

# Emotion recognition as a predictor of transition to a psychotic disorder in ultra-high risk participants

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## Aims

Recent research has shown emotion recognition to be impaired in individuals at ultra-high risk (UHR) for developing a psychotic disorder compared to healthy controls. This longitudinal study aimed to examine whether disturbed emotion recognition measured in UHR participants at baseline predicts transition to a psychotic disorder within 12 months.

## Methods

Thirty-seven UHR participants aged 13–22 years participated in the study. At baseline participants completed face and prosody emotion recognition tasks, as well as measures of psychopathology, functioning, and IQ. Transition to a psychotic disorder over 12 months was the primary outcome. A series of Cox regressions was performed with emotion recognition as the predictor variable, while controlling for covariates, with time to transition to a psychotic disorder as the dependent variable.

## Results

Eleven (29.7%) of the 37 participants transitioned to a psychotic disorder over the 12-month follow-up period. Total face or prosody emotion recognition accuracy was not predictive of transition to a psychotic disorder. However, examination of recognition of specific emotions, while controlling for positive, negative and global symptoms and functioning, revealed that accuracy in identifying neutral ( $p = .037$ ) and fearful ( $p = .015$ ) emotion predicted transition to a psychotic disorder. Specifically, lower accuracy in identifying neutral emotion and higher accuracy in identifying fearful emotion were predictive of transition to a psychotic disorder within 12 months. Examination of the separate modalities revealed that this finding held for face but not for prosody emotion recognition.

## Conclusion

These findings suggest that emotion recognition abilities may be prognostic for the development of psychotic disorders, but further studies are needed.