By Jimin Lee

Relationship between amygdala volume and emotion recognition in adolescents at ultra-high risk for psychosis

"The study explored whether amygdala volumes were related to emotion-recognition impairments in individuals at ultra-high risk (UHR) for psychosis, and whether volumes differed by sex." (Bartholomeusz et al., 2014).

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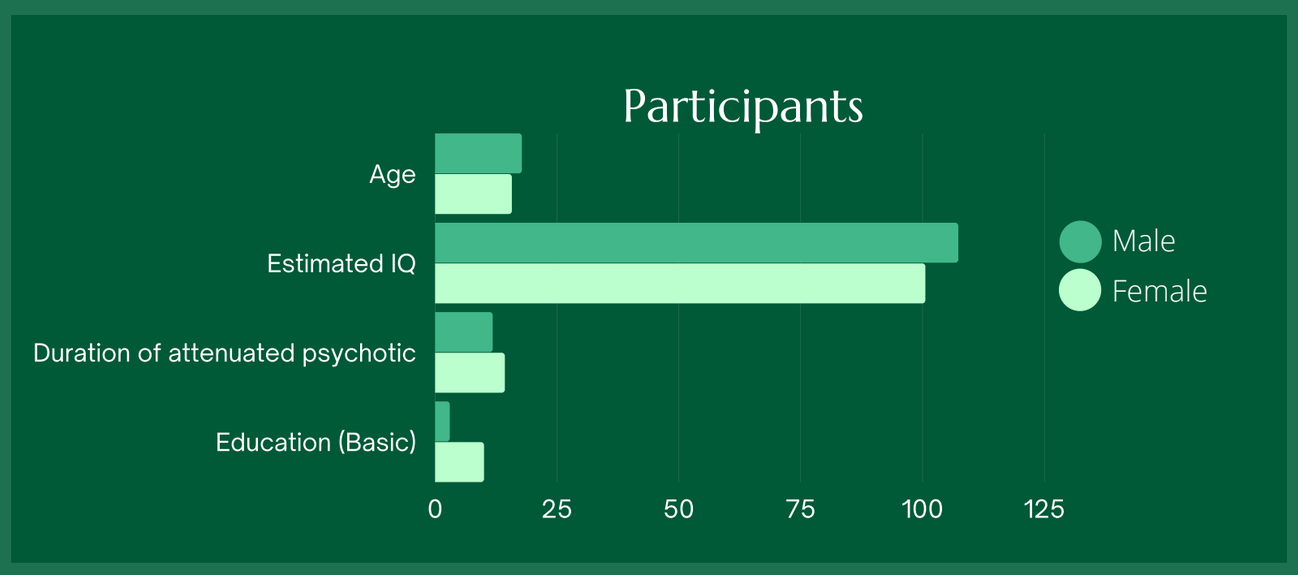
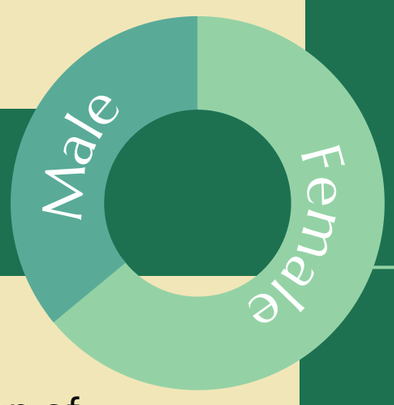
Hypothesis

The hypothesis of this research was that smaller amygdala volumes would be connected with larger emotion-recognition deficits for both facial and prosodic emotion. They estimated that this would be more shown in females.

Demographic characteristics and emotion recognition

Within the sample of 14 males and 25 females , there were significantly higher percentage scores for recognition of both facial and prosody expression in anger and fear.



