

Mirror on the Wall: A Study of Women's Perception of Facial Features as They Age

Billur Sezgin, MD; Kemal Findikcioglu, MD; Basar Kaya, MD; Serhat Sibar, MD; and Reha Yavuzer, MD

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Abstract

Background: Facial aesthetic treatments are among the most popular cosmetic procedures worldwide, but the factors that motivate women to change their facial appearance are not fully understood.

Objectives: The authors examine the relationships among the facial areas on which women focus most as they age, women's general self-perception, and the effect of their personal focus on "beauty points" on their perception of other women's faces.

Methods: In this prospective study, 200 women who presented to a cosmetic surgery outpatient clinic for consultation between December 2009 and February 2010 completed a questionnaire. The 200 participants were grouped by age: 20–29 years, 30–39, 40–49, and 50 or older (50 women in each group). They were asked which part of their face they focus on most when looking in the mirror, which part they notice most in other women (of different age groups), what they like/dislike most about their own face, and whether they wished to change any facial feature.

Results: A positive correlation was found between women's focal points and the areas they dislike or desire to change. Younger women focused mainly on their nose and skin, while older women focused on their periorbital area and jawline. Women focus on their personal focal points when looking at other women in their 20s and 30s, but not when looking at older women.

Conclusions: Women presenting for cosmetic surgery consultation focus on the areas that they dislike most, which leads to a desire to change those features. The plastic surgeon must fully understand patients' expectations to select appropriate candidates and maximize satisfaction with the outcomes.

Keywords

facial aesthetic surgery, invasive plastic surgery, minimally-invasive plastic surgery, noninvasive plastic surgery, patient expectations, patient selection, self-perception

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Whether it is surgery, minimally-invasive procedures, or noninvasive refinements, facial aesthetic procedures are among the most popular techniques performed by plastic surgeons worldwide. Among the US female population, approximately 8.6 million cosmetic procedures were performed in 2010, and a large percentage involved the face.¹ The face is the primary focal point of social interaction in everyday life and, therefore, any perception that a feature is unappealing may result in the urge to change it. Moreover, visual media have a tremendous effect on self-perception and influence women to choose aesthetic procedures; they wish to look more trendy, youthful, or "beautiful" according to the media's definitions.²

Aesthetic surgery patients differ from other surgical patients in that they usually present to the clinic with an established idea to undergo surgery and with certain expectations of the outcome; also, for other patients, the surgery usually is recommended by their doctor rather than being elective. Certain motivations influence a

patient's decision to undergo facial aesthetic procedures, yet the process behind the motivation remains unclear. The most basic and effective self-evaluation tool for the face is, undoubtedly, the ordinary mirror. Therefore, it can be assumed that a woman's dissatisfaction with her appearance relates to her own perception of the reflection in the mirror. Women want to be "at peace" with their

Dr. Sezgin is a resident, Dr. Findikcioglu is an attending physician, Dr. Kaya is a resident, and Dr. Sibar is a resident in the Department of Plastic, Reconstructive, and Aesthetic Surgery at Gazi University, Ankara, Turkey. Dr. Yavuzer is a Professor at the Vehbi Koc Foundation American Hospital, Istanbul, Turkey. Dr. Findikcioglu and Dr. Yavuzer are members of the Turkish Society.

Corresponding Author:

Dr. Sezgin, Gazi University, Faculty of Medicine, Department of Plastic, Reconstructive and Aesthetic Surgery, Bilkent 2 Park Sitesi, E1 blok, no. 1, Bilkent 06800, Ankara, Turkey.
E-mail: billursezgin@hotmail.com

Table 1. Facial Self-Perception Study Questionnaire

Questions Regarding Perception of Facial Features	
1. Which facial feature do you look at first thing in the morning and during the day when you look in a mirror?	
2. What is the facial feature that you notice the most when coming across a woman in their: a. 20s b. 30s c. 40s d. 50s	
3. Which feature do you most like about your face? And why?	
4. Which feature do you most dislike about your face? And why?	
5. Do you wish to change any part of your face? If yes, state which feature(s).	
List of pre-identified facial features from which patients chose their answers	
Skin	Forehead
Periorbital region	Eyebrows
Cheeks	Jawline
Lips	Nose

appearance, which may lead them to undergo cosmetic procedures.

