

Seeing emotions in the eyes: a new test for assessing emotion recognition

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Emotion recognition is a fundamental ability that drives us in social relations; deficits of emotion recognition are common in psychiatric and neurological conditions, negatively impacting social cognition. Eyes, in particular, offer crucial cues to infer others' emotions and internal states. However, a solid test with good psychometric features to assess the ability to recognize basic emotions from the gaze of others is still lacking.

Here, we presented two studies (N= 558) performed on Qualtrics, aimed at developing and validating a new test for assessing the ability of recognizing emotion from the eyes: the *Seeing Emotion in the Eyes test* (SEE). We started with 315 stimuli (frames of eyes extracted from the RAVDESS database): in Study 1 we investigated reliability; in Study 2 the focus was on construct validity.

After the statistical analyses, we selected the best 48 items and developed SEE-48, which measures the six basic emotions (anger, disgust, fear, happiness, sadness, surprise) with 8 stimuli for each, balanced for actors' gender and matched in terms of items difficulty and discrimination capacity. SEE-48 shows high reliability ($\alpha=.87$ and Omega T= .90) and a significant correlation (pbcor) with the Reading Mind in the Eyes Test (.49) and Situational Test of Emotional Understanding (.46), but not with tests assessing anxiety and apathy.

These results confirm that the SEE-48 has both convergent and divergent validity. The SEE-48 seems to measure not only low-level perceptual skills but also broader skills of emotion perception and emotional intelligence.

KEYWORDS: Emotion perception, Social cognition, Emotional intelligence