

## VIEWPOINT

# A Pandemic of Dismorphia: “Zooming” into the Perception of Our Appearance

Shauna M. Rice, BS,<sup>1</sup> Emmy Graber, MD, MBA,<sup>2</sup> and Arianne Shadi Kourosh, MD, MPH<sup>1,3,\*</sup>

The global pandemic has seen a massive shift toward remote work and living, with people spending record amounts of time on virtual platforms (herein collectively termed “Zoom”) with evidence indicating that these remote trends will persist even when conditions improve.<sup>1</sup>

Zoom has allowed life to go on in an ever-changing world, but may be affecting the way individuals view themselves. The authors have noted a surge in patients citing their appearance on Zoom as a reason to seek care, particularly concerned with acne and wrinkles. A recent analysis of Google search trends during the pandemic showed the terms “acne” and “hair loss” are increasing in this newly virtual reality.<sup>2</sup> They attributed this trend to the association of acne and hair loss with anxiety and depression, common psychological conditions during quarantine. We suspect the trend may also arise from people constantly seeing themselves on video and becoming more aware of their appearance.

Before Zoom took over as the metric used to value one’s appearance, patients used selfies and an arsenal of photo editing apps to create filtered versions of themselves. Dubbed “Snapchat dysmorphia,” the influx of patients hoping to look more like their edited selves has caused widespread concern for its potential to trigger body dysmorphic disorder.<sup>3</sup> In 2019, 72% of American Academy of Facial Plastic and Reconstructive Surgery members reported seeing patients seeking cosmetic procedures to improve their selfies.<sup>4</sup> In addition, higher levels of engagement on social media have shown to correlate with increased body dissatisfaction.<sup>3</sup> Unlike the still and filtered selfies of social media, Zoom displays an unedited version of oneself in motion, a self-depiction very few people are used to seeing on a daily basis. This may have drastic effects on body dissatisfaction and desire to seek cosmetic procedures.

So why are webcams so unsettling to users? During real-life conversations, we do not see our faces speaking and displaying emotions, and we certainly do not compare our faces side-by-side to others like we do on video calls. In addition, cameras can distort video quality and create an inaccurate representation of true appearance. One study found that a portrait taken from 12 inches away increases perceived nose size by 30% when compared with that taken at 5 feet.<sup>5</sup> Webcams, inevitably recording at shorter focal lengths, tend to produce an overall more rounded face, wider set eyes, and broader nose.<sup>6</sup> It is important for patients to recognize the limitations of webcams and understand that they are, at best, a flawed representation of reality.

To further deconstruct the motivations behind this influx of patients in the era of Zoom, we turn to the facial feedback hypothesis. The theory explains that treatment of sad-appearing wrinkles may reduce depression by making the patient appear less sad to others, which, in turn, makes them feel better about themselves.<sup>7</sup> Perhaps there is a recent surge in patients seeking cosmetic procedures simply because they now see their imperfections on camera daily, or because the wrinkles they see on screen make them *look* more depressed to others and *feel* more depressed themselves. The theory in the context of Zoom is particularly interesting, as the patient is also the viewer. They may perceive themselves as sad because of the wrinkles they see, which further negatively affects their emotions, leading to a dangerous cycle of self-deprecation. This becomes a major concern when an individual becomes excessively preoccupied with real or imagined defects. A life disproportionately spent on Zoom may trigger a self-critical comparative response that leads people to rush to their physicians for treatments they may not have considered

<sup>1</sup>Department of Dermatology, Massachusetts General Hospital, Boston, Massachusetts, USA.

<sup>2</sup>The Dermatology Institute of Boston, Boston, Massachusetts, USA.

<sup>3</sup>Harvard Medical School, Boston, Massachusetts, USA.

\*Address correspondence to: Arianne Shadi Kourosh, MD, MPH, Department of Dermatology, Massachusetts General Hospital, 55 Fruit Street, BAR 622, Boston, MA 02114, USA, Email: shadi@mail.harvard.edu

before months confronting a video screen, a new phenomenon of “Zoom Dysmorphia.”

