REVISTA DA ESCOLA DE ENFERMAGEM DA USP
JOURNAL OF SCHOOL OF NURSING · UNIVERSITY OF SÃO PAULO

ORIGINAL ARTICLE

https://doi.org/10.1590/1980-220X-REEUSP-2026-0162en

The relationship among self-esteem, psychological well-being, and genital appearance satisfaction in women: mediating role of genital self-image

La relación entre la autoestima, el bienestar psicológico y la satisfacción con la apariencia genital en las mujeres: el papel mediador de la autoimagen genital

Relação entre autoestima, bem-estar psicológico e satisfação com a aparência genital em mulheres: o papel mediador da autoimagem genital

How to cite this article:
Aydın CM, Karabulutlu Ö. The relationship among self-esteem, psychological well-being, and genital appearance satisfaction in women: mediating role of genital self-image. Rev Esc Enferm USP. 2026;60:e20260162. https://doi.org/10.1590/1980-220X-REEUSP-2026-0162en

Cansu Mine Aydın[1]
Özlem Karabulutlu[2]

[1] Kafkas University, Faculty of Health Sciences, Department of Midwifery, Kars, Turkey.

[2] Kafkas University, Faculty of Health Sciences, Department of Obstetrics and Gynecology Nursing, Kars, Turkey.

ABSTRACT

Objective: This descriptive, cross-sectional study aims to determine the mediating role of genital self-image in the relationship between self-esteem, psychological well-being and genital appearance satisfaction in women. It examines the relationships between the scales and the effect of mediation. **Method:** The study was conducted between May 2024 and June 2025 at Kafkas University in Turkey with the participation of 473 women. Data were collected via a questionnaire, the Female Genital Self-Image Scale (FGSIS), the Genital Appearance Satisfaction Scale (GASS), the Rosenberg Self-Esteem Scale (RSES), the Psychological Well-Being Scale (PWBS), and face-to-face interviews. **Results:** The study found that 31.08% of participants were in the 22–24 age group, 77.80% were single, 21.56% were in a committed relationship, and 46.30% had heard of genital cosmetic procedures. There was a statistically significant positive correlation between the PWBS and the GASS and a statistically significant negative correlation between the FGSIS and the GASS scores. It was determined that the FGSIS plays a partial mediating role in the relationship between the PWBS and the GASS ($p < 0.05$). **Conclusion:** Genital self-image and genital appearance satisfaction in women influence both psychological well-being and sexual life. It is recommended that healthcare professionals develop holistic approaches and intervention programs when providing counseling on genital cosmetic surgery.

DESCRIPTORS

Cosmetics; Genitalia, Female; Nursing; Self Concept.

Corresponding author:
Cansu Mine Aydın
University Street, 59/E, Bülbül
36100– Merkez, Kars, Turkey
cansumine2236@gmail.com

Received: 03/27/2026
Approved: 08/17/2026

INTRODUCTION

The widespread acceptance of beauty standards has led to a rise in demand for cosmetic surgery, making it more popular[1]. According to the International Society of Aesthetic Plastic Surgery (ISAPS), a total of 84.495 vaginal rejuvenation and 189.058 labiaplasty procedures were performed worldwide in 2023, with Brazil identified as the country where these procedures were performed most frequently[2]. Cosmetic or aesthetic surgery influences women's perceptions and expectations of their bodies through the influence of the media and shifting social norms[1]. In particular, advancements in technology and science, along with changes in fashion and scientific progress, have led to changes in women's physical self-perception and a shift in their concept of beauty[3,4]. It has been noted that women's interest in cosmetic surgical procedures has significantly increased over the past decade[3]. Genital cosmetic surgery refers to procedures that aim to correct asymmetries and variations in the external genital region to align them with what is considered normal and ideal, as well as to enhance and reshape anatomical components to improve genital appearance[3-5]. For example, procedures such as labiaplasty, vaginal rejuvenation, G-spot augmentation, hymen reconstruction, mons pubis reduction, and clitoral hood modification are available. Women may seek genital cosmetic surgery due to certain complaints they experience (pain during sexual intercourse, a sensation of vaginal laxity, lack of pleasure during sexual intercourse, discomfort, etc.), but in reality, the majority request the procedure for aesthetic and psychosocial reasons[6]. In particular, the imposition of an ideal genital appearance on women in society leads to a negative self-image, disgust with their genital appearance, and anxiety about being rejected by society[4,5]. Furthermore, if women are dissatisfied with the appearance of their genitals, experience a discrepancy between their actual and ideal appearance, and feel negative emotions, their perception of their genital self-image and their self-esteem are diminished[7]. Moreover, body image has a decisive influence on female sexual self-image, sexual function, and sexual pleasure[8,9]. The anxieties and concerns women experience regarding their genital appearance, coupled with their partner's expectations, can lead to feelings of shame or avoidance during sexual intercourse, resulting in low self-esteem and mental health disorders[4,8]. Women who have undergone genital cosmetic procedures have been shown to experience improved psychological well-being, increased self-esteem, and greater sexual confidence and satisfaction, which positively affects their quality of life[4,9]. Therefore, the existing literature lacks studies that comprehensively examine the connections between socio-demographic factors, knowledge of genital appearance and cosmetic procedures, and satisfaction with genital appearance, along with genital self-image, self-esteem, and psychological well-being. This study aims to fill these gaps and contribute to the field by investigating the relationships among these variables and the mediating role of genital self-image in the relationship between self-esteem, psychological well-being, and genital appearance satisfaction.

RESEARCH HYPOTHESES

H1: There is a significant relationship between genital appearance satisfaction and self-esteem.

H2: There is a significant relationship between genital appearance satisfaction and genital self-image.

H3: There is a significant relationship between genital self-image and psychological well-being.

H4: Genital self-image mediates the relationship between self-esteem and genital appearance satisfaction.

