Investigating the effects of social anxiety on the perception of negative emotions in faces
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INTRODUCTION
Accurately interpreting emotions is crucial for social interaction. However, biases in perceiving emotional information may vary as a function of social anxiety status. Social anxiety is characterized by fear of negative evaluation (American Psychiatric Association, 1994). Evidence suggests individuals high in social anxiety have negative biases in perceiving and interpreting the emotional information conveyed by faces (Mohlman et al., 2007) and are more attentive to angry faces and process them more quickly (Horley et al., 2004; Joormann & Gotlib, 2006). In the current study we compared perceptual biases to two different negative emotions, angry and sad relative to happy. We expected the strength of adaptation to negative emotional information to be greater for sad compared to angry faces. Participants viewed faces morphed along the angry/happy continuum and judged the faces as happy or angry, or faces morphed along the sad/happy continuum, and judged the faces as happy or sad.

METHODS
Stimuli & Methods
Participants viewed a series of 64 face images morphed along an emotional continuum (i.e., 80%, 40%, 20%, and 10% happy to neutral with the same morphs in the sad and angry dimension). Using a two-alternative forced choice paradigm, subjects judged each face as either happy or sad/angry. Participants were then adapted to happy, angry, or sad faces and then judged the same face morphs. The Point of Subjective Equality (PSE), the point at which an individual sees a face as neutral, equally happy and angry/sad, was quantified before adaptation and happy judgments of this same neutral face were evaluated post-adapt.

RESULTS
Baseline Biases:

Strength of Adaptation:

CONCLUSIONS
- At baseline, socially anxious participants tended to be biased in perceiving faces more negatively, more positive emotion was needed in the face morph for it to be seen as neutral at baseline.
- As expected, individuals with higher levels of social anxiety tended to adapt less overall to negative emotions (angry or sad) compared to the positive emotion, happy.
- Our sample of socially anxious individuals seemed to be especially sensitive to angry faces, tending to show weaker adaptation to this emotion compared to the other negative emotion of sadness.

References

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