To better understand the process behind patients' desire to alter their facial features, we sought to determine which facial features women focus on most, in their own faces and those of other women of various ages. We also explored whether these focal points change for women as they get older. What is it that leads them to seek "perfection"? Does it stem from a constant search for imperfections or from a focusing on their "good" features?

METHODS

This prospective study was conducted to determine the primary facial focal points of women as they age and to establish the relationship between these focal points and their effect on self-perceptions of beauty. Female patients who presented to a plastic surgery outpatient clinic between December 2009 and February 2010 were asked to complete a questionnaire. Excluded from the study were patients who had undergone previous cosmetic or reconstructive surgery, who demonstrated congenital facial anomalies, who had experienced massive weight loss, or who had facial deformities resulting from previous trauma. Participants were categorized by age, with 50 participants in each group: Group 1, ages 20–29 years; Group 2, ages 30–39 years; Group 3, ages 40–49 years; and Group 4, ages 50 years and older (range, 50–65 years). When we reached 50 questionnaires for each group, no further questionnaires were collected or entered.

The questionnaire contained five parts (Table 1). Each question was answered by specifying one of the preidentified eight areas of the face: the skin, periorbital region,

forehead, eyebrows, cheeks, lips, jawline, and nose. In Question 1, participants were asked to choose the area of their own face they focused on most when looking in the mirror. The areas identified were regarded as the patient's "main focal point." For Question 2, patients chose the part of the face they noticed most when looking at other women. They were asked to specify this for women in their 20s, 30s, 40s, and 50s. This question helped determine the relationship between *personal* focal points and their effect on the perception of *other* women's faces, depending on age group. For Questions 3 and 4, participants noted the areas of their own face that they liked and disliked the most (respectively), and they were asked to explain why they felt this way about those features. In the final question, participants were asked whether they wished to change any part of their face and, if so, which area.

STATISTICAL ANALYSIS

The main facial focal points specified by participants were tallied and analyzed for the various age groups. A Pearson correlation study was conducted to determine the relationship between these areas and self-perception, and the relationship between these areas and the respondents' perception of other women's faces. All statistical measurements were calculated utilizing SPSS software, version 15.0 (IBM, Armonk, NY). *P* values of less than .05 were considered statistically significant.

RESULTS

A total of 200 patients participated in the study. There were 50 patients in each of the four age groups. The mean age was 26.4 years for Group 1, 35.2 years for Group 2, 44.1 years for Group 3, and 59.7 years for Group 4. Figure 1 is a summary, according to age group, of the patients' main focal points, their most liked and disliked features, and the features they wished to change.

Overall, participants in Group 1 stated that their nose (26%) and skin (24%) were the first features they noticed when looking in the mirror. Their most liked feature was the lips (36%), whereas the most disliked feature was the nose (42%). The part of their face that they wished to change correlated with the most disliked feature; for 48%, this was the nose.

For Group 2, the main focal points of the face were the skin (36%) and periorbital area (26%). The most liked feature was the periorbital region (24%), and the most disliked feature was the nose (28%). Similar to Group 1, the part of their face that they wished to change the most was the nose (32%).

Participants in Group 3 stated that the periorbital region (40%) and skin (24%) were their main focal points. Their nose was the most liked feature (20%), and their periorbital region was the most disliked (30%). Of participants in this group, 36% wished to change their periorbital region.