H5: Genital self-image mediates the relationship between psychological well-being and genital appearance satisfaction.

METHOD

Study Design

This study used a descriptive, cross-sectional, and exploratory design and was conducted in accordance with the STROBE guidelines.

Population and Sample

The study involved female students at Kars Kafkas University in eastern Turkey, during the spring semester of the 2024-2025 academic year. The presence of women from various regions of Turkey at the university has resulted in a cosmopolitan population encompassing diverse socio-cultural characteristics. This factor demonstrates that the university represents a strategic setting for research on female genital self-image, genital cosmetics, self-esteem, psychological well-being, and appearance satisfaction. In the study, using the sampling method for an unknown population and the formula $n = p\ (100 - p)\ z^2 / E^2$, the required sample size was calculated to be 385 participants, assuming a 95% confidence level (z : 1.96 (95%), p : 50%, E : 5%)[10]. After accounting for potential data loss, 473 participants were included in the study. Participants included in the study were aged 18 years or older, capable of verbal communication, without a neurological or psychiatric diagnosis, and who voluntarily agreed to participate. Those who completed the questionnaire form incompletely or incorrectly were excluded from the study. Women who signed the informed consent forms in the face-to-face survey method participated in the study.

Data Collection Tools and Implementation

The data were collected using a questionnaire comprising the "Information Form", the "Female Genital Body Image Scale (FGSIS)", the "Genital Appearance Satisfaction Scale (GASS)", the "Rosenberg Self-Esteem Scale (RSES)", and the "Psychological Well-being Scale (PWBS)". The data collection process was conducted face-to-face between May 2024 and June 2025, and the forms were administered to participants by the researcher over a period of 15–20 minutes.

Information Form: The form, prepared by the researchers following a literature review, consists of two sections and 24 questions[4,8,11].

Female Genital Self-Image Scale (FGSIS): The Turkish adaptation of the scale developed by Herbenick and Reece was carried out by Kaya and colleagues[12]. The scale consists of seven items on a four-point Likert scale, scored from 1 to 4. The scale ranges from 7 to 28. A higher score indicates that the individual has a positive genital self-image. The scale's Cronbach's alpha value was 0.81[12]. The Cronbach's alpha value for this study was 0.81.

Genital Appearance Satisfaction Scale (GASS): The scale, developed by Bramwell and Morland[8], was adapted into Turkish by Ocaklık[4]. The scale consists of 11 items, comprising eight negative and three positive items, and uses a four-point Likert scale. The scale ranges from 0 to 33. As the score increases, the level of dissatisfaction with genital appearance also increases. The Cronbach's alpha value for the scale was 0.89[4]. In this study, the Cronbach's alpha value for genital appearance satisfaction was 0.81.

Rosenberg Self-Esteem Scale (RSES): Çuhadaroğlu[13] conducted a Turkish validity and reliability study of the scale developed by Rosenberg. The scale, comprising 63 items and 12 sub-scales, measures self-esteem through its first 10 items. The scale employs a four-point Likert-type rating ranging from 0 to 3, with options of "very true," "true," "false," and "very false." The total score ranges from 0 to 30, with a high score indicating high self-esteem. The scale's Cronbach's alpha value was 0.71[13]. The Cronbach's alpha value for this study was 0.86.

Psychological Well-being Scale (PWBS): The Turkish adaptation of the scale developed by Diener et al. was carried out by Telef[14]. The scale consists of eight items and uses a seven-point Likert scale. The scale ranges from 8 to 56. As the score on the scale increases, it indicates that the individual possesses numerous psychological resources and strengths, such as resilience, coping skills, and emotional intelligence. The Cronbach's alpha value obtained in the reliability study of the scale was 0.80[14]. The Cronbach's alpha value for this study was 0.93.

Data Analysis

The data were analyzed using the "SPSS for Windows 27" software package. For socio-demographic variables and cosmetic information regarding genital appearance, frequency and percentage distributions were reported. For continuous variables, the mean ± standard deviation and minimum–maximum values were reported. The distribution characteristics of the scale scores were assessed within the framework of the normality assumption using kurtosis and skewness values ranging from +1.5 to –1.5[15]. The FGSIS (Kurtosis : 0.90, Skewness : -0.11), PWBS (Kurtosis : 0.15, Skewness : -0.64), RSES (Kurtosis : 0.62, Skewness : 1), and GASS (Kurtosis : 0.70, Skewness : 0.38) were found to meet the normality assumptions. When comparing scale scores by demographic and genital region characteristics, the independent samples t-test was used for binary variables, and one-way analysis of variance (ANOVA) was used for variables with three or more categories. In cases where significant differences were detected in the ANOVA, the Tukey post hoc test was applied to determine the source of differences between groups. Relationships between the scales were assessed using Pearson correlation analysis. The analysis was conducted using PROCESS Model 4, developed by Hayes[16] for SPSS, with bootstrap sampling over 5.000 repetitions. The mediating role of female genital self-image in the relationships between self-esteem and genital appearance satisfaction and between psychological well-being and genital appearance satisfaction was tested using regression-based mediation analysis; coefficients, standard errors, t and p values, and 95% confidence intervals were reported for direct (X→Y), mediating (M→Y), and indirect (X→M→Y) effects, and the significance of the indirect effect was interpreted based on whether the confidence interval included zero; in addition, R, R^2, and F statistics were provided to assess the explanatory power of the models. A p-value of < 0.05 was taken as the threshold for statistical significance in all analyses.

Ethical Aspects of the Study

Prior to initiating the study, ethical approval was obtained from the Kafkas University Faculty of Health Sciences Non-Interventional Research Ethics Committee (Decision No. 81829502.903/48, March 29, 2024). Informed consent was obtained from the participating adults prior to the study. The study was conducted in accordance with the ethical standards of the Declaration of Helsinki.