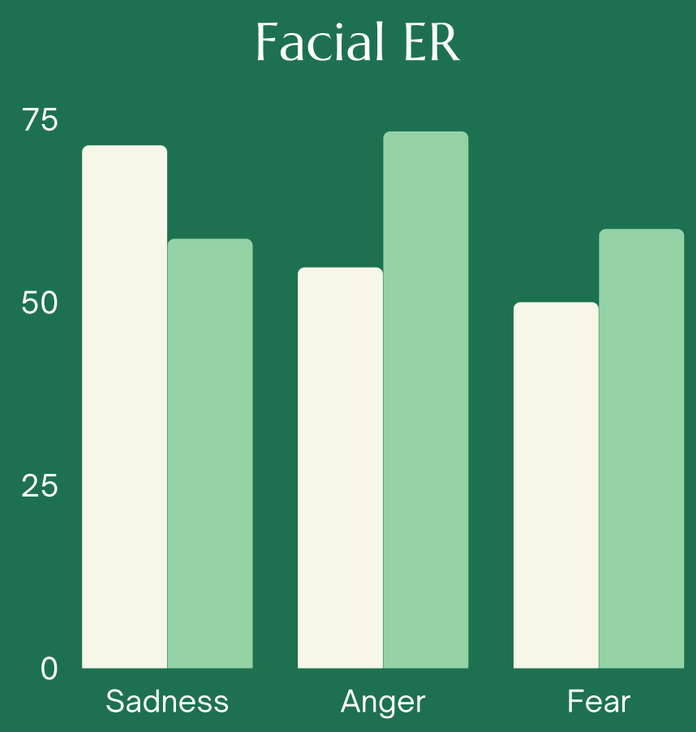


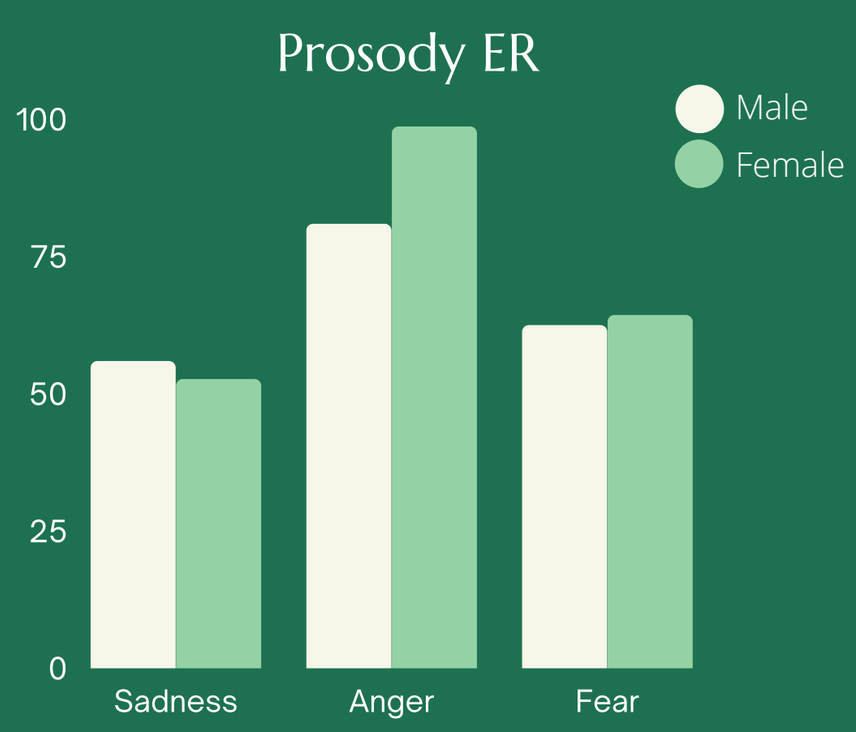
Amygdala volume and emotion recognition

There was a positive correlation of amygdala volume and emotion recognition only in females. The volume of left amygdala associated with the sadness recognition in prosody (p = 0.047). However, there was no significant change in males associated from the volume of amygdla and ER.

Amygdala volume asymmetry and emotion recognition

There were positive association between amygdala volume asymmetry and sadness prosody recognition and facial fear recognition in males only. Males better at those recognitions had greater left asymmetry.





Works Cited

Bartholomeusz, C. F., Whittle, S. L., Pilioussis, E., Allott, K., Rice, S., Schäfer, M. R., Pantelis, C., & Paul Amminger, G. (2014). Relationship between amygdala volume and emotion recognition in adolescents at ultra-high risk for psychosis. Psychiatry Research: Neuroimaging, 224(3), 159–167. https://doi.org/10.1016/j.pscychresns.2014.10.005