

EMOTION-SPECIFIC THREAT BIASES MAY UNDERLIE ANXIETY AND IRRITABILITY

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MAY 21, 2020
R'PSYC SYMPOSIUM



Anxiety & negativity bias

- Trait anxiety: the stable tendency to experience anxiety across many situations
- People with high trait anxiety:
 - *Tend to interpret ambiguous emotional facial expressions as negative*
 - *Have differences in response time to negative emotional stimuli*
- State anxiety: temporary feelings of anxiety that are related to a particular situation



Present Study

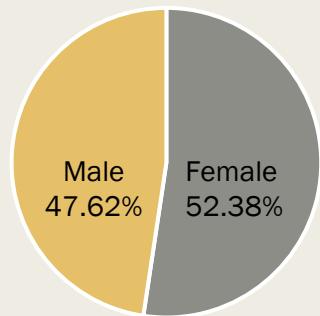
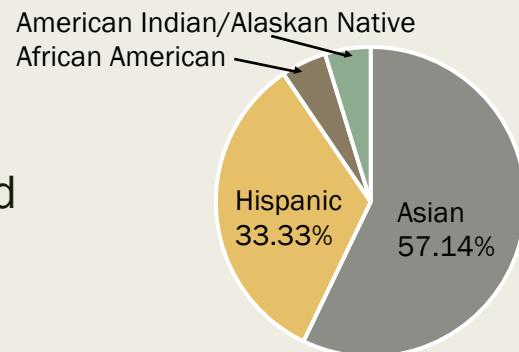
- Aims: Test how emotion recognition is influenced by:

1. State anxiety
2. Trait anxiety
3. Irritability

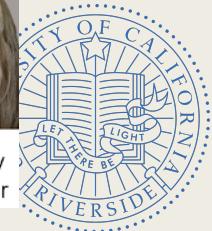
- Hypotheses:

1. High state anxiety will be related to a reduced threat threshold
2. High trait anxiety will be related to a reduced threat threshold
3. Irritability will influence the threat threshold

Sample: UCR undergraduates ($n = 21$)

