

# Factors Influencing Medical Students' Decision to Undergo Aesthetic Plastic Surgery

## *Fatores que influenciam estudantes de medicina na decisão de se submeterem a cirurgias plásticas estéticas*

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Rev Bras Cir Plást 2026;41:s00451812993.

### Abstract

**Introduction** The demand for plastic surgeries has increased among university students, especially in Brazil, which is the world leader in the number of these procedures. This scenario highlights the importance of understanding the factors that influence this decision.

**Objective** To identify the main factors that motivate medical students at the University of Rio Verde, Campus Aparecida de Goiânia - Extensão Goiânia, state of Goiânia, Brazil, to undergo aesthetic plastic surgeries.

**Materials and Methods** The present is an epidemiological, observational, cross-sectional, descriptive study with a quantitative approach. The sample comprised 303 students, who responded to three instruments: a sociodemographic questionnaire, the Rosenberg Self-Esteem Scale, and a questionnaire on aesthetic desires and influences. Data were analyzed using descriptive statistics and binary logistic regression.

**Results** Most participants were female (68.98%) and aged between 21 and 25 years old (45.87%). Although 89.1% had never undergone plastic surgery, 58.75% expressed interest in doing so. The main predictors of surgical intention were: desire to improve appearance (odds ratio [OR] = 23.5;  $p < 0.001$ ), female sex (OR = 7.6;  $p < 0.001$ ), perception of professional benefit (OR = 2.56;  $p = 0.014$ ), frequency of social media posts (OR = 1.76;  $p = 0.012$ ), age (OR = 1.12;  $p = 0.002$ ), and low self-esteem (OR = 1.14;  $p < 0.001$ ). The multivariate model showed excellent discriminatory power (area under the curve [AUC] = 0.89).

**Conclusion** The decision to undergo aesthetic plastic surgery among medical students is multifactorial, being primarily influenced by aesthetic and sociocultural factors rather than self-esteem alone. The findings highlight the need to address body image and emotional health within academic environments.

### Keywords

- ▶ self concept
- ▶ plastic surgery
- ▶ social behavior
- ▶ medical students
- ▶ social media

received  
January 8, 2025  
accepted  
July 14, 2025

DOI <https://doi.org/10.1055/s-0045-1812993>.  
ISSN 2177-1235.

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## Resumo

**Introdução** A busca por cirurgias plásticas tem aumentado entre jovens universitários, especialmente no Brasil, país que lidera mundialmente o número destes procedimentos. Tal cenário destaca a importância de compreender os fatores que influenciam esta escolha.

**Objetivo** Identificar os principais fatores que motivam estudantes de medicina da Universidade de Rio Verde, Campus Aparecida de Goiânia - Extensão Goiânia, GO, Brasil, a se submeterem a cirurgias plásticas estéticas.

**Materiais e Métodos** Estudo epidemiológico, observacional, transversal e descritivo, com abordagem quantitativa. A amostra foi composta por 303 acadêmicos que responderam a três instrumentos: questionário sociodemográfico, Escala de Autoestima de Rosenberg e questionário sobre desejos e influências estéticas. Os dados foram analisados por meio de estatística descritiva e regressão logística binária.

**Resultados** A maioria dos participantes era do sexo feminino (68,98%) e tinha entre 21 e 25 anos (45,87%). Embora 89,1% nunca tenham realizado cirurgia plástica, 58,75% demonstraram interesse. Os principais preditores da intenção cirúrgica foram: desejo de melhorar a aparência (razão de chances [RC] = 23,5;  $p < 0,001$ ), sexo feminino (RC = 7,6;  $p < 0,001$ ), percepção de benefício profissional (RC = 2,56;  $p = 0,014$ ), frequência de postagens em redes sociais (RC = 1,76;  $p = 0,012$ ), idade (RC = 1,12;  $p = 0,002$ ) e baixa autoestima (RC = 1,14;  $p < 0,001$ ). O modelo multivariado apresentou excelente poder discriminatório (área sob a curva [AUC] = 0,89).

**Conclusão** A decisão por cirurgias plásticas estéticas entre estudantes de medicina é multifatorial, sendo influenciada principalmente por fatores estéticos e socioculturais, mais do que apenas pela autoestima. Os achados destacam a necessidade de discutir imagem e saúde emocional acadêmica.

