

Emotion recognition in first-episode schizophrenia

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Individuals with sz do experience problems with emotion perception

- A trait factor?
- If so, should be evident in stabilised first episode (FE) psychosis

Background

- Substantial research on perception of emotion in schizophrenia
- Methods frequently flawed & findings equivocal (Edwards et al, 2002)

Background



Pergamon

**CLINICAL
PSYCHOLOGY
REVIEW**

Clinical Psychology Review 22 (2002) 789–832

Emotion recognition via facial expression and affective prosody in schizophrenia: A methodological review

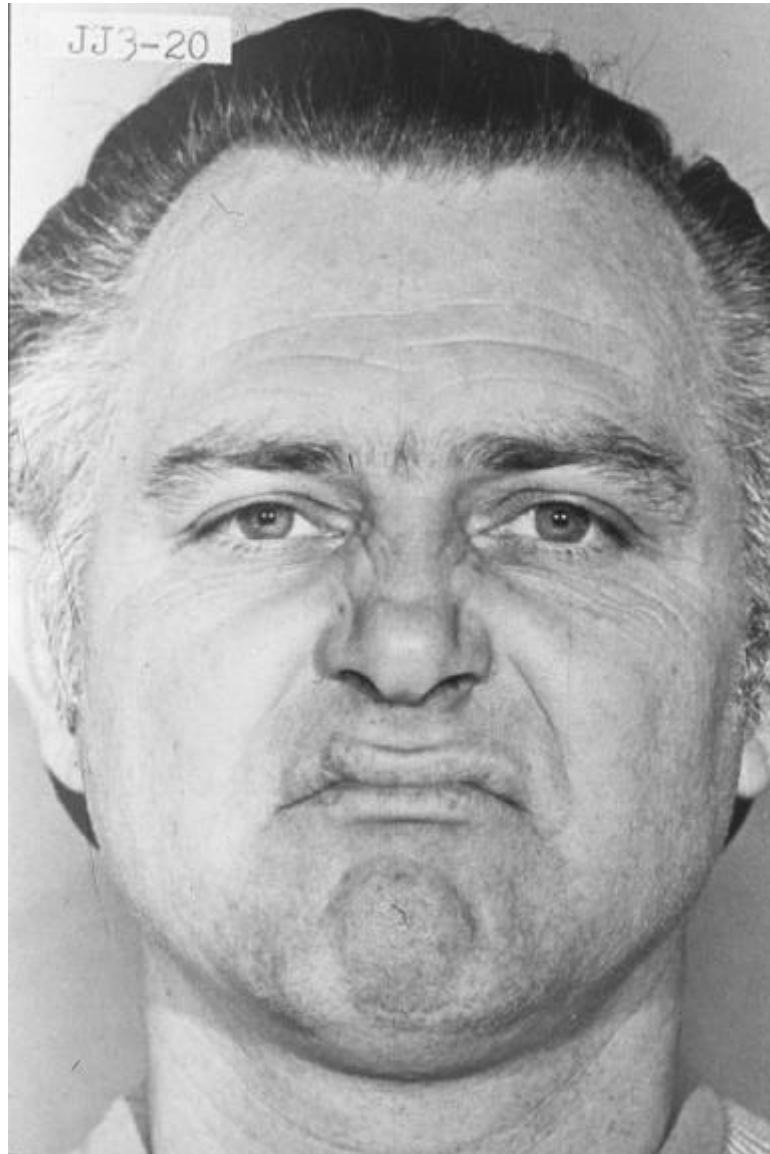
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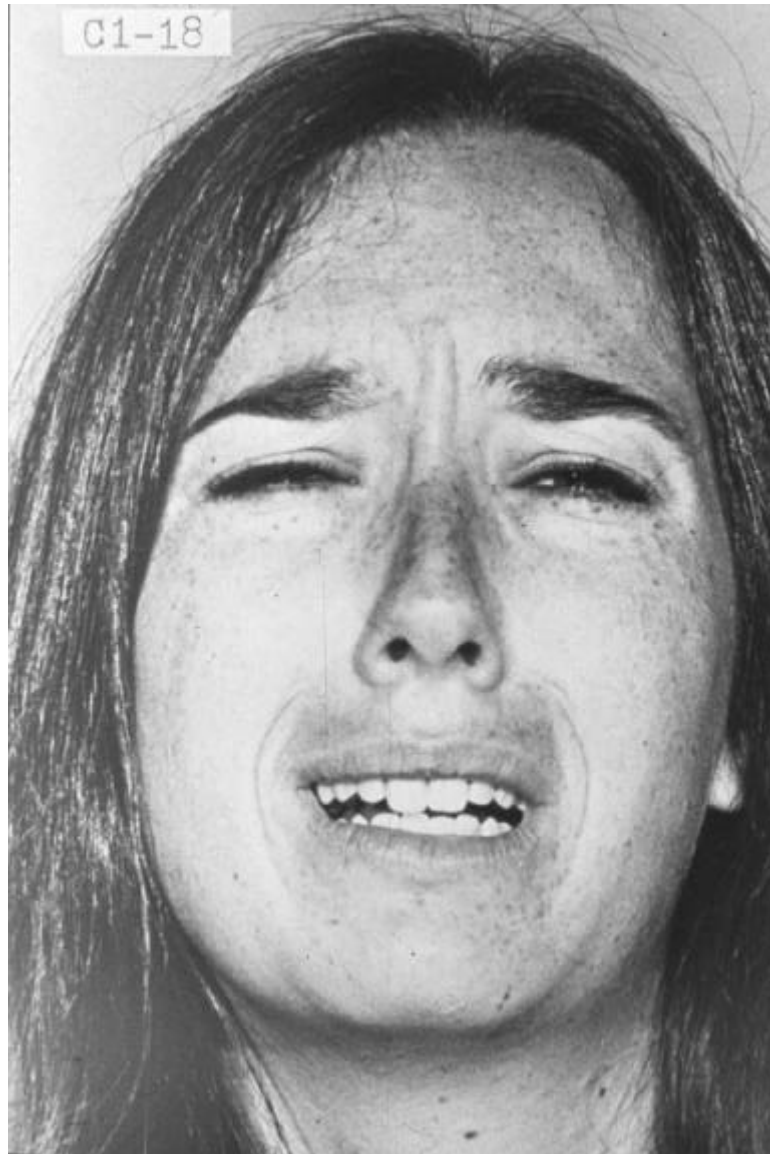
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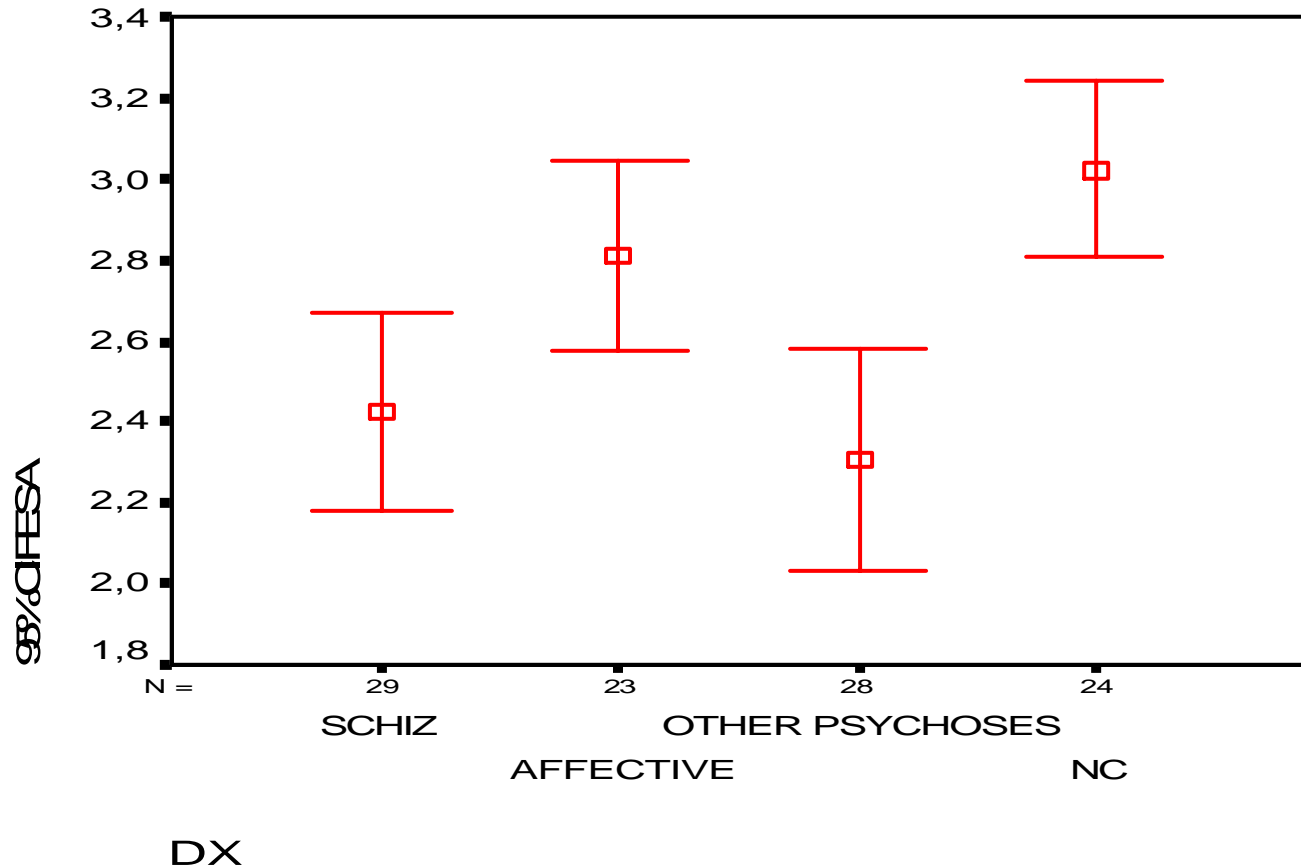