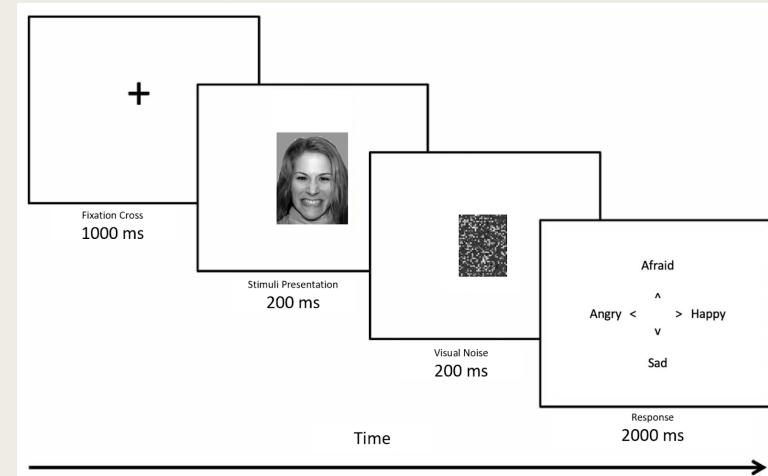


Decreasing threat threshold

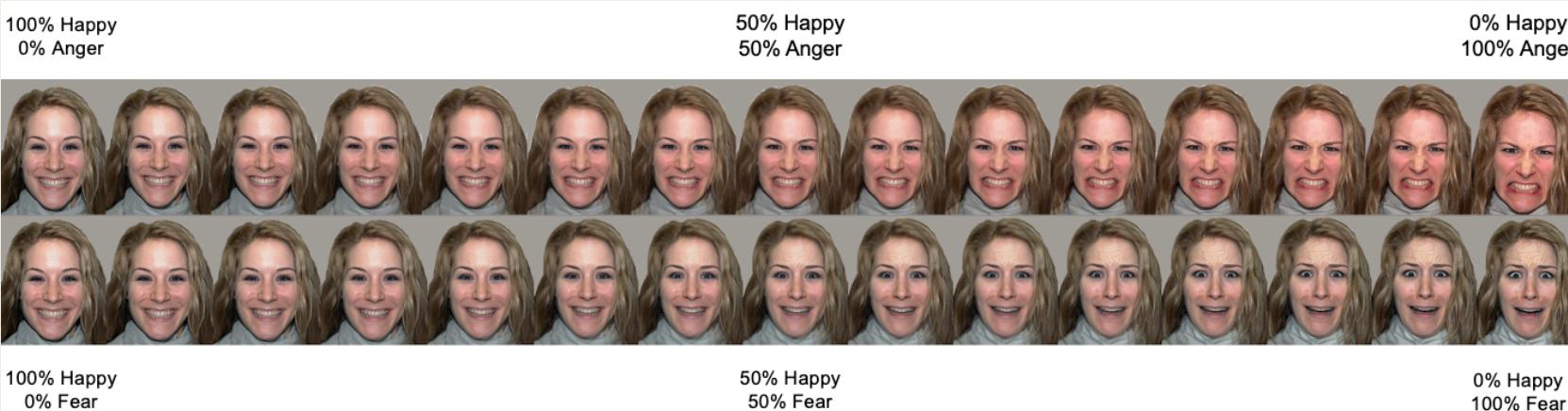


Experimental Design

Emotion Identification Task

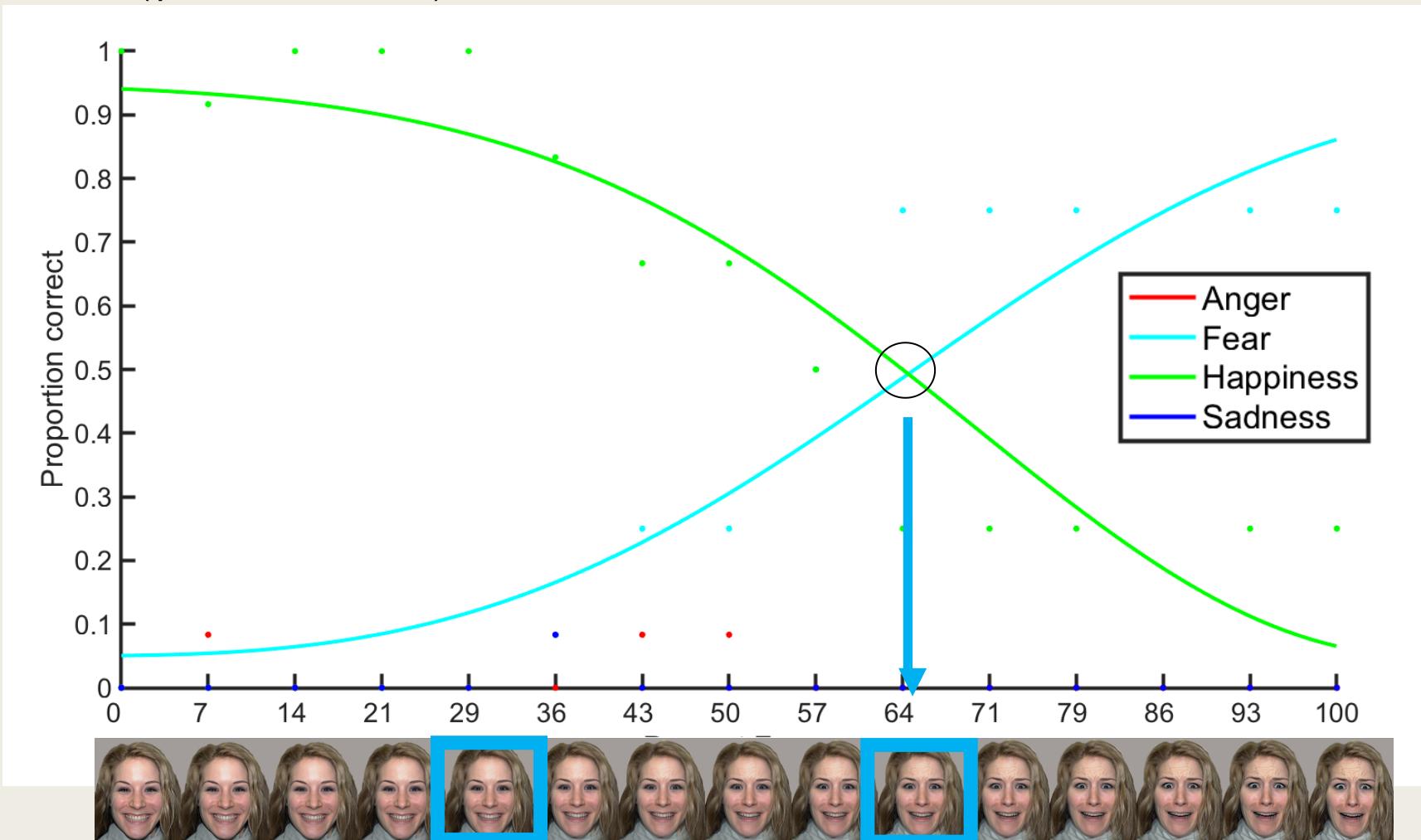


Face Morphs