RESULTS

The study found that 31.08% of participants were in the 22–24 age group, 77.80% were single, 60.05% were students, and there were equal numbers of civil servants and academics (18.60%). It was found that 53.70% of participants had an income equal to their expenditure, 77.80% had social security, 80.55% lived in a nuclear family, 67.23% lived in a city, 82.66% had no particular habits, and 41.23% reported that social media use increased their anxiety. It was found that 21.56% of participants had regular sexual intercourse, 46.30% had previously heard of the concept of genital cosmetic procedures, 48.40% learned about it online, and 8.22% learned about it from healthcare professionals. It was found that 67.44% of participants were interested in genital bleaching, 83.09% had no issues with their genital appearance, 99.15% had not undergone any genital surgery, 70.82% liked their partner's genitalia, 65.33% used any method to enhance genital appearance, 57.29% had a positive attitude towards genital aesthetics, and 57.29% reported that genital cosmetic procedures reduced their fear of examination. These results reveal that the participants' awareness, attitudes, and experiences regarding genital cosmetic and aesthetic procedures varied.

Table 1 shows that statistically significant correlations were found between the participants' income status and the mean PWBS score; between age, marital status, occupation, and income status and the mean RSES score; and between age, marital status, and occupation and the mean GASS score ($p < 0.05$).

Table 2 shows that statistically significant differences were found between the effect of social media on genital appearance anxiety and the mean scores for the PWBS, FGSIS, and GASS ($p < 0.05$). Statistically significant differences were found between the status of regular sexual intercourse and the mean RSES scores and the mean GASS scores ($p < 0.05$). There were statistically significant differences between hearing about the concept of genital cosmetic surgery and the mean PWBS score and the mean FGSIS score; between experiencing problems with genital appearance and the mean FGSIS score and the mean GASS score; between having undergone genital surgery and the mean FGSIS score and the mean RSES score; between having a positive attitude towards genital aesthetics and the mean PWBS score, the mean FGSIS score, and the mean GASS score; and between the situation where undergoing genital

Table 1 – Comparison of scale score averages by demographic characteristics – Kars, Turkey, 2024-2025.

Variable	Category	n (473)		PWBS	FGSIS	RSES	GASS
		n	%	$\bar{x}$ ± SD	$\bar{x}$ ± SD	$\bar{x}$ ± SD	$\bar{x}$ ± SD
Age	18–21[1]	112	23.68	5.26 ± 1.35	2.79 ± 0.48	1.83 ± 0.31	0.90 ± 0.47
	22–24[2]	147	31.08	5.36 ± 1.14	2.86 ± 0.42	1.83 ± 0.32	0.90 ± 0.37
	25–29[3]	69	14.59	5.51 ± 1.21	2.84 ± 0.55	1.88 ± 0.38	0.86 ± 0.44
	30–39[4]	68	14.38	5.60 ± 1.11	2.83 ± 0.58	1.69 ± 0.29	0.71 ± 0.31
	40+[5]	77	16.27	5.72 ± 1.01	2.87 ± 0.48	1.71 ± 0.35	0.78 ± 0.33
Test and p-value	F/p			2.245/0.063	0.376/0.826	**5.088/< 0.001***	**3.901/0.004***
	Post Hoc			–	–	**4 < 1, 4 < 2, 4 < 3**	**4 < 1, 4 < 2**
Marial Status	Married[1]	92	19.45	5.62 ± 1.17	2.90 ± 0.49	1.73 ± 0.30	0.73 ± 0.35
	Single[2]	368	77.80	5.40 ± 1.19	2.82 ± 0.48	1.82 ± 0.34	0.87 ± 0.40
	Divorced[3]	13	2.75	5.82 ± 0.98	2.85 ± 0.65	1.68 ± 0.44	0.86 ± 0.55
Test and p-value	F/p			1.904 / 0.151	0.926 / 0.397	**3.919/0.021***	**4.854/0.008***
	Post Hoc			–	–	**1 < 2**	**1 < 2**
Occupation	Student[1]	284	60.05	5.37 ± 1.21	2.82 ± 0.46	1.84 ± 0.32	0.91 ± 0.41
	Civil servant[2]	88	18.60	5.45 ± 1.24	2.80 ± 0.62	1.74 ± 0.34	0.76 ± 0.41
	Academic[3]	88	18.60	5.72 ± 1.04	2.94 ± 0.43	1.70 ± 0.32	0.74 ± 0.30
	Worker	13	2.75	5.42 ± 1.12	2.70 ± 0.40	1.87 ± 0.44	0.75 ± 0.29
Test and p-value	F/p			1.997 / 0.114	1.884/0.131	**5.128/0.002***	**6.363/< 0.001***
	Post Hoc			–	–	**1 > 3**	**1 > 2, 1 > 3**

$\bar{x}$ = Mean, SD = Standard deviation,*p < 0.05, t = Independent samples t test, F = ANOVA test, Post Hoc = Tukey test.

cosmetic procedures reduces fear of gynecological examination and the mean RSES score and the mean GASS score (p < 0.05).

Table 3 shows it was found that the mean item score for the PWBS was 5.45 ± 1.19 points, and the mean item score for the FGSIS was 2.84 ± 0.49 points. The mean item score for the RBSÖ was found to be 1.80 ± 0.33 points, while the mean item score for the GASS was 0.85 ± 0.40 points There was a moderate positive correlation between the PWBS and FGSIS scores (r = 0.437; p = 0.000), a weak negative correlation was found between the FGSIS and GASS scores (r = –0.101; p = 0.028), and a weak positive and statistically significant correlation was found between the RSES and GASS scores (r = 0.131; p = 0.004).