## Palavras-chave

- ▶ autoimagem
- ▶ cirurgia plástica
- ▶ comportamento social
- ▶ estudantes de medicina
- ▶ rede social

## Introduction

Although beauty standards have existed since Ancient Greece, they are changeable and adaptable.<sup>1</sup> The current standard consists of thin people with muscular definition,<sup>2</sup> especially in Brazil, a tropical country with a worldwide stereotype of beautiful bodies. In the 21<sup>st</sup> century, the body has taken a central role in human life, mediating social relations and influencing people's acceptance by peers within the same sociocultural context.<sup>3</sup> Technological advances and mass communication, in particular through the internet, resulted in body images reaching more and more people, contributing to a standardization of beauty.<sup>4</sup> Young people attribute a greater relevance to body image in society since this age group is developing their body image based on body recognition, contact, and the impact of society and culture.<sup>5</sup> Moreover, the psychosocial instability resulting from entering the university environment, including new social relationships, greater independence from family, and adoption of new behaviors, makes young students vulnerable to societal pressures regarding bodily aspects.<sup>6</sup> Self-perception influences interpersonal relationships, health, self-esteem, and well-being. Therefore, plastic surgery plays a significant role in the subject's life as it directly impacts their self-image and societal interactions. The latest global survey by the International Society of Aesthetic Plastic Surgery (ISAPS),<sup>7</sup> revealed that Brazil ranks first among countries performing

the most plastic surgical procedures in 2023. Psychological and social factors, such as self-esteem and the influence of social media, have a strong relationship with the desire for aesthetic surgery. It is essential to understand how these elements impact patients' overall well-being. In addition, plastic surgery can represent not only an aesthetic procedure but also a potential means of improving overall health, as the World Health Organization (WHO), since 1946, has defined health as a state of complete physical, mental, and social wellbeing, and not merely the absence of disease or illness.

## Objective

The present study aimed to identify the key factors that motivate medical students at the Universidade de Rio Verde (UniRV), Aparecida de Goiânia Campus, Goiânia Extension, Goiânia, state of Goiás, Brazil, to undergo aesthetic plastic surgeries.

## Materials and Methods

The present epidemiological, observational, cross-sectional, quantitative study included descriptive and analytical elements. We collected data from online questionnaires created on the Google Forms platform. We selected this model to analyze the factors influencing young medical students to undergo aesthetic plastic surgery.

The research took place at the School of Medicine of UniRV, Aparecida de Goiânia Campus, Goiânia Extension, Goiânia, state of Goiás, Brazil. The study involved students of both genders, aged  $\geq 18$  years old, enrolled from the 1<sup>st</sup> to the 12<sup>th</sup> semester of the Medical School. The initial sample consisted of 327 students, of whom 324 agreed to participate after signing the Informed Consent Form (ICF) (► **Appendix I**). After data processing, we analyzed 303 valid responses, considering the criteria of completeness and consistency of the variables used in the logistic regression.

The present study involved students  $\geq 18$  years old who were enrolled in the Medical School and agreed to the ICF terms. We excluded participants who either did not formally consent or chose “I prefer not to respond” to any of the analyzed variables. We sent individual invitations to participate via institutional academic emails, without using lists that would allow third parties to identify the students.

The research form consisted of three instruments. The first was a sociodemographic questionnaire (► **Appendix II**), containing 12 items, including age, gender, race, height, weight, income, and in which semester they were enrolled. The second instrument was the Rosenberg Self-Esteem Scale, which underwent translation into Portuguese and adaptation at Escola Paulista de Medicina, Universidade Federal de São Paulo, São Paulo, state of São Paulo, Brazil (► **Appendix III**),<sup>8</sup> with 10 items evaluated on a four-point Likert scale. For this instrument, potential answers for statements 1, 3, 4, 7, and 10 had the following scores: strongly agree = 0, agree = 1, disagree = 2, and strongly disagree = 3. Meanwhile, potential answers for statements 2, 5, 6, 8, and 9 had the following scores: strongly agree = 3, agree = 2, disagree = 1, strongly disagree = 0. The final Rosenberg Self-Esteem Scale score ranges from 0 to 30, with higher values indicating lower self-esteem. The third instrument was the Questionnaire on Desires, Yearnings, and Influences (► **Appendix IV**), consisting of eight items assessing aesthetic motivations, the influence of social media, and the frequency of digital exposure. Most questions have dichotomous answers (yes/no), except for question 6 (ordinal frequency scale) and question 2 (open-ended).

### Statistical Analysis

We organized the data in Microsoft Excel (Microsoft Corporation) and later exported it to jamovi statistical software (the jamovi project, 2023), version 2.3.21. Initially, we performed a descriptive analysis, calculating means, standard deviations, absolute and relative frequencies, and performed normality tests.