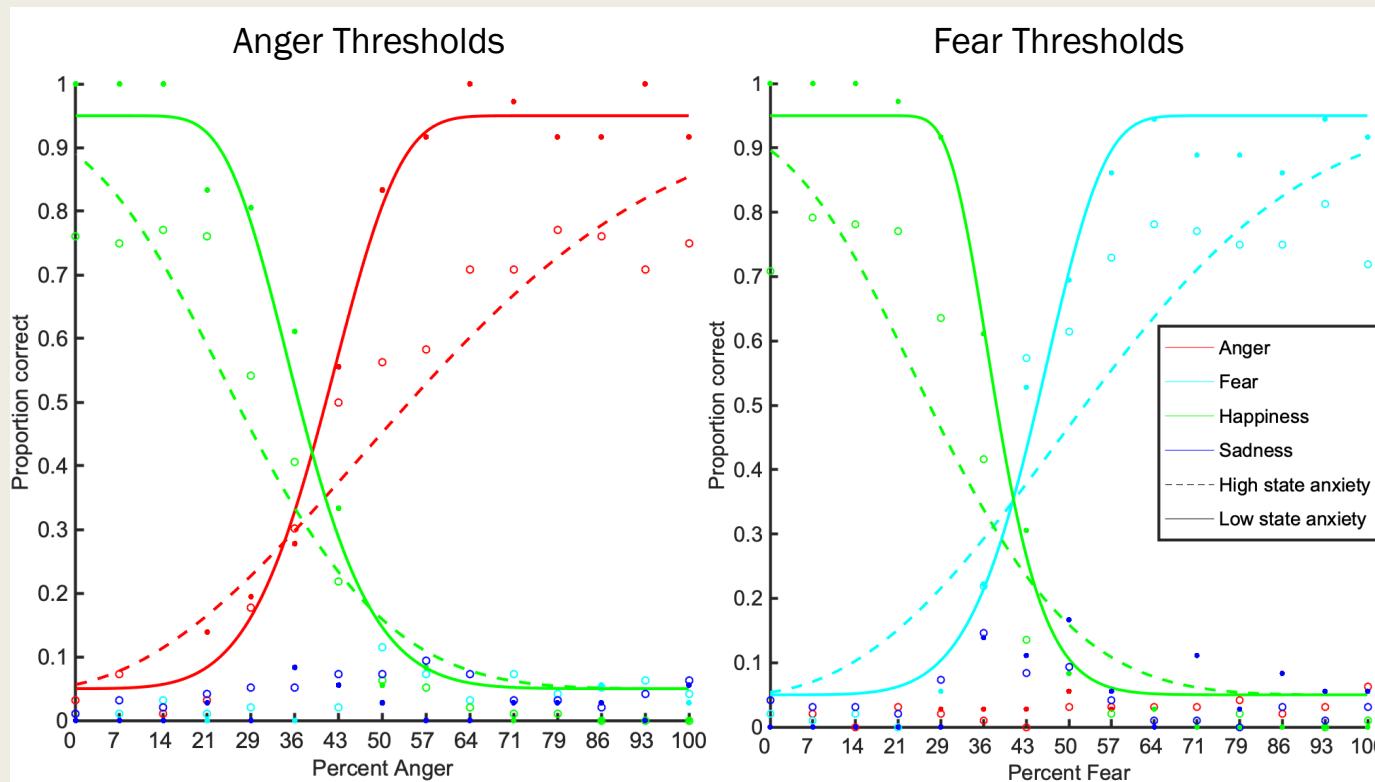


Threat Threshold

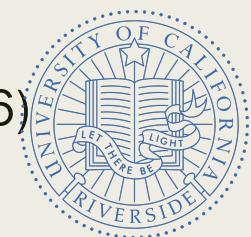
- Threat threshold: point of subjective equality via participants' psychometric (Weibull) function ($\gamma = .05$, $\lambda = .05$).