In Table 4, the direct effect of the RSES score on the GASS score was not statistically significant (p > 0.05). It was determined that the FGSIS score had a negative and statistically significant effect on GASS score (p < 0.05). When the indirect effect of the RSES score on GASS score was examined, it was found that the indirect effect calculated via FGSIS score was not statistically significant because the confidence interval included zero (β = –0.0094 ; CI [–0.0347– 0.0072]). It was determined that the model was generally significant and explained 3% of the variance in GASS score (R^2 = 0.03). These results indicate that the FGSIS score does not play a significant mediating role in the relationship between the RSES and the GASS scores. However, it was found that the GASS score is directly associated with the FGSIS score.

The PWBS score had a positive and statistically significant direct effect on the GASS score (p < 0.001). The FGSIS score was found to have a negative and statistically significant effect on the GASS score (p = 0.011). Upon examining the indirect effect of the PWBS score on the GASS score, it was observed that the confidence interval for the effect mediated by the FGSIS score did not include zero, and the indirect effect was statistically significant (β = –0.0191 ; CI [–0.0383 – –0.0027]). It was determined that the model was statistically significant overall and explained 2% of the variance in the GASS score (R^2 = 0.02). These results indicate that FGSIS score play a partial mediating role in the relationship between the PWBS and the GASS scores and that PWBS score influence GASS score both directly and indirectly via the FGSIS score (Figure 1).

DISCUSSION

The issue of dissatisfaction with genital appearance is becoming an increasingly common and serious cause for concern among women. In this regard, the rate of women seeking genital cosmetic surgery worldwide has risen in recent years[5]. This increase is influenced not only by physical and environmental factors but also, in particular, by psychological factors[6]. This study will contribute significantly to the literature by identifying the mediating role of genital self-image in the relationship between self-esteem, psychological well-being, and genital appearance satisfaction in women. Moreover, the relationship

Table 2 – Comparison of scale score averages according to knowledge of genital appearance and cosmetics – Kars, Turkey, 2024-2025.

Variable	Category	n (473)		PWBS	FGSIS	RSES	GASS
		n	%	$\bar{x}$ ± SD	$\bar{x}$ ± SD	$\bar{x}$ ± SD	$\bar{x}$ ± SD
The Effect of Social Media on Genital Appearance Anxiety	Decreased[1]	84	17.76	5.22 ± 1.29	2.70 ± 0.51	1.80 ± 0.27	1.04 ± 0.45
	Increased[2]	195	41.23	5.39 ± 1.20	2.82 ± 0.47	1.80 ± 0.34	0.83 ± 0.38
	No effect[3]	194	41.01	5.62 ± 1.10	2.91 ± 0.48	1.79 ± 0.35	0.78 ± 0.37
Test and p-value	F / p			**3.924/0.020***	**5.441/0.005***	0.084/0.919	**13.332/< 0.001***
	Post-Hoc			**1 < 3**	**1 < 3**	–	**1 > 2, 1 > 3**
Status of Regular Sexual Activity	Yes	102	21.56	5.53 ± 1.23	2.87 ± 0.53	1.74 ± 0.32	0.77 ± 0.29
	No	371	78.44	5.43 ± 1.17	2.83 ± 0.47	1.81 ± 0.33	0.87 ± 0.42
Test and p-value	t / p			0.805/0.721	0.688/0.492	**2.108/0.036***	**2.262/0.024***
Awareness of the Concept of Genital Cosmetic Surgery	Yes	219	46.30	5.61 ± 1.17	2.92 ± 0.51	1.79 ± 0.34	0.85 ± 0.40
	No	254	53.70	5.32 ± 1.18	2.77 ± 0.46	1.80 ± 0.33	0.84 ± 0.40
Test and p-value	t / p			**2.667/0.008***	**3.335/< 0.001***	0.495/0.621	0.292/0.771
Experiencing Concerns About Genital Appearance	Yes	80	16.91	5.25 ± 1.17	2.68 ± 0.44	1.85 ± 0.32	1.13 ± 0.47
	No	393	83.09	5.49 ± 1.18	2.87 ± 0.49	1.79 ± 0.33	0.79 ± 0.35
Test and p-value	t / p			1.676/0.094	**3.158/< 0.001***	1.394/0.164	**7.482/< 0.001***
Having Undergone Surgery on Genital Organs	Yes	4	0.85	6.00 ± 1.51	3.50 ± 0.36	2.13 ± 0.59	0.76 ± 0.33
	No	469	99.15	5.45 ± 1.18	2.83 ± 0.48	1.79 ± 0.33	0.85 ± 0.40
Test and p-value	t / p			0.931/0.352	**2.749/0.006***	**1.978/0.049***	0.457/0.648
Positive Attitude Towards Genital Aesthetics	Yes	271	57.29	5.58 ± 0.99	2.88 ± 0.48	1.80 ± 0.33	0.89 ± 0.38
	No	202	42.71	5.28 ± 1.39	2.78 ± 0.49	1.80 ± 0.35	0.79 ± 0.41
Test and p-value	t / p			**2.745/0.006***	**2.389/0.017***	0.159/0.874	**2.476/0.014***

$\bar{x}$ = Mean, SD = Standard deviation,*p < 0.05, t = Independent samples t test, F = ANOVA test, Post Hoc = Tukey test.

Table 3 – Correlation analysis between scales – Kars, Turkey, 2024-2025.

Variable	$\bar{x}$ ± SD		PWBS	FGSIS	RSES	GASS
PWBS	5.45 ± 1.19 (Min: 1, Max: 7)	r	1			
		p				
FGSIS	2.84 ± 0.49 (Min: 1, Max: 4)	r	0.437**	1		
		p	0.000			
RSES	1.80 ± 0.33 (Min: 0.90, Max: 3)	r	–0.053	0.071	1	
		p	0.249	0.124		
GASS	0.85 ± 0.40 (Min: 0, Max: 2.73)	r	0.010	–0.101*	0.131**	1
		p	0.827	0.028	0.004	

$\bar{x}$ = Mean, SD = Standard deviation, **p < 0.01, *p < 0.05, r = Pearson correlation coefficient.