To assess the association between self-esteem and the intention to undergo aesthetic plastic surgery, we applied binary logistic regression. The dependent variable was the intention to undergo aesthetic plastic surgery, considering a dichotomous response (in which yes = 1 and no = 0) to the question “Do you want to undergo an aesthetic (or another) plastic surgery?”.

The initial analysis of self-esteem used a simple model and the reversed Rosenberg Scale (in which higher values indicate lower self-esteem). Next, we constructed a multivariate

regression including the following covariates: self-esteem, gender (male/female), age (mean values of age groups), weight (mean values of weight groups), perceived professional benefit of surgery, desire to improve appearance, desire to look like digital influencers, and frequency of social media posts.

We converted categorical variables to binary format (yes = 1, no = 0). We expressed the ordinal variable referring to the frequency of social media posts based on the estimated mean number of posts assigned to each response range: rarely (0.25), once a week (1), 2 to 3 times a week (2.5), 4 to 5 times a week (5), and daily (7). This approach allowed the inclusion of the variable as a continuous predictor in the multivariate analysis, based on the estimated equivalence of self-reported frequency. For categorical variables with missing data, we applied point imputations based on the mode or point deletion. For continuous variables derived from ranges (such as age and weight), we used the mean values of the respective categories. This approach allowed the inclusion of all 303 participants in the multivariate analysis. The significance level adopted was  $p < 0.05$ . We reported the coefficients ( $\beta$ ),  $p$ -values, and odds ratios (ORs) with their respective 95% confidence intervals (95% CIs). We assessed the goodness-of-fit of the multivariate model using McFadden's pseudo  $R^2$  value. We evaluated the discriminatory capacity of the model using the receiver operating characteristic curve, calculating the area under the curve (AUC).

### Ethical Aspects

The present study complied with the precepts of Resolution 466/2012 of the Brazilian National Health Council (CNS, in the Portuguese acronym), Ministry of Health, observing the following ethical aspects: submission of the project to the Research Ethics Committee of UniRV and requesting authorization for its conduction. The study began after obtaining approval under opinion number 6.775.431. Thus, we explained to the participants all procedures adopted during the research and their potential risks and benefits. Additionally, the study adhered to bioethical principles by valuing human dignity, freedom, and autonomy. We assured the participants that they could choose not to answer any questions.

The approach to the participants was respectful, clarifying the purpose of the study and the significance of their participation. We then informed the participants about data confidentiality and that the presentation of the results would occur at the end of the study.

The subjects authorized their voluntary participation in the research by signing the ICF (Appendix I), which ensured their right to withdraw their consent at any stage of the study without penalty. Moreover, we emphasized the importance of participants saving a copy of the form for later access to the contact details of the researchers and the Ethics Committee. We provided a link to the ICF to ensure participants could access it (<https://forms.gle/yj72HKU1hynZMVkUA>). The ICF application was electronic, in compliance with Circular Letter No. 2/2021/CONEP/SECNS/MS. The ICF included the

**Table 1** Sociodemographic profile of medical students participating in the study ( $n = 303$ )

Variable	Category	<i>n</i>	%	95%CI
Gender	Male	94	31.02%	25.81%–36.23%
	Female	209	68.98%	63.77%–74.19%
Body weight (kg)	51–60	83	27.39%	22.37%–32.41%
	61–70	93	30.69%	25.50%–35.89%
	71–80	65	21.45%	16.83%–26.07%
Age (years old)	18–20	118	38.94%	33.45%–44.43%
	21–25	139	45.87%	40.26%–51.49%
	26–30	21	6.93%	4.07%–9.79%
Self-reported skin color	White	200	66.01%	60.67%–71.34%
	Brown	91	30.03%	24.87%–35.19%
	Black	12	3.96%	1.76%–6.16%
Monthly family income	< R\$ 5,000	23	7.59%	4.61%–10.57%
	R\$ 5,001–10,000	68	22.44%	17.74%–27.14%
	> R\$ 10,000	160	52.81%	47.18%–58.43%

Abbreviation: CI, confidence interval.

guarantees and rights provided for in CNS Resolutions No. 466 of 2012 and 510 of 2016.

## Results

### Sociodemographic Profile of Participants

We sent the questionnaire to 327 students and selected 303 students for the study after excluding 24 participants who did not meet the inclusion and statistical analysis criteria. ▶**Table 1** shows the sociodemographic profile of the 303 students included in the analysis. The sample was predominantly female (68.98%), with ages ranging from 21 to 25 years old (45.87%), and of white skin color (66.01%). More than half (52.81%) of the participants reported a family income > R\$ 10,000.

