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RESEARCH LETTER

Rhinoplasty

The Effect of a Consumer Nose Reshaper on Nasal Tip Projection and the Perceived Attractiveness of Asian Females

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Introduction

The main goals of tip rhinoplasty in the Asian patient are to enhance nasal projection, definition, and width, minimize flare at the nostrils, and maintain symmetry.^{1,2} There are numerous nonsurgical consumer beauty appliances widely used in Asia to achieve some of these goals. A widely known device is NoseSecret (Fort Lee, NJ, USA). This internal nasal brace is designed to increase tip projection and rotation, whereas to a lesser degree narrowing and refining the tip. This device is inserted by the user into the nasal vault parallel to the columella and can be worn for several hours. It achieves its result by intranasally expanding the distance between the columellar base and domal apex, stretching vestibular skin, and achieving the tripod effect.³ In this study, we evaluate whether the use of this device can improve nasal tip projection and enhance the perceived attractiveness of Asian females.

Methods

Facial photographs of 11 females from ages 18 to 24 were taken from a frontal, oblique, and lateral view with and without the nasal reshaper (Fig. 1). Full face image sets that contained pair reshaping and native nasal geometry of the same subject from the same angle were compiled.⁴ The facial photograph models received a self-evaluation survey of their own photo sets. A focus group of university students ($n = 40$) were asked to select which paired photo they found more attractive in each set in a blinded random manner. All participants were asked questions regarding demographics and knowledge of rhinoplasty and NoseSecret. Morphometric analysis of each before and after image ($n = 55$)

was performed by a single blinded author (B.S.D.) to calculate nasal tip projection using Goode and Crumley's methods.^{5,6}

Results

Demographics and questionnaire findings are summarized in Table 1. There was no significant difference in perceived attractiveness with the nose reshaper among models and participants (Table 1). Gender and ethnicity of respondents, prior knowledge of NoseSecret and rhinoplasty, and facial angle had no impact on the preference for NoseSecret. On average, there was a 5–10% change in nasal tip projection, and only the Crumley 1 method demonstrated a statistically significant ($p = 0.018$). All three methods confirmed that the nasal tip projection was still far from the ideal proposed ratio (Goode = 0.61 ± 0.04 , Crumley 1 = 4.02 ± 0.31 , Crumley 2 = 5.04 ± 0.38).

Discussion

Our study demonstrated that respondents actually had no preference toward the modified nose. We believe this is largely due to selection bias, as the subjects who volunteered for this study did not have complaints about their nasal appearance, in general. In contrast, the consumer who buys a reshaper likely believes their nose can benefit from cosmetic enhancement and thus may differ from this study's population. It is also possible that the nose reshaper fails to emulate a natural enhancement, or the focus group respondents could not identify the more subtle differences in the facial variations and answered on intrinsic perception of female attractiveness.

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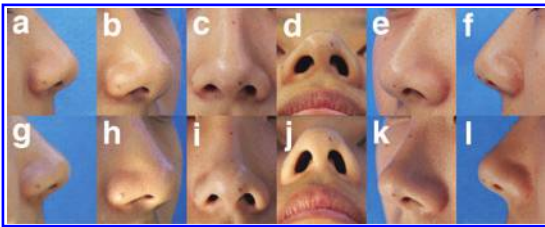


Fig. 1. Facial photographs of normal (a–f) and with the nose reshaper (g–l) at 90° right (a, g), 45° right (b, h), frontal (c, i), base view (d, j), 45° left (e, k), and 90° left (f, l).

Nasal tip projection measurements were still far from the ideal proposed ratio, although metrics are with respect to European norms. This may be due to limitations of the device itself or that the Asian nose may require more projection to reach the optimal ratio.

Table 1. Facial model and focus group participant demographic data and questionnaire responses

	Facial models, no. (%) (n = 11)	Focus group participants, no. (%) (n = 40)
Gender		
Female	11 (100.0)	35 (87.5)
Male	0 (0.0)	4 (10.0)
Other	0 (0.0)	1 (2.5)
Age, years		
18–24	11 (100.0)	40 (100.0)
Ethnicity		
Asian	11 (100.0)	16 (40.0)
Hispanic	0 (0.0)	14 (35.0)
Black	0 (0.0)	7 (17.5)
White	0 (0.0)	3 (7.5)
Asian ethnicity breakdown		
Chinese	6 (54.5)	—
Vietnamese	3 (27.3)	—
Korean	2 (18.2)	—
Taiwanese	2 (18.2)	—
Indonesian	1 (9.1)	—
Thai	1 (9.1)	—
Have you heard of NoseSecret before this experience?		
Yes	1 (9.1)	3 (7.5)
No	10 (90.9)	37 (92.5)
Do you know anyone who has used or currently uses NoseSecret?		
Yes	0 (0.0)	2 (5.0)
No	11 (100.0)	38 (95.0)
How do you feel about NoseSecret?		
Like	0 (0.0)	7 (17.5)
Dislike	4 (36.4)	3 (7.5)
No opinion	7 (63.6)	30 (75.0)
Have you heard of rhinoplasty?		
Yes	8 (72.7)	27 (67.5)
No	3 (27.3)	13 (32.5)

(continued)

Table 1. (Continued)

	Facial models, no. (%) (n = 11)	Focus group participants, no. (%) (n = 40)
Do you know anyone who has ever gotten a rhinoplasty?		
Yes	6 (54.5)	12 (30.0)
No	5 (45.5)	28 (70.0)
How do you feel about rhinoplasties?		
Like	2 (18.2)	8 (20.0)
Dislike	2 (18.2)	2 (5.0)
No opinion	7 (63.6)	30 (75.0)
Have you ever considered changing the way your nose looks?		
Yes	3 (27.3)	—
No	8 (72.7)	—
If you were to ever consider altering the way your nose looks, would the pictures with the NoseSecret device be representative of what you would want to look like?		
Yes	3 (27.3)	—
No	8 (72.7)	—
Which set of your photographs do you find more attractive? (n = 4345)		
Without NoseSecret	5 (45.5)	2410 (55.5%)
With NoseSecret	6 (54.5)	1935 (44.5%)
Preference for NoseSecret depending on facial angle (n = 1935)		
Right 90°	—	464 (24.0)
Right 45°	—	252 (13.0)
Frontal	—	310 (16.0)
Left 45°	—	348 (18.0)
Left 90°	—	561 (29.0)

NoseSecret is a simple low-risk nonsurgical consumer-grade device that has the potential for aesthetic enhancing effects as demonstrated by the increase in nasal tip projection. Although this study did not show a perceived enhanced aesthetic effect with the nose reshaper in the normal population, it remains possible that in patients interested in surgical correction of their nose, NoseSecret could be used as an alternative to simulation to advise these patients on realistic rhinoplasty expectations and potentially act as a bridge to rhinoplasty in a select group of candidates.

Author Disclosure Statement

No competing financial interests exist.

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