cortex (vmPFC) and the PCC. rsFC to nodes of the central executive and salience networks, such as the right dlPFC/BA46 and the bilateral insula, was decreased. Within the MDD group, Cg32antPFC/BA10 and Cg32-dlPFC/BA9 rsFC was positively correlated with anhedonia scores; additionally, subthreshold clusters were identified in the ventral striatum, pgACC and hypothalamus. Cg25antPFC/BA10 and Cg25-PCC rsFC was negatively correlated with anxiety scores. Cg32 rsFC to the insula, dlPFC/BA9 and and dmPFC/ BA10 showed negative correlations with hsCRP measures.

**Conclusion:** These findings suggest that sgACC subregions have distinct rsFC patterns which are altered in MDD. rsFC changes are differentially related to symptoms of anhedonia and anxiety, together with inflammatory status. This has important implications for the development of targeted neuromodulation treatment strategies.

### Covid-19 Associated Psychosis in Children and Young Person – a Systematic Review of Case Reports

Dr Amey Angane and Dr Victoria Fernandez Garcia De Las Heras South West London St George's Mental Health NHS Trust, London, United Kingdom

### doi: 10.1192/bjo.2025.10193

**Aims:** The primary objective of this descriptive systematic review of case reports is to describe the clinical commodities, presentations and outcomes in children and adolescents presenting with onset of non-delirious psychosis during or shortly after a SARS-CoV-2 infection and to find out statistically various other factors that might be linked to demographics of young people. The review also explores if the clinical presentation of the Covid-19 psychosis is different from early onset non-organic psychosis occurring in children and adolescents.

**Methods:** On 23 September 2023, the author searched six electronic databases including PubMed, Scopus, Web of Science, PsycInfo, Google Scholar, and CINAHL, using the following search terms: (COVID-19 OR SARS-CoV-2\* OR Severe Acute Respiratory Syndrome Coronavirus 2\* OR COVID\*) AND (Psychosis) AND (Adolescent OR Children OR Teenager). An updated search was completed on 10 August 2024. Search results from six databases were manually checked to remove any duplication. The extracted data was then arranged in a standardised template. The extracted data included: demographic characteristics of the patients including age, gender, ethnicity, past personal and family psychiatric history, clinical features including neurological and psychotic symptoms and management including outcome.

**Results:** This descriptive systematic review identified 15 cases of incident psychosis in patients with antecedent or concurrent Covid-19. Out of 15 cases, 9 were males, 4 were females and 2 did not report any sex. The mean age of patients in our sample was 15.1 years with 2 cases not reporting the actual age. Delusions were present in all cases (100%) of patients, whereas hallucinations were reported in only 33% of the cases. Disorganised speech or behaviour was reported in 40% of the cases. Psychotic symptoms lasted from approximately 7–90 days. Family history was positive for 2/15 cases (7.5%) with psychosis and BPAD respectively. Only 2 cases had past personal history of mental illness (Depression and anxiety). All patients received antipsychotic medications as a part of the treatment, whereas 33% patients received intravenous immunoglobulins concurrently with antipsychotic medication. Full remission was obtained in nearly all cases after treatment.

**Conclusion:** Covid-19 related psychosis differs in various aspects and should be considered as a separate entity when considering the assessment and management. It differs in many ways from a typical early onset psychotic episode both in presentation and treatment response.

# Societal Attitudes Towards Transgender Individuals: A Multicentric Survey Across Urban, Rural and Cosmopolitan Cities in India

Dr Arokia Antonysamy<sup>1</sup>, Dr Amutha Govindaraju<sup>2</sup>, Dr Helena Selvakodi<sup>2</sup> and Dr Shanmugapriya Samiyappan<sup>2</sup> <sup>1</sup>Cygnet Health Care, London, United Kingdom and <sup>2</sup>Madurai Medical College Hospitals, Madurai, India

#### doi: 10.1192/bjo.2025.10194

**Aims:** The aim of this study is to investigate public attitudes towards transgender individuals, seeking to understand the relationship between socio-demographic factors, gender beliefs and approach towards this minority group. The research acknowledges the widespread stigma faced by transgender people due to the incongruence between their gender identity and sex assigned at birth, which negatively impacts their access to resources and overall well-being.