### Assessment of Self-Esteem and its Relationship with the Intention to Undergo Aesthetic Plastic Surgery

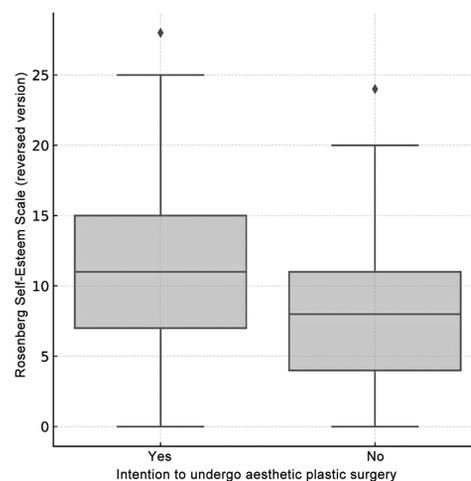
Analysis of the (reversed) Rosenberg Self-Esteem Scale revealed that low self-esteem had a statistically significant relationship with a greater intention to undergo aesthetic plastic surgery. The simple model, which considers only self-esteem as a predictor variable, showed that lower levels of self-esteem (higher scores on the reversed scale) had an association with a greater propensity to undergo aesthetic surgical procedures ( $\beta = 0.097$ ;  $p < 0.001$ ) (▶**Fig. 1**). However, the pseudo  $R^2$  value (0.09) indicated that self-esteem alone explained only 9% of the variability in the decision to undergo plastic surgery.

When including covariates in the multivariate model, the intercept was negative and highly significant ( $\beta_0 = -8.58$ ;  $p < 0.001$ ). This indicates that, in the absence of any predisposing factors (such as gender, low self-esteem, age, and aesthetic or professional motivations), the intention to

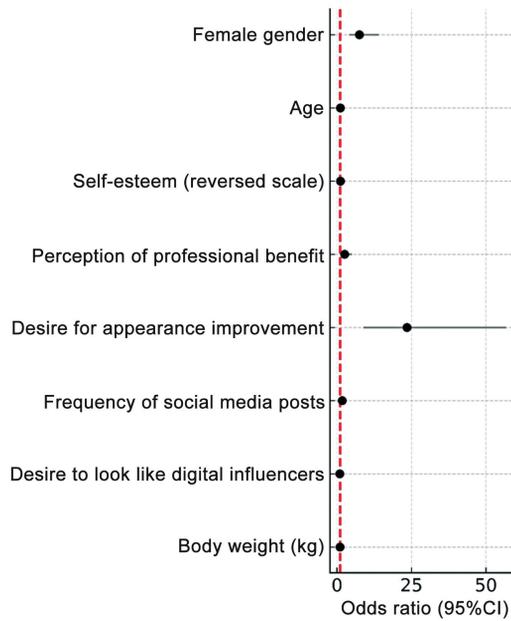
undergo plastic surgery would be extremely unlikely. However, when adjusting for other variables, self-esteem maintained a statistically significant association ( $\beta = 0.137$ ;  $p < 0.001$ ), confirming that subjects with lower self-esteem remain more likely to undergo plastic surgery, even after adjustments (▶**Fig. 2**).

### Main Predictors of Intention to Undergo Plastic Surgery

Multivariate analysis (▶**Table 2**) identified female gender as one of the most relevant predictors of surgical intention ( $\beta = 2.01$ ;  $p < 0.001$ ), with women being ~ 7.5 times more



**Fig. 1** Comparison of self-esteem scores between participants with and without intention to undergo aesthetic plastic surgery. We used the reversed version of the Rosenberg Self-Esteem Scale, in which higher scores indicate lower self-esteem. The group with surgical intention had significantly lower self-esteem ( $p < 0.001$ ). Source: The authors.



**Fig. 2** Forest plot of multiple logistic regression showing factors associated with intention to undergo aesthetic plastic surgery. Eight variables were included: gender, age, self-esteem (reversed scale), perceived professional benefit, desire to improve appearance, frequency of social media posts, desire to look like digital influencers, and body weight. The vertical dotted line represents an odds ratio (OR) value of 1 (no effect). Abbreviation: CI, confidence interval. Source: The authors.

likely to express this desire compared with men. Age also demonstrated a statistically significant effect ( $\beta = 0.113$ ;  $p = 0.001$ ), indicating that, with each additional year, the chance of desiring cosmetic surgery increases by  $\sim 12\%$ . However, the interpretation of this finding should be made with caution, considering that the sample consisted predominantly of young university students (21–25 years old), which may influence the direction and magnitude of this effect. Regarding the perceived career benefits of surgery ( $\beta = 0.942$ ;  $p = 0.011$ ), participants who believed that surgery could bring professional advantages were 2.56 times more likely to want to undergo the procedure. The desire to

improve aesthetic appearance was the most strongly associated factor with the intention to undergo plastic surgery ( $\beta = 3.158$ ;  $p < 0.001$ ), with an OR of 23.5, indicating that subjects motivated by aesthetic concerns were very likely to express this desire. The frequency of social media posts also presented a significant association with surgical intention ( $\beta = 0.563$ ;  $p = 0.012$ ), suggesting that the greater the digital engagement (frequent photo posting), the higher the propensity for aesthetic surgery. This finding may reflect the indirect influence of social media on self-image and public exposure of the body.

