

[Back to front page »](#)

May 28, 2008, 2:17 pm

## What Your Eyes Say About Your Mood



When compared with a neutral, unmodified face, left, a face with elevated eyebrows, center, was perceived as sad and tired. A face with lower eyebrows, right, was more often seen as angry or disgusted.

Has anyone ever told you that you looked sad or tired when you weren't? If the problem isn't your mood, it might be your face, according to a [study](#) in the medical journal *Plastic and Reconstructive Surgery*.

Yale University researchers set out to determine how facial features like eyebrow shape, eyelids and wrinkles affect facial expressions. They took a photo of a woman's eyes and digitally altered it to change the eyebrow or lid shape or add wrinkles. After producing 16 different versions of the same face, they asked 20 study participants to rate, on a scale of 0 to 5, the presence of seven expressions or emotions: tiredness, happiness, surprise, anger, sadness, disgust and fear.

What was surprising about the study is that many of the pictures that mimicked various plastic surgery procedures, such as eyelid surgery or brow lifts, actually generated worse scores, with study participants rating those faces as looking angry or tired.

For instance, drooping of the upper eyelid was the biggest indicator of tiredness, but a picture that simulated a type of eyelid surgery — involving the removal of excess skin from the upper eyelid — made the woman look even more tired and sad, the study participants reported. Raising the upper eyelids produced an increase in the perception of surprise and fear.

"A significant number of plastic surgery patients opt for eyelid surgery, forehead lifts and face-lifts not only for rejuvenative reasons, but to change an unattractive facial expression as well," said Dr. John A. Persing, one of the study authors. "Our findings indicate that moderation is best when removing excess skin in the upper eyelid. You do not want to create an overdone look that actually makes you look more tired."

Eyebrows made a big difference in how people perceived the mood of the woman in the picture. When the brows were lowered or slanted toward the nose, or when forehead wrinkles were added, ratings of anger and disgust increased.

Also, raising the outer corner of the eyebrows produced an increase in the perception of surprise. Raising the inner corner of the eyebrows away from the nose was perceived as a sad facial expression.

According to the American Society of Plastic Surgeons, more than 241,000 eyelid surgeries, 43,000 forehead lifts and 118,400 face-lifts were performed in 2007. But the study shows that people contemplating eye surgery should talk to their doctor about how a procedure might affect their facial expressions. And some people might want to think twice about eliminating some sets of wrinkles. One digitally-altered picture added crows' feet — tiny wrinkles around the eyes — and received high ratings for "happiness."

"The eyes and their related structures nonverbally communicate a wide range of expressions that are universal to all people," Dr. Persing said. "Therefore facial expression should be a factor in how patients and their plastic surgeons select various rejuvenation procedures. As our findings show, even the slightest modification can elicit profound changes in how others perceive us."