

PROBABILISTIC REASONING (JTC) BIAS IN SCHIZOPHRENIA: META-ANALYSIS OF ITS ASSOCIATION WITH DELUSIONS, NEGATIVE SYMPTOMS AND IQ

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BACKGROUND AND AIM: Probabilistic reasoning bias ('jumping to conclusions', JTC) has been studied in schizophrenia for over 30 years. While its presence in the disorder has been amply confirmed, some studies have failed to find evidence of an association with delusions, and its relationship to other aspects of the clinical picture remains uncertain. Given the publication of new studies (some of them large), an updated meta-analysis aimed at examining the relationship of JTC bias in schizophrenia spectrum disorders (SSD) to delusions, negative symptoms and cognitive function is justified.

METHODS: Databases searched included PubMed, PsycINFO, Embase, and ProQuest Dissertations and Theses Global; the grey literature was also searched. Studies were required to be carried out on patients meeting diagnostic criteria for SSD, to use recognized tasks for assessing JTC (e.g the beads task) and to report scores for delusions, negative symptoms or cognitive function (as indexed by current IQ). This meta-analysis was preregistered on OSF, DOI: 10.17605/OSF.IO/89RTV, OSF

project: osf.io/jec69 (ethics committee approval is not required for meta-analyses).

RESULTS: After title/abstract screening, 2,746 of 2,947 records were excluded, leaving 201 reports for retrieval. Of these, 199 could be located, and 51 studies were considered includable after full text screening. There were 29 studies reporting on the association between JTC and delusions (with 7 more potentially includable, eg after requesting data from authors), 6 studies on the association with negative symptoms, and 5 (+ 2 more potentially includable) on the association with current IQ. Full meta-analytic findings will be presented.

CONCLUSIONS: This study will provide an up-to-date overview of the relationship of JTC bias to key clinical and cognitive features of schizophrenia. Findings should help clarify the 'state' vs 'trait' characteristics of this reasoning bias.

Keywords: Jumping to conclusions, probabilistic reasoning bias, schizophrenia, delusions, negative symptoms, cognitive function