### Author Disclosure Statement

No competing financial interests exist.

### Funding Information

No funding was received for this article.

### References

1. Brenan MUS. Workers discovering affinity for remote work. Gallup. <https://news.gallup.com/poll/306695/workers-discovering-affinity-remote-work.aspx> Accessed April 3, 2020.
2. Kutlu Ö. Analysis of dermatologic conditions in Turkey and Italy by using Google Trends analysis in the era of the COVID-19 pandemic. *Dermatologic Ther*. 2020;e13949.
3. Rajanala S, Maymone MB, Vashi NA. Selfies—living in the era of filtered photographs. *JAMA Facial Plast Surg*. 2018;20(6):443–444.
4. American Academy of Facial Plastic and Reconstructive Surgery. 2019 Annual survey statistics. 2020. [https://www.aafprs.org/Media/Press\\_Releases/New%20Stats%20AAFPRS%20Annual%20Survey.aspx?WebsiteKey=760f3515-2fb0-441b-a8b4-28f94313fffc](https://www.aafprs.org/Media/Press_Releases/New%20Stats%20AAFPRS%20Annual%20Survey.aspx?WebsiteKey=760f3515-2fb0-441b-a8b4-28f94313fffc) Accessed August 10, 2020.
5. Ward B, Ward M, Fried O, Paskhover B. Nasal distortion in short-distance photographs: the selfie effect. *JAMA Facial Plast Surg*. 2018;20(4):333–335.
6. Trebicky V, et al. Focal length affects depicted shape and perception of facial images. *PLoS One*. 2016;11(2):e0149313.
7. Finzi E, Rosenthal NE. Emotional proprioception: treatment of depression with afferent facial feedback. *J Psychiatr Res*. 2016;80:93–96.

DOI: 10.1089/fpsam.2020.0541

## INVITED COMMENTARY

# From the Time of Narcissus We Have Been Beguiled by Our Own Reflection

Benjamin Marcus, MD\*

From the time of Narcissus we have been beguiled by our own reflection. The eternal struggle between how we perceive ourselves and how others perceive us remains one of the more fascinating aspects of our psychology. The article in this issue by Rice et al.<sup>1</sup> entitled “A Pandemic of Dysmorphia: “Zooming” into the Perception of Our Appearance” asserts that the images we observe of ourselves are distorted by the technology that captures them. This can lead to a concern with facial features that may not have been noticed by the patient prior. Other authors have observed this with rhinoplasty as well.<sup>2</sup> The psychology and neurocognition literature has many experiments that elucidate just how complex our sense of “self-perception” really is.<sup>3</sup> Mirror evaluation of our own faces versus those of known friends demonstrates a strong difference in hemispheric cognition. In short, how we see others differs greatly from how we perceive ourselves. Self-perception is fraught with cognitive overlay.

Historically we certainly spend time evaluating our faces in the mirror—perhaps while getting ready for the

day or as a quick check up. The COVID-19 pandemic has radically changed the frequency with which we are confronted with our own image. The shift to online work, learning, and even socializing has dramatically increased the time we have to observe ourselves.

A core question from this cultural shift is the possibility that the increased amount of self-observation could lead to heightened self-criticism. This is not a clear-cut association. Earlier work on self-perception of beauty has led to some surprising findings. In the study by Wolfart and colleagues,<sup>4</sup> subjects were asked to rate a series of images (including their own). Unrelated reviewers also rated the images. The interesting finding was that all of the subjects statistically rated their own beauty higher than the impartial reviewers. Although this study shows we may have a slightly inflated appreciation for our own reflection—these conclusions are not universal. Other analysis has shown that we can be quite critical of our appearance as well. Barnier and Collison<sup>5</sup> have shown that prolonged self-image viewing leads to a

Department of Otolaryngology, University of Wisconsin Hospitals and Clinics, Madison, Wisconsin, USA.

\*Address correspondence to: Benjamin Marcus, MD, Department of Otolaryngology, University of Wisconsin Hospitals and Clinics, 600 S. Highland, Madison, WI 53725, USA, Email: marcus@surgery.wisc.edu