**Other Factors with Marginal or Nonsignificant Effect**

On the other hand, the desire to have a body similar to that of digital influencers ( $\beta = -0.078$ ;  $p = 0.824$ ) did not show a significant association with surgery intention, indicating that this variable may reflect other factors already adjusted for in the model, such as self-esteem or social media use. Moreover, body weight ( $\beta = 0.008$ ;  $p = 0.664$ ) did not have a statistically significant effect on the desire to undergo plastic surgery.

**Predictive Strength of the Model**

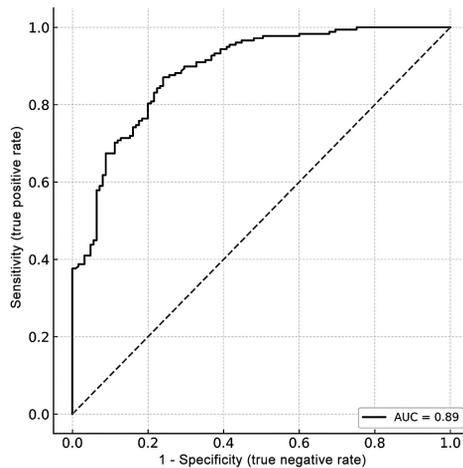
The multivariate model presented a substantially better fit than the simple model, with a pseudo  $R^2$  value of 0.5. Furthermore, we evaluated the accuracy of the multivariate model using the ROC curve. The AUC value of 0.89 demonstrates excellent discriminatory capacity ( $\rightarrow$ Fig. 3). This suggests that the main factors influencing the decision to undergo plastic surgery are external, including social expectations, gender pressures, age, and perceptions of personal and professional benefits.

Although low self-esteem is associated with a greater intention to undergo plastic surgery, its impact is less significant when compared with sociocultural factors. Apparently, the key influences for the decision to undergo cosmetic procedures are aesthetic-related social pressures, perceived professional benefits, and demographic aspects, such as gender and age. Future studies should investigate how various aspects of self-esteem and body dissatisfaction interact with these motivations, particularly in the context of

**Table 2** Multiple logistic regression of factors associated with intention to undergo aesthetic plastic surgery among medical students ( $n = 303$ )

Variable	$\beta$	<i>p</i> -value	OR (95%CI)
Female gender	2.01	< 0.001	7.60 (4.12–14.03)
Age (years old)	0.11	0.002	1.12 (1.04–1.20)
Self-esteem (reversed scale)	0.13	< 0.001	1.14 (1.07–1.22)
Perception of professional benefit	0.94	0.014	2.56 (1.20–5.08)
Desire for appearance improvement	3.15	< 0.001	23.50 (8.91–56.83)
Frequency of social media posts	0.563	0.012	1.76 (1.01–1.89)
Desire to look like digital influencers	- 0.078	0.82	0.93 (0.42–1.83)
Body weight (kg)	0.008	0.66	1.01 (0.98–1.05)

Abbreviations: CI, confidence interval; OR, odds ratio.



**Fig. 3** Receiver operating characteristic (ROC) curve of the adjusted logistic regression model. The area under the curve (AUC = 0.89) indicates excellent predictive performance in identifying the intention to undergo aesthetic plastic surgery. The dashed line represents a random model (with no discriminative power). **Source:** The authors.

social networks and the construction of body image in highly competitive careers.

## Discussion

### Sociodemographic Profile of Participants

The data from the present study resemble the sociodemographic profile reported by Filho et al.,<sup>9</sup> who also found a predominance of women (92.3%), white subjects (63.5%), and an income between 4 and 10 minimum wages (28.8%). These findings are consistent with the study by Rassi et al.,<sup>10</sup> which reported a predominantly female (97.6%) and white population (26.9%), with a mean age of 35.31 years old ( $n = 501$ ), and a mean income of R\$ 7,341.69. The primary difference between the studies lies in the age range of participants; we focused on medical students, whereas the other studies examined subjects who had already undergone plastic surgery.