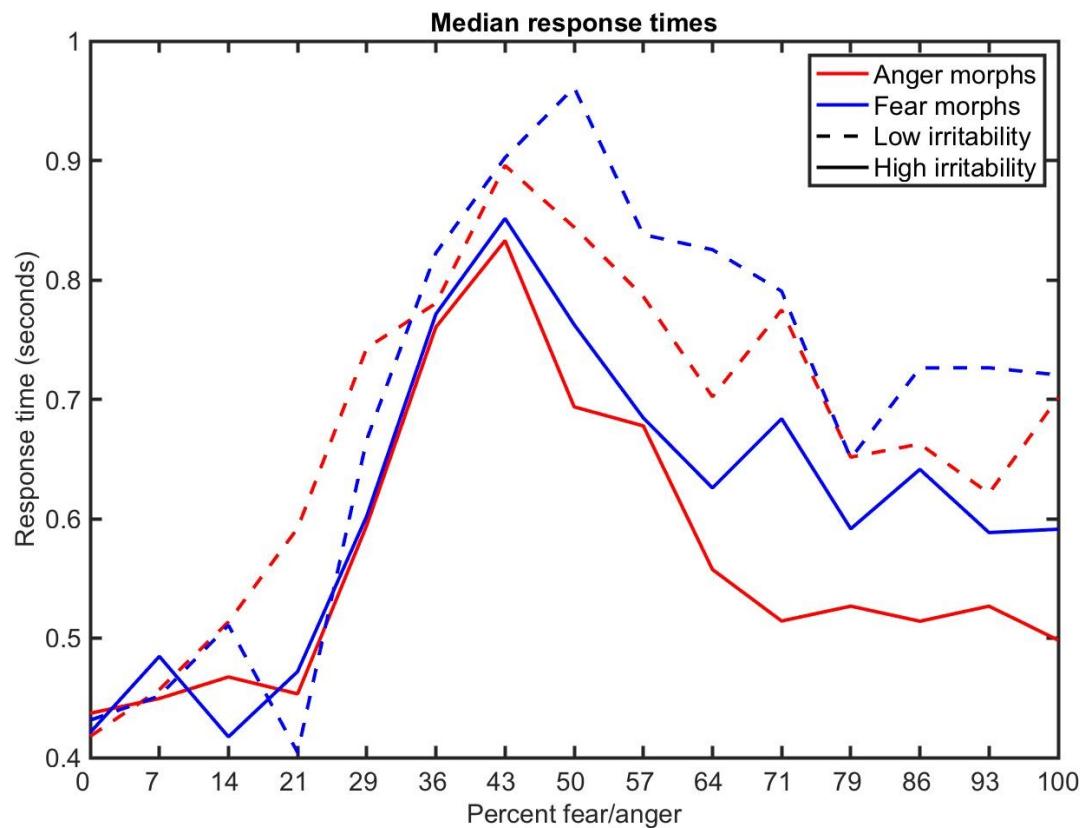
Anxiety Influences Fear Thresholds



- Emotion x trait anxiety x state anxiety: $F(1, 13) = 5.27, p = .039$
- People with high trait anxiety **and** high state anxiety have marginally lower fear thresholds than those with high trait and low state anxiety ($t(9) = 2.09, p = .066$)



Irritability Influences Threat Thresholds and Response Time



- Highly irritable participants had marginally higher fear thresholds than those with low irritability

$$t(19) = 1.90, p = .063$$

- Highly irritable participants were faster to select anger than those with low irritability

$$t(19) = 2.39, p = .027$$



Conclusion

- Participants with high trait *and* high state anxiety were more biased to detect fearful faces than those with high trait and low state anxiety
 - Negativity biases *might be due to temporary feelings of anxiety for trait anxious people*
- Participants with high irritability had marginally higher threat thresholds for fear morphs and were faster to select anger than those with low irritability
 - Anxiety and irritability may be related to emotion-specific threat biases



References

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Acknowledgements

- We would like to thank:
 - *Dana Glenn, Dr. Megan Peters, and Dr. Kalina Michalska for their mentorship*
 - *UCR Undergraduate Education Mini-Grant*

