

Study shows smiling makes you look older, unless you're old already

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Andrea Piacquadio. Credit: Pexels

Smiling makes you look older, according to research by neuroscientists at Western and Ben-Gurion University in Israel. But if you're already over 60, smiling doesn't appear to change the way your age is perceived.

Melvyn Goodale, founding director of Western's renowned Brain and Mind Institute, and his collaborator Tzvi Ganel from Ben-Gurion devised a study that furthered their [previous research](#) showing that

smiling could make people appear to be one or two years older than if they keep a straight face.

"Faces contain an amazing number of social cues. Among the many critical dimensions that people readily extract from faces, age is often considered as primary," said Goodale. "Accurate identification of a person's age is crucial for understanding social roles and determining the nature of social interaction."

In the new study, published today in *Scientific Reports*, participants were shown hundreds of photographs of faces of people between 20 and 80 years old—either smiling or with a neutral expression—and were asked to estimate age.

The faces of younger people in their twenties and thirties were "strongly" and "reliably" identified as looking older when they were smiling. These matched results of their previous study, which used only photographs of young people.

Smiling had little or no effect, however, on the perceived age of faces of people over the age of 60. Pushing the study even further, the photos of the older people (smiling and not smiling) were cropped so that only their eyes were visible. When participants were presented with the cropped photographs, the same faces were now perceived as looking older when they were smiling.

"This suggests that [older people](#) already have so many [facial wrinkles](#) that any smiling-related wrinkles make little difference to their overall appearance and their perceived age," said Goodale, who holds the Canada Research Chair in Visual Neuroscience.

While younger and older photographs yielded predicted results, the findings for [middle-aged people](#) (40 to 60 years old) were complicated

by an unexpected gender difference, according to Goodale.

Middle-aged males appeared to be older when they smiled but smiling had no effect on the perceived age of middle-aged females. This may also be explained by a difference in smile-related wrinkles.

"Not only do middle-aged men have more wrinkles than middle-aged women—the prominence of those wrinkles around the eyes increases more when middle-aged men smile than it does when middle-aged women smile," said Goodale.

The exact reason for this perceived difference between men and women remains unclear. In the study, the researchers posit that there are well-established anatomical and physiological differences in the skin of men and women. There are also gender differences in lifestyle and skin care that could affect facial wrinkling.

The difference in age perception between middle-aged men and [women](#) also had little to do with the use of makeup. Most people in the photos were not wearing any and when the few that were wearing makeup were removed from the analysis, the gender difference in the effect of smiling on age perception remained.

Regardless of the explanation, these findings reinforce the idea that the presence of wrinkles around the eyes is a potent cue for the perception of age—and that facial expression can affect the prominence of those [wrinkles](#) and, consequently, perception of someone's age.

"These findings are particularly relevant in the time of COVID when so many people are wearing masks, leaving only our eyes visible," said Goodale.

More information: Tzvi Ganel et al, The effect of smiling on the

perceived age of male and female faces across the lifespan, *Scientific Reports* (2021). [DOI: 10.1038/s41598-021-02380-2](https://doi.org/10.1038/s41598-021-02380-2)

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