

# The Ideal Nasolabial Angle in Rhinoplasty: A Preference Analysis of the General Population

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**Background:** In aesthetic rhinoplasty, the described ideal nasolabial angle ranges from 90 to 120 degrees, with variable anthropologic differences. The authors sought to verify the most aesthetic nasolabial angle as specifically perceived by a random prospective sample of the general population and determine whether age, sex, race, and education were independent associated predictors.

**Methods:** The authors prospectively recruited 98 random volunteers from the general population. They were asked to rank three different nasolabial angles for the female nose (100, 105, and 110 degrees) and the male nose (90, 100, and 105 degrees) as “most,” “moderately,” and “least aesthetic.” Demographic data were used to determine correlations between aesthetic preferences. Pearson chi-square test and t test were used to determine statistical significance.

**Results:** The most aesthetic female nasolabial angle was  $104.9 \pm 4.0$  degrees. The most aesthetic male nasolabial angle was  $97.0 \pm 6.3$  degrees. Male subjects, younger volunteers, Native Americans, and African Americans preferred more acute male nasolabial angles (90 degrees). Female subjects, volunteers older than 50 years, college graduates, those with a previous rhinoplasty, and Caucasian and Asian subjects preferred more obtuse male nasolabial angles.

**Conclusions:** In the authors' sample of the general population, the ideal and most aesthetic nasolabial angle ranged from 100.9 to 108.9 degrees in the female nose and 90.7 to 103.3 degrees in the male nose. Age, sex, race, education, and having undergone a previous rhinoplasty were predictors of differences in the ideal male nasolabial angle but did not change preference of the female nasolabial angle. (*Plast. Reconstr. Surg.* 134: 201, 2014.)

From the inception of recorded time, documenting beauty has been pursued, and constantly defined and contested. Some individuals have defined beauty in terms of proportion and harmony.<sup>1</sup> Albrecht Durer, a German painter and mathematician, described his ideas on proportions, but admittedly could not define absolute beauty.<sup>2</sup> The ancient Greeks still influence modern aesthetics today with their ideals of beauty and proportion,<sup>3-5</sup> along with Renaissance scholars and artists who adopted these rules to define facial relationships.<sup>6</sup> For example, Leonardo da Vinci helped establish that the base width of the nose should equal eye width.<sup>7</sup> However, as centuries passed, the neoclassical canon developed among nineteenth

century artists as they began to note that variations from ideals may be more pleasing. Although aesthetics can be a matter of consensus (as in the field of cephalometrics), practitioners in the 1950s defined facial harmony by ideal average European American facial features,<sup>8,9</sup> and this consensus is still subject to variability. An area of aesthetic judgment where such variability exists is rhinoplasty. Indeed, the rhinoplasty surgeon should not only be knowledgeable about differing ethnic and sex norms and ideals in nasal aesthetics but also be able to recognize the impact this image-altering surgery can have not just on an aesthetic scale but on a more socially conscious tangent. For example, rhinoplasty has been used by ethnic female minorities in certain communities internationally to acquire Caucasian aesthetic ideals and nasal proportions

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