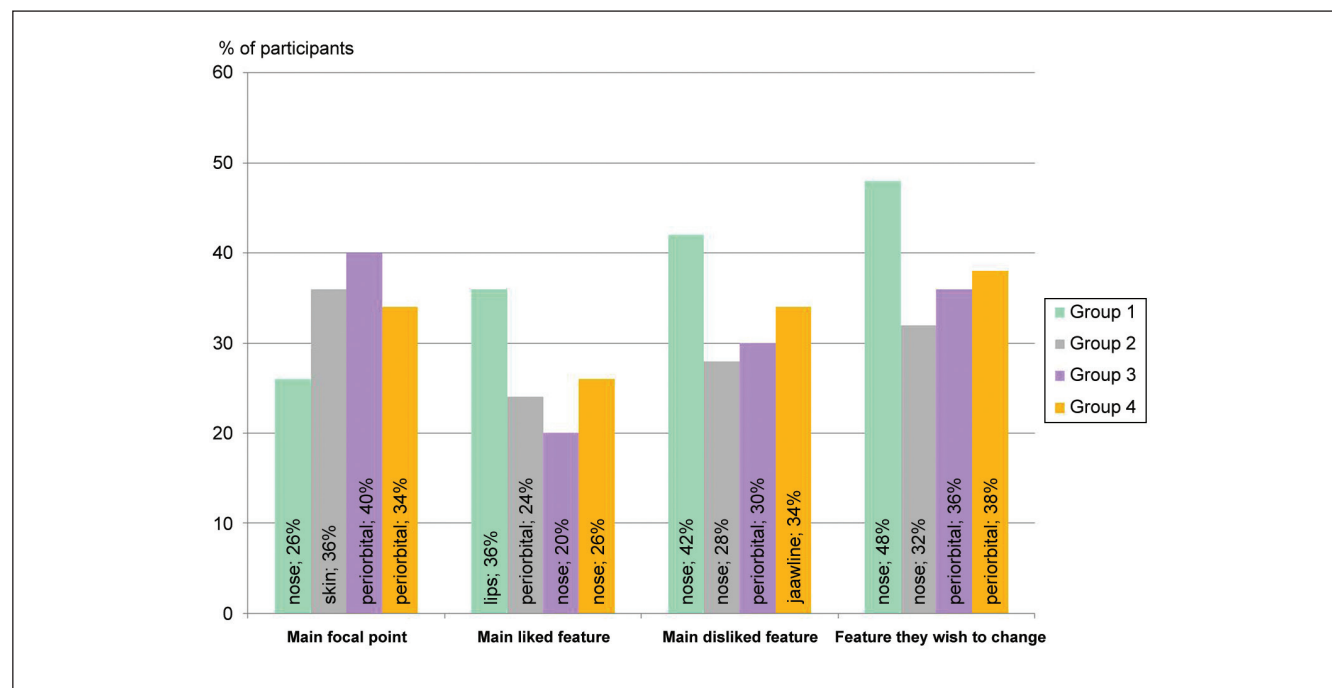


Figure 1. The distribution of facial focal points, most liked and disliked features, and features that women wished to change, according to age group. The age categories were as follows: Group 1 = 20–29 years; Group 2 = 30–39 years; Group 3 = 40–49 years; Group 4 = 50 years and older.

For Group 4, the main focal points were the periorbital region (34%) and jawline (22%). Their most liked feature was the nose (26%) and most disliked feature was the jawline (34%). The part of their face that they wished to change most was the periorbital region (38%), followed by the jawline (30%).

When asked to explain why a particular feature was the one they liked most, all participants noted that they thought this particular feature was their most “attractive” one. With respect to the most disliked feature, participants in Groups 1 and 2 felt that the shape of their nose was not suitable for their face and was too prominent. Respondents in Groups 3 and 4, whose least favorite areas were their periorbital region and jawline, noted that, no matter what they did or how many cosmetics they applied, these areas highlighted their age and made their overall facial appearance seem older.

The Pearson analysis showed a strong positive correlation between the women’s facial focal points and the feature they disliked most and wished to change ($P < .01$), and a strong negative correlation between the main focal points and the area with which they were most content ($P < .01$). For Groups 1 and 2, the structures that represented self-beauty focal points were the nose, skin, and lips; for Groups 3 and 4, these areas were the periorbital area and the jawline. With respect to perceptions of other women’s faces, these personal self-beauty focal points were the ones that women—no matter how old—noticed

Table 2. Pearson Correlation Analysis of the Relationship Between Facial Focal Points and Their Effect on the Desire to Change

	Main Feature That Women Want to Change	
	Pearson Correlation Quotient	Significance (Two-Tailed)
Most liked feature	–.340	$P < .01^*$
Most disliked feature	.771	$P < .01^*$
Feature of focus for women in 20s	.198	$P = .01^\dagger$
Feature of focus for women in 30s	.216	$P = .005^*$
Feature of focus for women in 40s	.092	$P = .235^\ddagger$
Feature of focus for women in 50s	.065	$P = .402^\ddagger$

‡ Correlation not significant. † Correlation significant at the .01 level. * Correlation significant at the .05 level.

most when coming in contact with women in their 20s and 30s; a significant positive correlation was observed ($P < .01$). However, no correlation was found between personal focal points and the respondents’ perception of women in their 40s or 50s (Table 2).