### Age and Gender Influence

Female gender was one of the factors most strongly associated with surgical intention, with women being 7.5 times more likely to desire the procedure compared with men ( $\beta = 2.01$ ;  $p < 0.001$ ). This finding is in line with the literature, which indicates that women often adopt beauty standards and experience heightened social pressure to conform to aesthetic norms.<sup>11,12</sup>

Age also demonstrated a statistically significant influence ( $\beta = 0.11$ ;  $p = 0.001$ ), with a 12% increase in surgical intention for each additional year of age. However, this association should be interpreted with caution, since the sample was predominantly composed of young university students (21–25 years old). Studies suggest that, in this age group, media exposure and the impact of social media are particularly relevant factors.<sup>13</sup> In contrast, in older subjects, the desire for rejuvenation may play a more prominent role.<sup>14</sup>

### Self-Esteem and the Intention to Undergo Aesthetic Plastic Surgery

The results of our study indicate that the intention to undergo aesthetic plastic surgery is influenced by a combination of psychological and social factors, with self-esteem playing a relevant, but not solely determining, role. This conclusion is corroborated by Aguiar et al.,<sup>15</sup> who, in a qualitative study of women undergoing cosmetic procedures, observed that, although the surgery promoted an improvement in the perception of self-esteem, this was not the main motivation for it, reinforcing the idea that the surgical decision involves a broader context of social and individual expectations. Subjects with lower levels of self-esteem tend to have a greater intention to undergo cosmetic procedures ( $\beta = 0.13$ ;  $p < 0.001$ ), corroborating previous studies that highlight body dissatisfaction as an even stronger predictor than global self-esteem.<sup>14,16</sup>

However, the isolated contribution of self-esteem to surgical intention was modest (pseudo  $R^2 = 0.05$ ), which is in line with recent studies suggesting that internalization of beauty standards and dissatisfaction with specific body parts are more robust predictors of this desire.<sup>17</sup>

Furthermore, the present study is unique in that it analyzed medical students, a group rarely investigated in research on surgical intention. Al-Bashaireh et al.<sup>18</sup> found a strong association between negative body image and favorable attitudes toward plastic surgery among female university students in the United Arab Emirates, suggesting that academic and cultural factors may influence perceptions of body image and the pursuit of cosmetic interventions.

### Perception of Professional Benefits and Influence of Attractiveness

Another relevant finding was the perception that plastic surgery can bring professional benefits, which was associated with a greater intention to undergo plastic surgery ( $\beta = 0.94$ ;  $p = 0.011$ ). The “beauty premium” concept suggests that attractive subjects are often seen as more competent and enjoy better job market opportunities.<sup>19</sup>

This perception may be particularly relevant for medical students, whose careers involve high levels of public exposure and constant interaction with patients and colleagues. Furthermore, the desire for appearance improvement was the factor most strongly associated with plastic surgery intention ( $\beta = 3.15$ ;  $p < 0.001$ ), indicating that dissatisfaction with one's own attractiveness is among the most robust predictors of this desire.<sup>11</sup>

### The Role of Social Media and Digital Influencers

A Brazilian study from Portela et al.<sup>20</sup> confirmed the influence of social media on body image perception and intention to undergo plastic surgery. These authors revealed that 79.5% of medical students considered undergoing aesthetic procedures due to exposure to digital content. In our study, the frequency of social media posts was significantly associated with the intention to undergo plastic surgery ( $\beta = 0.563$ ;  $p = 0.012$ ), suggesting that students who post more frequently are more likely to have surgical intentions. In contrast, the

desire to look like digital influencers did not show a significant association ( $\beta = -0.078$ ;  $p = 0.824$ ). This suggests that exposure behavior may be more determinant than the explicit idealization of digital aesthetics. These findings indicate that, despite the significance of the digital environment, factors such as academic pressures and professional expectations may play a modulating role in the relationship between social media and surgical intention, especially among medical students. Still, it is worth considering that, as pointed out by Mironica et al.,<sup>21</sup> chronic exposure to aesthetic content on social media can generate cumulative effects over time, gradually influencing the decision to undergo aesthetic interventions.