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Example of prosody task

QuickTime™ and a Cinepak deco

Study I - 'FESA' findings



$p = .0001$

Background



ELSEVIER

Schizophrenia Research 48 (2001) 235–253

SCHIZOPHRENIA
RESEARCH

www.elsevier.com/locate/schres

Facial affect and affective prosody recognition in first-episode schizophrenia

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Consistent findings

- Fear (Van der Gaag & Haenene, 1990; Gaebel & Wolwer, 1992, Archer et al., 1994)
- Sadness (Archer et al., 1994; Schneider et al., 1995; Bellack et al., 1996; Mandal et al., 1999)
- Fear and mania (Lembke & Ketter, 2002)??

Role of the amygdala

- Link between the amygdala and fear recognition (Adolphs, 1999)
- Amygdala as a factor in pathogenesis of sz (Fudge et al., 1998)
- Abnormality in amygdala activation in individuals with sz during fear affect recognition (Baird et al., 1999) & sad mood induction (Schneider et al., 1998)

Work in progress

- Study II - Validate & extend Study I
 - replicate fear/sadness deficit in FE sz
 - stable over 9 months?
 - do 'prolonged recovery' do worse?
 - emotional intelligence & alexithymia
- Study III - pilot MRI data
- Study IV - Borderline Disorders/traits
- Study V - individuals at ultra high risk of developing psychosis

Study VI

13-18 year olds with FE Sz and their siblings

- Explore the findings of Edwards et al (2001) re a fear/sadness deficit in adolescents with FE sz
- Determine whether the expected fear/sadness recognition deficit is trait marker through investigation of the non affected first degree relatives of adolescents with FE sz

Measures

- Psychopathology & cognitive measures (SCID-P, PANNS, WAIS-III triad)
- Emotion labeling of faces (FACT 4)*
3 actors x (7 emotions x 1)
- Affective Prosody*
3 actors x (5 emotions x 4)

*Instructions and response formats presented in German.

Samples

- FE sz and related psychoses - in remission (Sz), n=24
- Non-patient controls (NP), n=24
- Non-affected first-degree relatives (parents and siblings) of Sz (Aff), n=24

Sz - Inclusion Criteria

- Age 13-18 years
- FE sz and related psychoses
- Attending the Child and Adolescent Clinic for Neuropsychiatry, Vienna
- Mental state settled

Nonpatients

- friends of young people attending the clinic
- match for age, sex, IQ
- no psychiatric history
- 12 month follow up diagnostic phone call

Exclusion criteria for all 3 groups

- tonal first-language (e.g. Thai)
- illiterate
- impaired vision
- impaired auditory acuity
- organic condition
- intoxication

Hypotheses

- Sz and R will perform significantly more poorly on fear/sadness in faces and voices (ie 'FESA') compared to NP
- There will be no significant differences between Sz and NP on the remaining emotions tested across the two tasks.

Why research this area?

- Contribute towards an assessment knowledge base to assist with the development of interventions to improve emotion recognition skills
- Provide clues as to whom among the unaffected relatives of individuals with sz might be at heightened risk for developing the illness?

Related research

: J Abnorm Child Psychol 2001 Dec;29(6):491-8

[Related Articles, Links](#)

A selective impairment in the processing of sad and fearful expressions in children with psychopathic tendencies.

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The processing of emotional expressions is fundamental for normal socialisation and interaction. Reduced responsiveness to the expressions of sadness and fear has been implicated in the development of psychopathy (R. J. R. Blair, 1995). The current study investigates the sensitivity of children with psychopathic tendencies to facial expressions. Children with psychopathic tendencies and a comparison group, as defined by the Psychopathy Screening Device (PSD; P. J. Frick & R. D. Hare, in press), were presented with a cinematic display of a standardised set of facial expressions that depicted sadness, happiness, anger, disgust, fear, and surprise. Participants observed as these facial expressions slowly evolved through 20 successive frames of increasing intensity. The children with psychopathic tendencies presented with selective impairments; they needed significantly more stages before they could successfully recognise the sad expressions and even when the fearful expressions were at full intensity were significantly more likely to mistake them for another expression. These results are interpreted with reference to an amygdala and empathy impairment explanation of psychopathy.