



Morphological asymmetry in schizophrenia patients: a biomarker of hallucinations and thought disorganisation?

Stephan-Otto C. ^{a,b,c}, Lombardini F. ^a, Núñez C. ^{a,b}, Senior C. ^{d,e}, Ochoa S. ^{a,b,c}, Usall J. ^{a,b,c}, Brébion G. ^{a,b,c}

a) Parc Sanitari Sant Joan de Déu, Sant Boi de Llobregat, Spain; b) Institut de Recerca Sant Joan de Déu, Esplugues de Llobregat, Spain; c) Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), Madrid, Spain; d) School of Life & Health Sciences, Aston University, Birmingham, UK; e) University of Gibraltar, Gibraltar

Correspondence Author: federica.lombardini90@gmail.com

Introduction

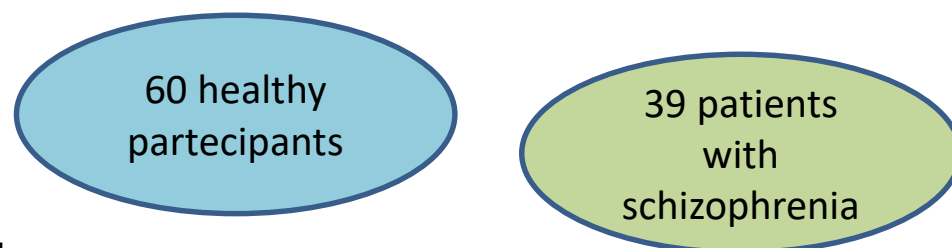
Morphological asymmetries are increased in schizophrenia patients relative to healthy patients. Associations between such morphological anomalies and clinical symptoms have been inconclusive.

Aim of the study

- To examine the associations of developmental instability —reflected by the fluctuating asymmetry (FA) — with clinical symptoms, non-clinical symptoms and affective symptoms.

Methods

Participants



Instruments used in each group:

- FA
- Clinical and non-clinical symptoms

Regression analysis for each group



Results

Significative associations of FA value with clinical, non-clinical and affective symptoms (β value)

~ $p < ,05$
* $p < ,002$
** $p < ,0001$

36 healthy participants subsample	FA
Anxiety	,78 *
Depression	-,65 *
Social anhedonia	-,35 ~

39 patients with schizophrenia	FA
Hallucination	,59 *
Thought disorganisation	,65 **

Conclusions

Morphological asymmetry may be a biomarker of clinical hallucinations and thought disorganisation rather than of schizophrenia disease.