### Study Limitations

As limitations, we highlight that the cross-sectional design adopted does not allow the establishment of causal relationships between the variables studied, confining the study to the identification of statistical associations. The sample, although large, is composed exclusively of students from a private institution in the state of Goiás, Brazil, with a predominance of high-income families, which may limit the generalization of the results to other academic populations or sociocultural contexts. The primary outcome, the intention to pursue aesthetic plastic surgery, was based on self-reports, which may not reflect the participants' actual future actions due to possible economic barriers, fluctuating opinions, or changing contexts. Furthermore, we did not include relevant psychosocial variables, such as localized body dissatisfaction, social comparison, or symptoms of body dysmorphic disorder, which can significantly impact the decision to undergo cosmetic procedures and deserve investigation in future studies.<sup>22</sup>

### Conclusion

The results of the present study demonstrate that medical students' decision to undergo aesthetic plastic surgery is influenced by sociocultural factors, self-esteem, and perceived professional benefits. Low self-esteem showed an association with a greater intention to undergo plastic surgery. However, this relationship became less significant when adjusted for other variables, suggesting that aesthetic and social expectations play a more decisive role. Women were more likely to undergo plastic surgery, and the perception that the procedure could bring career benefits also proved to be a relevant factor. The desire to improve appearance was the main predictor of surgical intention, indicating that the pursuit of aesthetic procedures largely reflects social pressures and idealized beauty standards. Although social media plays a significant role in exposure to aesthetic standards, the frequency of posts and the desire to look like digital influencers were not isolated determinants of surgical decision-making, reinforcing the fact that multiple factors interact in this process. The present study contributes to understanding the factors that motivate medical students to consider aesthetic plastic surgery, highlighting the need for educational initiatives and critical discussions about body image and aesthetic

expectations. Therefore, plastic surgery should not be viewed negatively or stigmatized, but rather understood as a legitimate possibility, as long as the decision is based on genuine and conscious motivations. Educational strategies that focus on reflection about self-esteem, aesthetic standards, and social influence can empower students to make more balanced decisions that align with their well-being. Future studies with a longitudinal design and more diverse populations could deepen understanding of the factors that support the intention to undergo plastic surgery over time.

### Data Availability

Data will be available upon request to the corresponding author.

### Authors' Contributions

VBDS, TTA, and LCA: data analysis, interpretation, or both, statistical analysis, final approval of the manuscript, funding acquisition, data collection, conceptualization, study conception and design, resource management, project management, investigation, methodology, performance of surgeries, experiments, or both, writing – draft preparation, writing – reviewing & editing, software, supervision, validation, and visualization; HSM: data analysis, interpretation, or both, statistical analysis, final approval of the manuscript, funding acquisition, resource management, project management, investigation, methodology, performance of surgeries, experiments, or both, writing – reviewing & editing, supervision, and visualization.

### Clinical Trials

None.

### Financial Support

The authors declare that they did not receive financial support from agencies in the public, private, or non-profit sectors to conduct the present study.

### Conflict of Interests

The authors have no conflict of interests to declare.

### References

- 1 Sena RMC, Nascimento EGC, Sena PRC, Jacob LMS, Mais EMC. A construção social do corpo: como a perseguição do ideal do belo influenciou as concepções de saúde na sociedade brasileira contemporânea. *Mudanças*. 2019;27(01):53–61
- 2 Kelley CC, Neufeld JM, Musher-Eizenman DR. Drive for thinness and drive for muscularity: opposite ends of the continuum or separate constructs? *Body Image* 2010;7(01):74–77. Doi: 10.1016/j.bodyim.2009.09.008
- 3 Miranda RF, Almeida TS, Oliveira TC, Souza CS, Abranches MV. REPRESENTAÇÃO CORPORAL ENTRE JOVENS UNIVERSITÁRIOS: BELEZA, SAÚDE E INSATISFAÇÃO NA VIVÊNCIA DE UM CORPO-VITRINE. *Rev Psi Divers Saúde* 2017;6(04):258–269. Doi: 10.17267/2317-3394rpd.v6i4.1696 Disponível em: <https://www5.bahiana.edu.br/index.php/psicologia/article/view/1696>
- 4 Freitas CMSMd, Lima RBT, Costa AS, Lucena Filho A. O padrão de beleza corporal sobre o corpo feminino mediante o IMC. *Rev Bras Educ Fis Esporte* 2010;24(03):389–404. Doi: 10.1590/S1807-55092010000300010