Table 4 – The mediating role of genital self-image in the relationship between self-esteem and psychological well-being and genital appearance satisfaction – Kars, Turkey, 2024-2025.

Model	β	SE	T	P	95 % Confidence Interval	
					Low	High
RSES[X]	0.1036	0.0672	1.5419	0.1238	–0.0284	0.2356
FGSIS[M]	–0.0904	0.0372	–2.4284	**0.0155**	–0.1636	–0.0173
X*M (Indirect effect)	–0.0094	0.0107	–	–	–0.0347	0.0072
R = 0.17	R^2 = 0.03; F = 7.08; **p = 0.001***					
PWBS[X]	0.1797	0.0171	10.5467	**0.0001***	0.1462	0.2132
FGSIS[M]	–0.1063	0.0416	–2.5538	**0.011**	–0.1881	–0.0245
X*M (Indirect effect)	–0.0191	0.0091	–	–	–0.0383	–0.0027
R = 0.11	R^2 = 0.02; F = 3.28; **p = 0.038***					

Dependent variable = Genital appearance satisfaction (GASS).

between socio-demographic characteristics, knowledge levels regarding genital appearance and cosmetic procedures, and genital appearance satisfaction, genital self-image, self-esteem, and psychological well-being was examined. In this context, it is important to adopt a holistic approach to sexual health counseling, clinical practices, measures to promote mental health, and assessment processes in the field of genital cosmetics for women. In this study, it was found that the average PWBS

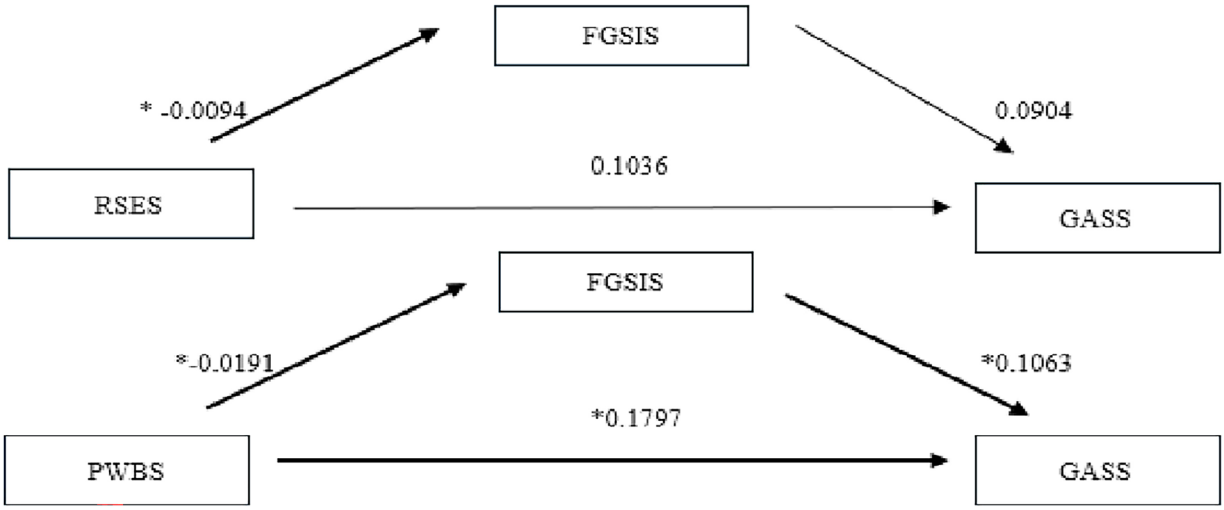


Figure 1 – Model illustrating the mediating role of genital self-image in the relationship between self-esteem and psychological well-being with genital appearance satisfaction.

score was high, the average FGSIS score was above average, the average GASS score was average, and the average RSES score was low (Table 3). In previous studies, the average PWBS score was high; the average FGSIS and RSES scores were above the mid-range; and the average GASS score was high[4,17,18]. The literature supports some of the study's findings in this regard. It is believed that this similarity is related to the fact that the studies included women in similar age groups and that they lived in similar sociocultural environments. Unlike the literature, it is thought that an increase in the educational level of the women participating in the present study had a positive effect on their health literacy and awareness of genital appearance.

It has been found that a negative genital self-image negatively affects psychological well-being in women[19], and the results of this study, which identified a positive correlation between the PWBS and the FGSIS, support the literature (Table 3). This results suggests that a positive perception of one's genital self-image may be associated with women women see themselves in a more positive light.

Benabe et al.[20] reported that women were dissatisfied with the appearance of their genital organs and felt embarrassed, stating that this led to the development of a negative self-image and an increase in sexual problems. It was also noted that they sought genital cosmetic surgery for this reason. Sharp et al.[21] reported that women with genital appearance dissatisfaction were more likely to undergo genital cosmetic surgery and specifically noted that labiaplasty increased self-esteem in same women. In this study, a negative correlation was found between the GASS and the FGSIS, while a positive correlation was found between the RSES and the GASS, consistent with the literature (Table 3). An increase in the mean GASS score leads to a higher level of genital appearance dissatisfaction. Accordingly, the study's H1, H2, and H3 hypotheses were supported by the findings. The results of this study are consistent with a previous study reporting that increased satisfaction with women's genital appearance has a positive effect on genital self-image. Furthermore, this study suggests that increased dissatisfaction with genital appearance leads to a greater desire for changes, causes women to behave more critically and selectively, and may enhance self-esteem through these changes.

