

comparing changes in blood glucose levels between patients receiving anti-psychotic or a placebo for the treatment of schizophrenia or related disorders. The primary outcome of interest was mean changes from baseline in fasting glucose levels.

**Results:** We included 29 studies reporting changes in fasting glucose levels. Of the 10 antipsychotics, only olanzapine was associated with significantly increased total fasting glucose compared to a placebo (standardized mean difference (SMD) = 0.192, 95% confidence interval (CI) = 0.002 to 0.382,  $p = 0.048$ ).

**Discussion:** Olanzapine was associated with a significantly greater change in blood glucose levels than placebo treatment. The comparative influence of glucose metabolism-related side effects may help clinicians tailor the choice of antipsychotic drug to meet the needs of individual patients.

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## S4. CHILDHOOD TRAUMA AND SOCIAL COGNITION IN SCHIZOPHRENIA

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**Background:** In the last two decades, there has been a substantial number of studies indicating a link between schizophrenia (SZ) and early life adversities, such as childhood trauma (CT), which is highly prevalent in psychiatric populations (Rokita et al., 2018). However, little is known about the association between CT and social cognition, defined as a set of mental operations underlying social interactions and comprising of: Theory of Mind, emotion recognition and regulation, social perception and attributional style. Social cognitive deficits are a hallmark feature of SZ, which may result in impaired social and occupational functioning (Green, 2016). The aim of this study is to examine whether childhood adversity is associated with social cognitive abilities in both patients with schizophrenia and healthy controls.

**Methods:** Thirty patients with SZ (mean age=43.93; SD=11.80; 18 males, 12 females) and thirty healthy controls (mean age=33.07; SD=9.88; 17 males, 13 females) completed the Childhood Trauma Questionnaire (CTQ), which assesses the frequency and severity of five types of CT: emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect. Furthermore, all participants underwent three social cognitive tasks: the Reading the Mind in the Eyes Task (RME) and the Hinting Task that evaluate the ability to infer emotions and mental states of others, and the Emotion Recognition Task (ERT), which is implemented in the Cambridge Neuropsychological Test Automated Battery and measures the ability to identify six basic emotions in facial expressions (sadness, happiness, fear,

anger, disgust or surprise). Pearson's correlation coefficient was carried out to investigate the association between various types of childhood trauma and social cognitive tasks.

**Results:** We found that a history of CT, specifically physical neglect, was significantly negatively associated with poorer theory of mind abilities (measured with the RME task;  $r = -.623$ ,  $p < .001$ ) and deficits in recognizing disgust (measured with the ERT task;  $r = -.415$ ,  $p < .05$ ) in patients, but not in healthy controls. No significant associations were found between CT and the total score on the Hinting Task.

**Discussion:** These results suggest that the experience of CT has an impact on emotion recognition and Theory of Mind abilities in patients with SZ. Since deficits in social cognition are suggested to represent a core aspect of disability in schizophrenia and are not generally improved by antipsychotic medication (Daros et al., 2014, Kucharska-Pietura and Mortimer, 2013), a better understanding of the role of early childhood experiences in the development of social cognitive abilities is crucial. Further, the findings highlight the importance of addressing the various types of early childhood social experience and adversity in the assessment and intervention protocols of mental health treatments (e.g. Cognitive Behavioural Therapy), and psychosocial interventions that will specifically target social cognitive deficits. Early interventions (e.g. parenting programs) should also be implemented in an effort to minimize the occurrence of childhood adversities or reduce their impact.

## S5. SPECIFICITY OF TRAUMA AND ATTENUATED POSITIVE SYMPTOMS IN A NON-HELP-SEEKING SAMPLE

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**Background:** Trauma has been consistently associated with psychosis risk; however, the specificity of childhood trauma to individual attenuated positive psychotic symptoms among non-help-seeking individuals has not yet been adequately explored, as only one study to date has examined this relationship among help-seeking individuals and focused only on violent vs. non-violent traumatic events, rather than specific types of traumas.

**Methods:** We examined the relationship between childhood trauma (Childhood Trauma Questionnaire) with type of positive symptom, as measured by the Structural Interview for Psychosis-risk Syndromes (SIPS) among a sample of non-help-seeking undergraduates at a large, ethnically and socioeconomically diverse urban university ( $n = 130$ ).

**Results:** Simple linear regressions revealed that any childhood trauma was significantly associated with increased disorganized communication in young adulthood [ $\beta = .35$ ,  $t(128) = 4.15$ ,  $p < .001$ ]. Childhood sexual abuse also predicted increased disorganized communication [ $\beta = .28$ ,  $t(128) = 3.34$ ,  $p = .001$ ]. Additionally, childhood emotional neglect was significantly associated with increased suspiciousness/persecutory ideas [ $\beta = .32$ ,  $t(128) = 3.76$ ,  $p < .001$ ].

**Discussion:** This study is the first to identify specific attenuated positive psychotic symptoms linked to childhood traumas in a non-help-seeking sample. Specifically, our results suggest that there are differential influences of trauma type on specific positive symptom domains, which could be of potential use to future identification and prevention efforts.

## S6. MACHINE LEARNING-BASED CLASSIFICATION OF SCHIZOPHRENIA, THEIR BIOLOGICAL RELATIVES, AND HEALTHY INDIVIDUALS USING FUNCTIONAL CONNECTIVITY EEG FEATURES AT SOURCE-LEVEL

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