- 5 Chagas LM, Ferreira NG, Hartmann V, Kumpel DA. Percepção da imagem corporal e estado nutricional de adolescentes. *Rev Psicol IMED*. 2019;11(02):69–78. Doi: 10.18256/2175-5027.2019.v11i2.3166
- 6 de Souza AC, Alvarenga Mdos S. Insatisfação com a imagem corporal em estudantes universitários – Uma revisão integrativa. *J Bras Psiquiatr* 2016;65(03):286–299. Doi: 10.1590/0047-2085000000134
- 7 International Society of Aesthetic Plastic Surgery. Aesthetic/Cosmetic procedures performed in 2023. 2023 [cited 2024 Sep 8]. Disponível em: [https://www.isaps.org/media/rxnfqibn/isaps-global-survey\\_2023.pdf](https://www.isaps.org/media/rxnfqibn/isaps-global-survey_2023.pdf)
- 8 Dini GM, Quaresma MR, Ferreira LM. Adaptação Cultural e Validação da Escala de Autoestima de Rosenberg. *Rev Bras Cir Plást* 2004;19:41–52
- 9 Moreira Filho HF, Bessa OADAC, Moreira NS. Autoestima e qualidade de vida em pacientes submetidos a cirurgia plástica. *Rev Bras Cir Plást* 2024;39(02):e0858. Doi: 10.5935/2177-1235.2024RBCP0858-PT
- 10 Rassi SP, Freitas-Júnior R, Costa ADM. Características sociodemográficas, hábitos de vida e critérios do paciente para a escolha do cirurgião plástico. *Rev Bras Cir Plást* 2021;36(01):56–62. Doi: 10.5935/2177-1235.2021RBCP0011
- 11 Henderson-King D, Henderson-King E. Acceptance of cosmetic surgery: scale development and validation. *Body Image* 2005;2(02):137–149. Doi: 10.1016/j.bodyim.2005.03.003
- 12 Pearlman RL, Wilkerson AH, Cobb EK, et al. Factors associated with likelihood to undergo cosmetic surgical procedures among young adults in the United States: a narrative review. *Clin Cosmet Investig Dermatol* 2022;15:859–877. Doi: 10.2147/CCID.S358573
- 13 Walker CE, Krumhuber EG, Dayan S, Furnham A. Effects of social media use on desire for cosmetic surgery among young women. *Curr Psychol* 2021;40:3355–3364. Doi: 10.1007/s12144-019-00282-1
- 14 Sarwer DB. Body image, cosmetic surgery, and minimally invasive treatments. *Body Image* 2019;31:302–308. Doi: 10.1016/j.bodyim.2019.01.009
- 15 De Aguiar KGM, de Sousa JA. Cirurgia plástica estética em mulheres e autoestima: um estudo qualitativo. *Rev Psi Divers Saúde*. 2023;12:1–11. Doi: 10.17267/2317-3394rpsds.2023.e5277e5277 Disponível em: <https://www5.bahiana.edu.br/index.php/psicologia/article/view/5277>
- 16 Nerini A, Matera C, Di Gesto C, Policardo GR, Stefanile C. Exploring the links between self-compassion, body dissatisfaction, and acceptance of cosmetic surgery in young Italian women. *Front Psychol* 2019;10:2698. Doi: 10.3389/fpsyg.2019.02698
- 17 Wu Y. Say no to the knife! An investigation of Chinese and Dutch women's consideration of cosmetic surgery and how to intervene [dissertation]. Maastricht (NL): Maastricht University; 2022. Doi: 10.26481/dis.20221115yw
- 18 Al-Bashaireh AM, Aljawarneh Y, Alkouri O, et al. Body image and attitudes toward cosmetic surgeries among female college students in the United Arab Emirates: A cross-sectional study. *Heliyon* 2025;11(02):e42027. Doi: 10.1016/j.heliyon.2025.e42027
- 19 Dossinger K, Wanberg CR, Choi Y, Leslie LM. The beauty premium: the role of organizational sponsorship in the relationship between physical attractiveness and early career salaries. *J Vocat Behav* 2019;112:109–121. Doi: 10.1016/j.jvb.2019.01.007
- 20 Portela MVV, da Silva YFA, Dutra MCMF, Lages MKAB, Holanda TA, Almeida IP. Análise da influência das redes sociais na busca por procedimentos cosméticos entre acadêmicos de medicina. *Braz J Hea Rev*. 2023;6(06):30040–30052. Doi: 10.34119/bjhrv6n6-266 Disponível em: <https://ojs.brazilianjournals.com.br/ojs/index.php/BJHR/article/view/65187>
- 21 Mironica A, Popescu CA, George D, Tegzeşiu AM, Gherman CD. Social media influence on body image and cosmetic surgery considerations: a systematic review. *Cureus* 2024;16(07):e65626. Doi: 10.7759/cureus.65626
- 22 Rodrigues LF, de Souza RE Junior, Balbino JC, et al. Prevalência do Transtorno Dismórfico corporal em pacientes candidatas e/ou submetidos a procedimentos estéticos na especialidade de cirurgia plástica: uma revisão sistemática. *Braz J Desenvolver* 2023;9(05):16889–16901. Doi: 10.34117/bjdv9n5-159