DISCUSSION

Throughout history, the relationship between a woman and her mirror has made its way into children's fairytales and other literature. The tug-of-war between the two can be continuous; if a woman constantly desires to be at peace with her reflection in the mirror and yet she is not, the desire to change and the process of changing begins. At this point, women may resort to cosmetics, minimally-invasive procedures, and/or surgery. Our results show that there are certain areas of the face that, in particular, prompt the desire to change facial appearance. As this study has shown, these facial focal points change as women age. Women in their 20s focus primarily on their noses and skin. For women in their 30s and 40s, the skin and periorbital region are the main areas of concern. Women in their 50s and 60s focus most on their periorbital region and jawline.

This study also shows, not surprisingly, that women presenting for cosmetic surgery consultation focus mainly on the areas of their face that cause them discontent. In turn, this dissatisfaction engenders an urge to change the disliked facial feature(s). The study results demonstrate that these women generally focus on the areas of the face where they perceive their own flaws when they look at the faces of other women who are in their 20s and 30s, regardless of their own age. This pattern reflects an unhealthy comparative tendency, which is encouraged both by the media's definition of "beautiful" and by personal opinions, which are likely contributors to a woman's desire to change her face.

Patients in Groups 1 and 2 (the younger women) often requested rhinoplasty. Patients in Groups 3 and 4 typically sought out procedures (both minimally-invasive and surgical) for their jawline or periorbital area. Thus, younger women, who have experienced few effects of the aging process, desire to change areas that they perceive as disrupting the harmony of the facial mosaic. For older women, whose facial proportions may be affected by gravity as well as changes in facial volume and skin elasticity, the main desire is a more youthful appearance. Although these focal points may be affected somewhat by the culture and skeletal features of certain ethnic groups (eg, the Turkish population in the present study), the motives behind choosing a particular focal point are representative of how the mind of a typical female plastic surgery patient works. Younger patients aim to achieve facial harmony, while older patients seek to restore a more youthful appearance.

Findings from this study should be taken into consideration during consultations with patients who are seeking plastic surgery. A recent study by Springer et al.³ showed that impaired well-being is associated with impaired facial perception. Even though willingness to undergo cosmetic surgery was not found to be affected by one's sense of well-being, for those with impaired well-being who undergo surgery, facial self-perception seemed unlikely to be improved. Furthermore, one study showed that 20% of patients who undergo cosmetic surgery have a history of psychiatric disorders, 80% of whom are clinically depressed.⁴ Therefore, the selection process of appropriate candidates

remains an important step in the practice of plastic surgery. Although a positive change in appearance can improve psychological well-being, as well as symptoms of depression,⁵⁻¹¹ patients with borderline personality disorders or a history of depression or anxiety are at risk for low levels of postoperative satisfaction, despite successful results.^{5,10,12-14} Plastic surgeons must take the time to fully understand the expectations of patients who seek plastic surgery and to inform them of the limitations of such procedures if high rates of patient satisfaction are to be achieved.

CONCLUSIONS

Our approach to patients who desire plastic surgery should remain cautious, particularly because women presenting for plastic surgery consultation focus mainly on the facial areas they dislike and continuously compare these areas with the appearance of younger women. It is important to understand each patient's preconceived ideas and expectations, regardless of age. Young patients must be educated and guided appropriately, in accordance with their expectations. Comparisons to their peers will continue and unfulfilled expectations can lead to dissatisfaction for the patient as well as the surgeon. For older patients, it is crucial to ensure that their expectations of aesthetic procedures are realistic—especially because, as this study has shown, women in their 50s and older may compare themselves to women who are much younger, leading to unrealistic and unhealthy results. Therefore, plastic surgeons must explain in detail what can be achieved realistically through cosmetic procedures. This will aid in selecting appropriate candidates and in maximizing satisfaction with the results.

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