Reading crowd emotion: The roles of hemispheric specialization, task goal, anxiety, and facial identity

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Introduction
• Crowd emotion provides important social information that guides out interactions with others [1] (e.g., whether to approach or to avoid them).
• How crowd emotion perception is achieved and modulated by intrinsic and extrinsic factors remains virtually unexplored.

Task-dependent laterality effect
• Right hemisphere: more accurate for processing task-relevant crowd emotion.
• Left hemisphere: more accurate for processing the alternative choice, for confirmatory or inhibitory signal.

Method
• 50 morphed faces between Happy and Angry
• 6 sets from different identities [1]
• (3 males, 3 females)
• Which group (left or right) would you rather

Avoid? Approach?

Observers’ anxiety level
High-Anxiety observers were less accurate for perceiving happy crowds (not angry crowds).

Eye movement during free viewing
• Higher proportion of first saccades to LVF

Eye movement during free viewing
• Direction of first saccade modulated by crowd gender: More frequent to LVF when viewing male crowds.

Facial identity
Mixed identities showed interference with extraction of crowd emotion.
Angry male crowds and happy female crowds were perceived more accurately.

References