This study revealed that married women's mean RSES and GASS scores were lower than those of single women (Table 1). Negative assessments of their genital appearance by the partners of married women cause these women to experience anxiety during sexual intercourse and a decrease in self-esteem[4]. It is thought that unmarried women experience greater dissatisfaction because they believe it is necessary to possess the genital appearance considered ideal in society. Furthermore, in this study, the mean RSES and GASS scores were found to be higher among women with regular sexual intercourse (Table 1). Research has shown that women who engage in regular sexual intercourse have significantly lower self-esteem and are more satisfied with their genital organs[22,23]. According to previous studies and the results of this study, it is believed that women's satisfaction with their sexual lives increases when they find their partners' genitalia attractive, while engaging in regular sexual intercourse for their partners' happiness or at their partners' request reduces their self-esteem.

It has been noted that the use of social media enables women to discuss their genitalia more freely and to access more information regarding genital appearance and genital cosmetic surgery[24]. In this regard, women's psychological well-being suffers when they increase their social media use, which can also lead to unexpected consequences[25]. In this study, among women who believed that social media use reduced their genital appearance anxiety, the mean scores for the PWBS and the FGSIS were lower than those of women whose anxiety was unaffected. It was found that the average GASS score among those whose anxiety decreased was higher than that of those whose anxiety increased and those who were unaffected (Table 2). According to the findings of this study, it is thought that women's exposure to social media content related to genital appearance or genital cosmetics leads them to believe that it reduces their genital appearance anxiety in the short term. However, in the long term, increased social media use is thought to negatively affect women's psychological well-being, genital self-image, and genital appearance

satisfaction. Previous studies support the results of this study. In this study, the literature shows that women's exposure to social media content related to genital appearance or genital cosmetic procedures negatively impacts their psychological well-being. However, while women may believe that increased social media use temporarily reduces their concerns about genital appearance, it is thought that, in the long term, increased social media use negatively affects women's genital self-image and satisfaction with their genital appearance.

In this study, participants who were aware of the concept of genital cosmetics had higher mean scores on the FGSIS and PWBS (Table 2). In the study by Öçal et al.[26], it was found that women with a high level of awareness of genital cosmetics/surgery had a higher level of genital self-image. This study's finding is supported. The awareness of genital aesthetics among women is thought to contribute to a more positive self-image and a more positive perception of their genital areas.

There are no studies in the literature comparing the psychological well-being of individuals familiar with genital cosmetic procedures. However, this study found that women who underwent genital cosmetic procedures experienced an increase in their psychological well-being[9]. Study findings show that among women who have heard of the concept of genital cosmetics and have a positive attitude toward it, increased awareness of genital aesthetics has a positive effect on psychological well-being.

It has been reported that women with concerns regarding their genital appearance experience high levels of genital appearance dissatisfaction, feel ashamed during sexual intercourse, possess a negative genital self-image, and exhibit reduced self-esteem and self-confidence[6,11]. The results of this study are consistent with the literature, indicating that women's concerns about their genital appearance negatively affect their genital self-image (Table 2). Women concerned about their genital appearance seek genital cosmetic surgery to improve it. In this study, the mean scores for the FGSIS and RSES were found to be high among women who had undergone genital surgery, which was supported by the results of studies in the literature[26]. It is believed that changes to women's genital appearance affect both their self-esteem and the development of a positive genital self-image. The study by Sasanfar et al.[27] and the current study both found that women who were dissatisfied with their genital appearance tended to have a positive attitude towards genital cosmetic surgery. In this regard, the study's results, supported by the literature, highlight women's perceptions regarding the effects of genital cosmetic surgery on body satisfaction, mental health, and physical health.

This study revealed that PWBS scores had a positive and statistically significant direct effect on the GASS and that the FGSIS plays a partial mediating role in the relationship between the PWBS and the GASS. Furthermore, it was found that the GASS was directly associated with the FGSIS (Table 4). There is no study in the literature that directly examines the mediating role; therefore, a direct comparison of the results could not be made. However, studies in the literature have indicated that dissatisfaction with genital appearance in women leads to low self-esteem and psychological problems[28] and that genital self-image influences self-esteem[29] and psychological well-being[30]. In this regard, the results of this study are consistent with those of previous studies. It is thought that female satisfaction with genital appearance positively influences genital self-image and that a positive genital self-image enhances self-esteem, thereby increasing psychological well-being. Furthermore, it is thought that an increase in psychological well-being may lead to higher levels of self-awareness and a more critical and questioning attitude towards genital appearance, which could in turn increase dissatisfaction with genital appearance. The results of this study have made significant contributions to the literature from both methodological and conceptual perspectives.

LIMITATIONS OF THE STUDY

This study has various limitations. The fact that the majority of the sample consisted of younger age groups limits the generalizability of the results to all women. A cross-sectional design precludes the drawing of causal inferences. For future studies, it is recommended that qualitative designs be utilized to obtain more meaningful results and that comparisons be made between men and women regarding the importance of genital appearance in sexual life and their attitudes towards genital cosmetic surgery.

CONCLUSION

This study found that women's psychological well-being, genital self-image, self-esteem, and satisfaction with genital appearance were at moderate to high levels. Significant differences were found between the variables examined and the sociodemographic characteristics (age, marital status, occupation), as well as between genital appearance and information regarding cosmetic procedures. It was found that the FGSIS acts as a partial mediating variable between the PWBS and the GASS. Consequently, women possessing a positive genital self-image are satisfied with the appearance of their genital organs, which positively influences their psychological well-being. The prominence of perfectionism in women leads to an increase in self-esteem while simultaneously raising the level of dissatisfaction with genital appearance. Negative evaluations of their partners' genital appearance and a poor quality of sexual life lead women to seek genital cosmetic surgery. A holistic approach should be offered by nurses or midwives to raise women's awareness of genital cosmetic surgery, to strengthen their mental health, and to improve their sexual health and quality of life.

DATA AVAILABILITY

The datasets used and analyzed during the study are available from the corresponding author on reasonable request.

