limited confidence in their cognitive abilities during decision-making, these individuals rely heavily on external factors and employ poor decision-making strategies such as avoidance, rationalization, and excuse-making—factors that gradually increase their susceptibility to seeking cosmetic surgery.

The study also revealed that body image attitudes were significantly more positive among women without a history of cosmetic surgery, suggesting that they possess a healthier perception of their physical appearance. This finding aligns with the prior results (Bani Asad, 2013; Khanjani et al., 2012; Zoughi Paydar et al., 2018), though it contradicts some findings (Ronaq Sheshkalani et al., 2018). Body image is a crucial component of individuals' overall well-being, influenced by sociocultural values and societal emphasis on physical attractiveness. Cultural pressure, body-based social comparisons, and preferential treatment of attractive individuals—alongside experiences of ridicule or marginalization—can all contribute to body dissatisfaction. In this context, negative body image is shaped by physical, psychological, developmental, and sociocultural factors. Those who invest more in their appearance and link it closely to their self-esteem—and who are also dissatisfied with their appearance—are more likely to seek cosmetic procedures than individuals who are less appearance-invested and more body-accepting. Thus, body dissatisfaction may serve as a motivational force behind aesthetic interventions.

Additionally, the findings suggest that women without a history of cosmetic surgery are more likely to have accepted their natural appearance, hold a more positive body image, and maintain healthier self-perceptions. They may prefer non-surgical methods to maintain or enhance their appearance. It is also plausible that concerns about body image today operate as a negative psychological factor. Certain social situations—such as public exposure of one's body—can exacerbate self-consciousness, leading to excessive self-monitoring, avoidance behaviors, negative interpretations of others' reactions, and reassurance-seeking. These behaviors contribute to the formation of cognitive and emotional experiences associated with perceived physical defectiveness, intensifying anxiety and increasing the likelihood of psychological distress. Such patterns

emphasize the importance of body image and its potential role in fostering a desire for cosmetic surgery (Bahraini, 2017).

The results further revealed that vulnerable narcissism was significantly higher among women with a history of cosmetic surgery. This finding is consistent with the prior results (Moheb et al., 2009; Sohrabi et al., 2011; Zajaji et al., 2015). While narcissism is often associated with inflated self-regard and confidence in one's appearance, vulnerable narcissism presents a different picture: socially sensitive individuals with low self-esteem. These individuals may resort to cosmetic surgery as a means of boosting their self-confidence and presenting a more desirable image. The hypersensitivity to others' judgments inherent in vulnerable narcissism fosters thoughts of altering one's appearance and striving for greater facial attractiveness—beauty that may objectively exist but remains invisible to the individual due to self-deprecation.

In discussing vulnerable narcissism, it appears that low self-esteem, the desire for self-exposure, and sensitivity to external opinions act as critical components that trigger interest in and pursuit of cosmetic procedures. This trait, coupled with excessive self-criticism and insecurity, marks individuals with a higher propensity to alter facial features. Morf and Rhodewalt's (2001) dynamic self-regulatory processing model supports this, asserting that narcissists adjust their behavior to maximize positive feedback, thereby reinforcing their grandiose self-concept. Thus, the elevated attractiveness in narcissists may be a product of their self-regulation (Morf & Rhodewalt, 2001).

The limitations of the current study should be acknowledged. First, the sample was restricted to women residing in Tehran, and given the sociocultural factors influencing attitudes toward cosmetic surgery, the findings may not be generalizable to other regions or national populations. Second, the study was limited to women aged 20 to 50 who had visited cosmetic clinics, thus excluding men and individuals outside this age range. Third, variables such as marital status, socioeconomic class, and education level were not controlled, despite their potential impact on the results. Finally, the lack of prior research specifically examining the relationship between identity styles and cosmetic surgery represents another limitation.

Given the observed differences between women with and without a history of cosmetic surgery in terms of identity styles, it is recommended that media and public communication channels be used to promote human values and diminish the emphasis on physical appearance. Such

efforts could help redirect youth toward authentic human experience and encourage the discovery of true identity.

Authors' Contributions

All authors significantly contributed to this study.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the study and participated in the research with informed consent.

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