DEFICITS AND BIASES OF FACIAL EMOTION RECOGNITION IN ULTRA-HIGH RISK FOR PSYCHOSIS AND FIRST-EPISODE SCHIZOPHRENIA

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The purpose of this study was to examine whether people with ultra-high risk for psychosis showed biases as well as deficits in facial emotional recognition which were well-established findings in people with schizophrenia. Forty-five people with ultra-high risk (UHR) for psychosis, 30 people with first-episode (FE) schizophrenia and 40 healthy controls were asked to recognize the emotional category of facial emotional photographs. The stimuli were selected from the standard emotional photographs of Japanese and Caucasian Facial Expressions of Emotion (JACFEE) which depicting the basic emotions of happiness, disgust, sadness, anger, surprise, fear, and contempt. To examine the accurate and biased attribution of facial emotion recognition, unbiased hit rates and misattrbution rates of each emotion were calculated. The common abnormalities observed in the UHR for psychosis and FE schizophrenia group were lower unbiased hit rate for fear faces (UHR< controls: $p=0.027$, FE< controls: $p=0.029$) and higher contempt misattribution rate to faces (UHR>controls: $p=0.022$, FE< controls: $p=0.088$) compared with healthy controls. Unbiased hit rates for fear in UHR for psychosis and FE schizophrenia group were correlated with negative symptoms, and these correlations were found in other negative emotions in FE schizophrenia. These findings suggest that the bias as well as deficits of facial emotional recognition may be already present in the (putative) prodromal stages of schizophrenia and could be a possible trait markers for the social cognition.