RESUMO

Objetivo: Este estudo descritivo e transversal tem como objetivo determinar o papel mediador da autoimagem genital na relação entre autoestima, bem-estar psicológico e satisfação com a aparência genital em mulheres; ele examina as relações entre as escalas e o efeito de mediação. **Método:** O estudo foi realizado entre maio de 2024 e junho de 2025 na Universidade Kafkas, na Turquia, com a participação de 473 mulheres. Os dados foram coletados por meio de um questionário, da Escala de Autoimagem Genital Feminina (FGSIS), da Escala de

Satisfação com a Aparência Genital (GASS), da Escala de Autoestima de Rosenberg (RSES), da Escala de Bem-Estar Psicológico (PWBS) e de entrevistas presenciais. **Resultados:** O estudo constatou que 31,08% das participantes estavam na faixa etária de 22 a 24 anos, 77,80% eram solteiras, 21,56% estavam em um relacionamento estável e 46,30% já tinham ouvido falar em procedimentos estéticos genitais. Houve uma correlação positiva estatisticamente significativa entre o PWBS e o GASS e uma correlação negativa estatisticamente significativa entre o FGSIS e as pontuações do GASS. Determinou-se que o FGSIS desempenha um papel mediador parcial na relação entre o PWBS e o GASS ($p < 0,05$). **Conclusão:** A autoimagem genital e a satisfação com a aparência genital nas mulheres influenciam tanto o bem-estar psicológico quanto a vida sexual. Recomenda-se que os profissionais de saúde desenvolvam abordagens holísticas e programas de intervenção ao oferecer aconselhamento sobre cirurgia estética genital.

DESCRITORES

Cosméticos; Genitália Feminina; Enfermagem; Autoimagem.

RESUMEN

Objetivo: Este estudio descriptivo y transversal tiene como objetivo determinar el papel mediador de la autoimagen genital en la relación entre la autoestima, el bienestar psicológico y la satisfacción con la apariencia genital en las mujeres. Examina las relaciones entre las escalas y el efecto de la mediación. **Método:** El estudio se llevó a cabo entre mayo de 2024 y junio de 2025 en la Universidad de Kafkas, en Turquía, con la participación de 473 mujeres. Los datos se recolectaron mediante un cuestionario, la Escala de Autoimagen Genital Femenina (FGSIS), la Escala de Satisfacción con la Apariencia Genital (GASS), la Escala de Autoestima de Rosenberg (RSES), la Escala de Bienestar Psicológico (PWBS) y entrevistas presenciales. **Resultados:** El estudio reveló que el 31,08 % de las participantes pertenecía al grupo de edad de 22 a 24 años, el 77,80 % era soltera, el 21,56 % mantenía una relación estable y el 46,30 % había oído hablar de los procedimientos cosméticos genitales. Se observó una correlación positiva estadísticamente significativa entre la PWBS y la GASS, así como una correlación negativa estadísticamente significativa entre las puntuaciones de la FGSIS y la GASS. Se determinó que la escala FGSIS desempeña un papel mediador parcial en la relación entre el PWBS y el GASS ($p < 0,05$). **Conclusión:** La autoimagen genital y la satisfacción con la apariencia genital en las mujeres influyen tanto en el bienestar psicológico como en la vida sexual. Se recomienda que los profesionales de la salud desarrollen enfoques holísticos y programas de intervención al brindar asesoramiento sobre la cirugía estética genital.

DESCRIPTORES

Cosmética; Genitales Femeninos; Enfermería; Autoimagen.

REFERENCES

1. Walker CE, Krumhuber EG, Dayan S, Furnham A. Effects of social media use on desire for cosmetic surgery among young women. Curr Psychol. 2021;40(7):3355–64. doi: https://doi.org/10.1007/s12144-019-00282-1.
2. International Society of Aesthetic Plastic Surgery. ISAPS international survey on aesthetic/cosmetic procedures performed in 2023 [Internet]. Mount Royal (NJ): International Society of Aesthetic Plastic Surgery; 2024 [cited 2024 Oct 3]. Available from: https://www.isaps.org/media/rxnfqibn/isaps-global-survey_2023.pdf.
3. Schnatz PF, Boardman LA. Elective female genital cosmetic surgery. Obstet Gynecol. 2020;135(1):e42. doi: https://doi.org/10.1097/AOG.0000000000003616.
4. Ocaklık D. An investigation into genital appearance satisfaction and psychosocial aspects among women aged 18–65 [dissertation]. Istanbul: Istanbul University; 2022.
5. Kılavuz M, Genç R, Günay D, Ertekin S, Pektaş M, Oral Ş, et al. An investigation into women's views on aesthetic cosmetic gynaecology. Journal of the Faculty of Nursing Ege University. 2023;39(2):185–91. doi: https://doi.org/10.53490/egehemsire.1136638.
6. Daşıkan Z, Kıratlı D, Erdoğan M. Women's satisfaction with their genital appearance: genital cosmetic surgery. J Gynecol Obstet Neonatal Med. 2019;16(4):238–43.
7. Turan İ, Erdemoğlu Ç, Özkan SA, Özkan TK. The impact of social media use on body image and self-esteem in women. Aydın Health Journal [Internet]. 2024 [cited 2024 Oct 3];10(3):269–86. Available from: https://izlik.org/JA93RY43KZ.
8. Bramwell R, Morland C. Genital appearance satisfaction in women: the development of a questionnaire and exploration of correlates. J Reprod Infant Psychol. 2009;27(1):15–27. doi: https://doi.org/10.1080/02646830701759793.
9. Sharp G, Tiggemann M, Mattiske J. A retrospective study of the psychological outcomes of labiaplasty. Aesthet Surg J. 2017;37(3):324–31. doi: https://doi.org/10.1093/asj/sjw190. PubMed PMID: 28207030.
10. Kılbas EPK, Cevahir F. Sample selection and power analysis in scientic research. J Biotechnol and Strategic Health Res. 2023;7(1):1–8. doi: https://doi.org/10.34084/bshr.1217279.
11. Schick VR, Calabrese SK, Rima BN, Zucker AN. Genital appearance dissatisfaction: implications for women's genital image self-consciousness, sexual esteem, sexual satisfaction, and sexual risk. Psychol Women Q. 2010;34(3):394–404. doi: https://doi.org/10.1111/j.1471-6402.2010.01584.x. PubMed PMID: 20824180.
12. Ellibes Kaya A, Yassa M, Dogan O, Basbug A, Pulatoglu C, Caliskan E. The female genital self-image scale (FGSIS): cross-cultural adaptation and validation of psychometric properties within a Turkish population. Int Urogynecol J. 2019;30(1):89–99. doi: https://doi.org/10.1007/s00192-018-3688-1. PubMed PMID: 29961112.
13. Çuhadaroğlu F. Self-esteem in adolescents [dissertation]. Ankara: Hacettepe University Faculty of Medicine; 1986.
14. Telef BB. Psychological well-being scale: A study on its adaptation into Turkish, validity and reliability. Journal of the Faculty of Education Hacettepe University. 2013;28(3):374–84.
15. Tabachnick BG, Fidell LS. Using multivariate statistics. 6th ed. Boston: Allyn&Bacon; 2013.
16. Hayes AF. Introduction to mediation, moderation, and conditional process: a regression-based approach. 2nd ed. New York: The Guilford Press; 2013.