**Methods:** This is a cross-sectional survey conducted across rural, suburban and cosmopolitan cities in India. A total of 500 participants were randomly selected using multistage sampling. Inclusion criteria for participants included the age range 18–60 years, no history of mental illness, and having no known family members with transgender characteristics.

This specific demographic targeting aimed to isolate general public perception, excluding potentially biased viewpoints from those with direct personal connections to transgender individuals or pre-existing mental health conditions.

**Results:** The study revealed a predominantly young adult sample, with 52.6% of respondents falling between the ages of 26 and 40. The sample was fairly distributed across both genders, male (56%), females (44%). Majority were married (62.4%), educated at graduate level (61%) and employed. This socio-demographic breakdown provides context for interpreting the attitudinal data.

Key findings indicated a concerning trend: younger, unmarried males with higher education demonstrated more negative attitudes towards transgender individuals. This finding contradicts some expectations, as higher education is often associated with more liberal and inclusive viewpoints. Furthermore, the study found that highly educated individuals, in general, held more negative attitudes, while married individuals tended to express more positive attitudes. Interestingly, there was no significant difference in attitudes towards transgender men compared with transgender women.

**Conclusion:** The study concludes by emphasizing the need for targeted educational interventions, particularly aimed at younger, unmarried, highly educated males. The authors argue that these interventions are crucial for promoting cultural competence and ensuring that transgender individuals are afforded their due rights. By focusing on education and awareness, the study suggests a potential pathway for mitigating the negative attitudes identified and fostering a more inclusive and accepting society for transgender individuals. The study highlights the importance of understanding the complex interplay between socio-demographic factors and



Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

attitudes towards marginalized groups to develop effective strategies for social change.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

## Digital Interventions for Improving Positive and Negative Symptoms in Psychosis: A Systematic Review of Evidence.

Dr Nnamdi Anyim<sup>1</sup> and Dr Ahmed Waqas<sup>1,2</sup>

<sup>1</sup>Greater Manchester Mental Health (GMMH) Trust, Manchester, United Kingdom and <sup>2</sup>University of Manchester, Manchester, United Kingdom

#### doi: 10.1192/bjo.2025.10195

**Aims:** Digital interventions have gained prominence as effective tools for improving outcomes across various psychiatric disorders. These interventions offer scalability, thus enhancing access to mental health services, particularly in resource-limited settings. While substantial evidence supports the efficacy of digital interventions for neurotic disorders, there is a notable gap in data regarding their effectiveness in severe, enduring mental illnesses like schizophrenia. This systematic review aims to evaluate the types of digital interventions used in the treatment of psychotic disorders and assess their effectiveness in improving both positive and negative symptoms.

**Methods:** We conducted a comprehensive search of multiple databases, including PubMed, up to December 2024, for studies evaluating digital interventions in psychotic disorders using a pretested search strategy. After retrieving relevant bibliographic records, two reviewers independently screened titles, abstracts, and full texts. Data extraction was performed by both reviewers working separately. Key variables extracted included study design, intervention type and platform, target population, and intervention components. The primary outcomes assessed were the severity of positive and negative symptoms following the intervention.

