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Eye sizes inform about emotions



The eyes are a powerful non-verbal communication tool for humans. Whether we are aware of it or not, the different elements of visual language (the shape of the eyes, eye movements, and even blinks) inform our thoughts and our moods. A study carried out at the UAB explores the relationship between the size of the eyes with the intensity and attractiveness with which recipients perceive different facial expressions.

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Your eyes communicate much more than individuals' may realize, and it is well-known that eyes play a huge role in the non-verbal communication, including the psychological states. But there is scientific debate concerning to what extent emotions are perceived in the eyes, and also regarding what are the eyes' attributes contributing to the perceptual processes. Empirical results suggest that eye size could be a key indicator of some emotions, and that this characteristic might modify the intensity of the emotional cues provided by the face as a whole. It has been observed that larger eyes would make happy faces look happier, angry faces angrier, and so on.

According to evolution-based theories, neutral faces with bigger eyes may also be rated as more intense than those with smaller eyes. The hypothesis that eye size intensifies facial emotional clues also supports the argument that emotions are processed holistically, and that emotional expressions are deciphered by understanding the face as a compendium of

pieces that must be looked at together. However, the empirical available data are uncertain and in some cases inconsistent.

A study carried out by the Psychology student Alanís Esté Jaloveckas, under the supervision of Professor Roser Granero (Department of Psychobiology and Methodology), was aimed to examine the relationship between eye size and facial emotional expression with the perceived intensity and attractiveness ratings. In addition, the study explored the potential moderator role of evaluators' gender and age within the aforementioned relationships. The sample consisted in N=63 participants (men and women, aged 18 to 35), who rated attractiveness and emotional intensity for images displaying emotionally expressive women's faces with digitally manipulated eye size (15% smaller, unchanged, or 15% larger).

The results regarding the comparison of the intensity levels showed an interaction with participants' gender: within the male participants, differences were found across all eye size comparisons. Within the females' group, differences were only found when comparing the unchanged and larger eyes. No interaction was found between gender and emotion type. The emotion perceived as the most intense was fear, and neutral faces were rated with the lowest intensity. No interaction was found when comparing age by emotion and age by eye size. Regarding the perception of attractiveness, no significant interactions were found with either the avaluators' age or gender. The lowest mean was associated with the smaller eyes, with no differences between the unchanged and larger eyes. The most attractive emotion was happiness.

In conclusion, the empirical result of this research evidence that the eyes size plays an important role in communicating emotions. Larger eyes seem to make emotions more intense and attractive, and these findings suggest that the more intense phenomenon serves an evolutive purpose. This interpretation is consistent with the theory proposed by Both Glocker et al. (2009), that suggest that the mesocorticolimbic system is the neurophysiologic mechanism by which baby schema promotes human caregiving, regardless of kinship. The results of this study are also consistent with the other prior empirical hypotheses, which have suggested that bigger eyes increase the chances of survival by increasing both the intensity of the emotion on display, and the attractiveness of the face (phenomenon applicable also to adulthood age).

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