17. Özdemir A, Kavak F. The relationship between psychological well-being and perceived levels of social support among women in the menopausal period. JGON. 2021;18(2):787–91. doi: https://doi.org/10.38136/jgon.825856.

18. Bay H, Akın B. Determining the relationship between body image, genital self-image and self-esteem in postpartum women. BAUN Health Sci J. 2023;12(2):304–10. doi: https://doi.org/10.53424/balikesirsbd.1144493.

19. DeMaria AL, Meier SJ, Dykstra C. It's not perfect but it's mine: genital self-image among women living in Italy. Body Image. 2019;29:140–8. doi: https://doi.org/10.1016/j.bodyim.2019.03.011. PubMed PMID: 30959326.

20. Benabe E, Fuentes Y, Roldan G, Ramos M, Pastrana M, Romaguera J. The perceptions of female genital self-image and its associations with female sexual distress. Int J Gynaecol Obstet. 2022;157(1):90–5. doi: https://doi.org/10.1002/ijgo.13827. PubMed PMID: 34270108.

21. Sharp G, Maynard P, Hudaib AR, Hamori CA, Oates J, Kulkarni J, et al. Do genital cosmetic procedures improve women's self-esteem? A systematic review and meta-analysis. Aesthet Surg J. 2020;40(10):1143–51. doi: https://doi.org/10.1093/asj/sjaa038. PubMed PMID: 32020160.

22. Avcı C, Aygün O, Güldal D. The relationship between sexual dysfunction, self-esteem and sexual satisfaction in women. Aegean J Obstet Gynecol. 2023;5(1):5–10. doi: https://doi.org/10.46328/aejog.v5i1.134.

23. Ayan YM, Beydağ KD. Determination of the relationship between genital self-image and sexual quality of life in sexually active women. Caucasian Journal of Science. 2023;10(2):115–24. doi: https://doi.org/10.48138/cjo.1370466.

24. Karababa B, Canyurt F. An investigation into the mediating effect of self-esteem on the relationship between social media use and psychological well-being among athletes. International Journal of Health. Exercise and Sports Sciences. 2025;2(1):183–93.

25. Özgül İ, Ekşi Z. Maintaining vulvar health and vulvar appearance: nursing care. Journal of Health Sciences and Management [Internet]. 2025 [cited 2026 Sept 23];5(1):30–8. Available from: https://izlik.org/JA82TG89KU.

26. Öçal SE, Cetişli NE, Avcı SÇ, Gür EB. Women's genital self-images, their acceptance of cosmetic surgery, and evaluation the relationship. Eur J Obstet Gynecol Reprod Biol. 2025;312:114557. doi: https://doi.org/10.1016/j.ejogrb.2025.114557. PubMed PMID: 40617195.

27. Sasanfar T, Maasoumi R, Ataei M, Haghani S, Nekoolaltak M. Comparative ınvestigation of genital self-image and sexual function in women with and without a history of female genital cosmetic procedures: a cross-sectional study. Int J Community Based Nurs Midwifery. 2024;12(2):121–34. doi: https://doi.org/10.30476/IJCBNM.2024.101051.2399. PubMed PMID: 38650960.

28. Magdala I, Sánchez-Fernández M, Mestre JM. Female genital self-image and psychological distress: the serial mediating effects of existential shame and limited access to emotion regulation strategies. Arch Womens Ment Health. 2026;29(1):33. doi: https://doi.org/10.1007/s00737-025-01662-2. PubMed PMID: 41636900.

29. Mohammed GF, Al-Dhubaibi MS, AbdElneam AI, Bahaj SS, Al-Dhubaibi AM. Exploring female genital self-image: a psychological and sociocultural perspective. Sex Med Rev. 2025;13(2):256–66. doi: https://doi.org/10.1093/sxmrev/qeaf006. PubMed PMID: 39916386.

30. Alavi-Arjas F, Goodman MP, Simbar M, Alavi Majd H, Sharp G, Nahidi F. The effect of female genital cosmetic and reconstructive procedures on body and genital self-image: a systematic review and meta-analysis. Aesthet Surg J. 2023;43(10):1161–73. doi: https://doi.org/10.1093/asj/sjad109. PubMed PMID: 37078824.

ASSOCIATE EDITOR

Nathalie Leister

CC BY This is an open-access article distributed under the terms of the Creative Commons Attribution License.