

Crowdsourcing Public Opinion of Plastic Surgeons: Is There a Gender Bias?

Alexandra Bucknor, MBBS, MRCS, MSc¹, Parisa Kamali, MD², Austin Chen¹, Anmol Chattha, BA¹, Charlotte van Veldhuisen, BSc¹, Hinne Rakhorst, MD, PhD³, Samuel J. Lin, MD, MBA, FACS¹

¹ Division of Plastic and Reconstructive Surgery, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, USA
² Department of Plastic, Reconstructive and Hand Surgery, Radboud University, Nijmegen Medical Center, Nijmegen, The Netherlands
³ Division of Plastic and Reconstructive Surgery, Medisch Spectrum Twente, Enschede, The Netherlands

BACKGROUND

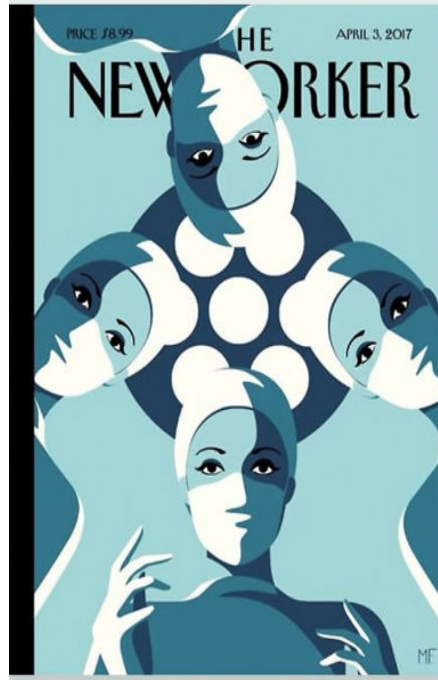
- The recent series on Women in Plastic Surgery in the *Plastic and Reconstructive Surgery* journal has highlighted ongoing issues for women in the field.^{1,2}
- Literature suggests that overt discrimination may have become implicit bias over time.

QUESTION

- Is there implicit gender bias in the public when considering plastic surgeons?

METHODS

- The Amazon Mechanical Turk Crowdsourcing platform was used to recruit members of the public.³
- Respondents read one of eight randomly assigned scenarios describing a situation where a plastic surgeon was to operate on their mother.⁴
- Scenarios only differed by surgeon gender (male vs. female), surgeon demeanor (agenic: assertive and independent vs. communal: supportive and nurturing), or type of surgery (breast vs. trauma). All were described as highly qualified with low complication rates.⁴
- Using a 5-item Likert scale, respondents indicated their level of agreement with statements on surgeon competence, skills, leadership qualities, how much they would like, respect or trust the surgeon, and whether they would ultimately choose them to perform surgery.



#WhatADoctorLooksLike

RESULTS

- A total of 341 replies were retrieved. Median age was 33 years; most respondents were Caucasian (45.5%) males (55.7%) from North America (54.8%).
- Male plastic surgeons were ranked more highly than female plastic surgeons in terms of likeability ($p=0.038$) and skills ($p=0.030$).
- There were no differences in perceived competence ($p=0.209$), leadership ($p=0.675$), or in how much the respondent would respect ($p=0.129$) or trust the surgeon to report an error ($p=0.309$), or in choosing the surgeon to perform the surgery ($p=0.084$).
- When female surgeons were sub-categorized by demeanor, those with a more 'communal' personality were perceived as less competent ($p=0.025$) and less skilled ($p=0.023$), but more likeable ($p<0.001$).

DISCUSSION

- Women plastic surgeons have made significant progress over the last few decades; numbers have increased, authorship has increased, prevalence in leadership and academic positions has also increased.
- However, despite this, results of the present study found that despite equal credentials, there appears to be a pervasive, implicit bias, leading to women plastic surgeons being perceived as less likeable and less skilled. Moreover, those with more assertive personalities are also perceived as less competent. A recent initiative arising from the cover of The New Yorker sparked women surgeons worldwide sharing pictures of themselves wearing their surgical gowns and masks, accompanied by the slogan: "ILookLikeASurgeon". Similar strategies for educating the public on the capabilities of women plastic surgeons are needed, and women plastic surgeons should find new ways of engaging meaningfully with the public.

CONCLUSION

- We need to engage with the public to understand these observations and to promote positive interaction with women in the plastic surgery workforce.

#ILookLikeASurgeon

REFERENCES

- Huis EA, Canales FL, Furnas HJ. The Impact of a Plastic Surgeon's Gender on Patient Choice. *Aesthetic Surg J*. 2016;1–6.
- Phillips NA, Tannan SC, Kallianen LK. Understanding and overcoming implicit gender bias in plastic surgery. *Plast Reconstr Surg*. 2016;1.
- www.mturk.com
- Dusch MN, Sullivan PSO, Ascher NL. Patient perceptions of female surgeons: how surgeon demeanor and type of surgery affect patient preference. *J Surg Res*. Elsevier Inc; 2014;7:5–10.

ACKNOWLEDGEMENTS

Thank you to Dr. Nancy Ascher for her kind permission to adapt the survey used in her study on gender-based perceptions of surgeons for the purposes of the present study.⁴