Results: Nine studies met the inclusion criteria. Three studies focused on interventions for participants with schizophrenia (n=3), two studies focused on first episode psychosis (n=2), and four studies were on schizophrenia spectrum disorders (n=4). Of these, four studies employed randomized controlled trial (RCT) designs, while the remaining studies assessed intervention development (n=1) and feasibility (n=4). The digital platforms used in the interventions included apps designed for symptom monitoring, self-management, and early relapse identification. Notable features of the apps included affect monitoring (n=3), diary keeping (n=2), reminders (n=3), and peer networking (n=3). Two apps specifically aimed at monitoring early relapse used active symptom tracking (n=1) and passive behavioural monitoring via GPS (n=1). The intervention strategies were rooted in psychosocial principles, with some apps utilizing cognitive-behavioural therapy for psychosis (CBTp; n=4) and behavioural activation for exercise engagement (n=1). One study combined the Actissist and CliniTouch apps, with the CliniTouch app prompting users to respond to PANSS-based items, while the Actissist app delivered CBTp-based interventions. Positive outcomes were observed in areas such as paranoia, delusions, motivation, and overall PANSS scores.

**Conclusion:** The use of digital interventions in the treatment of psychotic disorders has increased, with diverse strategies showing potential for improving both mental and physical health outcomes. Although promising, further randomized controlled trials are

necessary to establish firm recommendations for integrating these digital tools into clinical practice.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

## Cognitive Empathy Differences on the Questionnaire of Cognitive and Affective Empathy Distinguish Between Borderline Personality Disorder and Other Mental Disorders

Dr Ariana Axiaq<sup>1</sup>, Dr Donald MacIntyre<sup>1</sup>, Professor Douglas Steele<sup>2</sup> and Dr David Hayward<sup>3</sup>

<sup>1</sup>University of Edinburgh, Edinburgh, United Kingdom; <sup>2</sup>University of Dundee, Dundee, United Kingdom and <sup>3</sup>St John's Hospital, Livingston, United Kingdom

#### doi: 10.1192/bjo.2025.10196

**Aims:** Bipolar personality disorder (BPD) is associated with a deficiency in cognitive empathy, defined as the ability to infer other's mental state by imagining their perspective and interpreting cues like facial expression. However, patients with BPD tend to have a typical or heightened emotional empathy – having reciprocal feeling state. We hypothesise that an empathy measure that discriminates between cognitive and affective empathy could aid diagnosis, quantify severity, inform prognosis, and stratify treatment of BPD.

The Questionnaire of Cognitive and Affective Empathy (QCAE) was produced by assimilating the most discriminating aspects of other well-validated questionnaires. It clearly defines empathy and is easy to use. The QCAE has also been shown to capture the characteristic empathy difference in people with BPD compared with non-clinical controls, but studies using non-clinical controls cannot determine whether these empathy differences discriminate between different mental disorders or are generally symptomatic of mental distress. Therefore, we measured empathetic aptitude using the QCAE in a BPD group and comparable group of people with other mental disorders.

This study aims to assess whether empathetic amplitude – cognitive and emotional empathy scores on QCAE, is different in BPD compared with other mental health disorders.

**Methods:** Participants diagnosed with BPD were recruited in outpatient appointments and in inpatient settings. Diagnoses were affirmed using DSM–IV diagnostic criteria by consultant psychiatrists. QCAE results were compared with a clinical control group with other mental disorders, also recruited in outpatient and inpatient settings.

**Results:** In the BPD group: N=40 (38 female), cognitive empathy mean on QCAE was 35.075 (SD 7.917) whereas emotional empathy mean was 46.80 (SD 12.90). Meanwhile in the clinical control group: N=23 (9 female, depression 5, schizophrenia 10, dissociative disorder 1, mania 4, NDD 2, delusional disorder 1), cognitive empathy mean was 55 (SD 10.531) while emotional empathy averaged at 35.609 (SD 6.103).There was a significant cognitive empathy score difference between the control and BPD group (p=0.012), with Cohen's d of 0.696, the difference in emotional empathy was not significant (p=0.781).

**Conclusion:** These results corroborate the characteristic BPD empathy difference of an impaired cognitive empathy but a typical emotional empathy; people with BPD struggle to understand the motives and intentions of others, but their own emotions can be roused. This convincingly explains why it can be difficult for affected people to navigate interpersonal challenges. QCAE empathy testing