





Seen and heard emotions: Influences on perception and cortisol

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CONCLUSIONS:

In a total of 163 participants, we assessed how seen & heard emotional information can alter the perception of seen emotional faces and alter the corresponding cortisol response, a proxy for participant arousal or stress.

1) Adaptation yielded perceptual aftereffects in the predicted direction, positive biases after exposure to angry faces and negative biases after exposure to happy faces. Perceptual effects differed significantly from 0 except following exposure to emotional sounds alone, where perceptual effects were weakest.

2) Contrary to predictions, we found no significant differences in perceptual aftereffects from exposure to congruent vs incongruent emotional information.

3) Cortisol levels decreased on average, although increases were seen on an individual basis. Contrary to predictions, we found no significant differences in cortisol with emotional condition.

4) We found a significant correlation between perceptual changes and cortisol changes. Following exposure to negative emotional information, larger decreases in cortisol (indicative of less stress), were correlated with more positive perceptual aftereffects (indicative of stronger biases to see a neutral face as happy).

Sample References

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