



Assessing Preferences of Facial Appearance in Gender Nonbinary Patients

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Background

Differences in the shape of the forehead, supraorbital ridges, orbital borders, zygomatic bone, and the mandible, are most perceptible in facial sexual dimorphism. Males typically have a higher hairline, larger foreheads with more prominent supraorbital ridges and larger orbits, larger nasal bones, larger and thicker mandible with greater body height at the squared symphysis, squared chin, and thicker subcutaneous tissue in the face. These features are those primarily addressed in gender-confirming facial surgery (GCFs). Non-genital surgeries are critical to treating gender dysphoria. The number of nonbinary individuals has substantially increased over the past few years. Yet, there is a lack of clinical recommendations and treatment protocols for nonbinary patients who need access to gender-affirming medical treatments.

Objective

We seek to elucidate nonbinary patient preferences regarding the appearance of certain facial features typically involved in gender-confirming facial surgery (GCFs), including the forehead, brows, nose, orbits, cheeks, and chin.

Methods

- Pictures of frontal and lateral forehead, and frontal and lateral mandible were edited to resemble male to female facial appearances on a Likert scale.
- Participants took a one-time, online, anonymous, and voluntary survey. 4.8K responses were received in June-July 2021 from Amazon Mechanical Turk Workers (age 18+) located in the US with a 95% approval rating. Responses were narrowed down to 87 based on transgender and nonbinary gender identity.
- The survey collected the following data: participant demographics, prior medical and surgical interventions for gender dysphoria, social history/gender transition details.
- Responders rated their facial preferences on a 5-point scale in the following areas: frontal and lateral hairline, and frontal and lateral jaw and chin.
- Statistical analysis was performed using Microsoft Excel's ANOVA single-factor and two-tailed t-Test comparing transgender vs nonbinary responses.

Results

- n=87; Age ranges: 20-62, average 32 years old; Ethnicity: 77% White
- 56% of nonbinary individuals in this survey were assigned female at birth
- 23% of nonbinary and 56% of binary individuals consider these photos very or extremely useful to review and discuss with a surgeon prior to surgery
- 51% of nonbinary and 64% of binary individuals would consider a tool/app to upload photos and simulate appearance after GCFs to be very or extremely useful

Conclusions

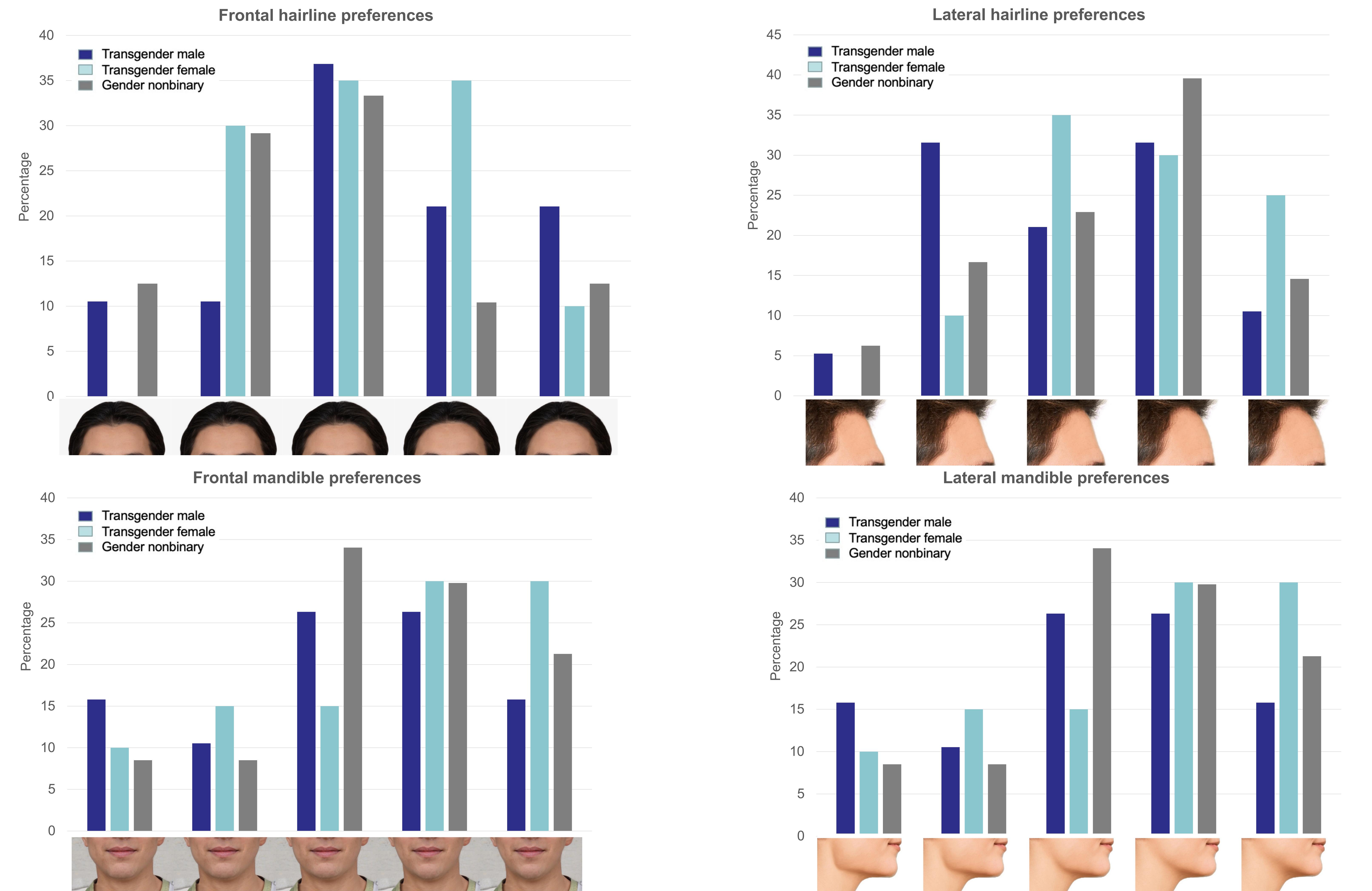
No significant differences were noted in facial appearance preferences between transgender male versus transgender female in any of the categories.

We observed a clear trend in mandible preferences with transgender females choosing more female-appearing mandibles and gender nonbinary individuals choosing more neutral and female-appearing mandibles.

Although most binary individuals considered these photos very or extremely useful to use in the preoperative phase, only 23% of nonbinary individuals thought it would be.

Previous literature has suggested that nonbinary patients may experience less dissatisfaction with sex-specific parts of the body. In the future, we would like to assess individuals' satisfaction with their facial appearance as part of this survey in order to better understand their facial appearance preferences.

Results



Lateral mandible preferences:
Transgender male vs transgender female: p = 0.057
Transgender male vs gender nonbinary: p = 0.050

References & Acknowledgements

- The original face images used for this project were AI-generated by generated.photos and edited by Bryan Arreola.
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	Hormone replacement therapy (HRT) (%)	Gender-confirming surgical history (%)
Transgender male	74	52
Transgender female	85	50
Gender nonbinary	19	19