Background: While many pharmacological and psychosocial interventions are available, many treatment-resistant schizophrenia patients continue to suffer from persistent psychotic symptoms, mainly auditory verbal hallucinations (AVH). Recently, a psychological therapy using computerized technology has shown large therapeutic effects on AVH severity by enabling patients to engage in a dialogue with a representation of their distressing voices. These very hopeful results have been extended by our team using immersive 3D virtual reality. The results of VR therapy (VRT) in our pilot trial involving 15 schizophrenia patients with refractory AVH were clinically promising for the severity and distress related to hallucinations, illness symptomatology, depressive symptoms and quality of life. Notably, clinical improvements of our pilot remained significant at our 3-month follow-up. Such findings suggest that VRT seems to be a highly promising intervention for refractory AVH.
Methods: To further research in this field, the primary goal of this randomized-controlled trial is to show that VRT is superior to a widely utilized psychotherapy, that is Cognitive behavioral therapy (CBT), for the treatment of persistent auditory verbal hallucinations in schizophrenia. Our secondary goal is to examine the effects of these interventions on beliefs about voices, illness symptomatology, mood symptoms (anxiety and depression), self-esteem, level of functioning and quality of life.
This is a single-blinded randomized-controlled, single-site parallel study of VRT versus CBT. Each treatment group will include 52 randomized participants (assuming 20% attrition) of over 18 years of age hearing persecutory voices and suffering from treatment resistant schizophrenia or schizoaffective disorder. Diagnoses will be established with the Structured Interview for DSM-V. Patients will be included if they have been hearing persecutor voices that did not respond to ≥2 antipsychotic trials.
VRT comprises of 9 weekly sessions: 1 avatar creation session and 8 therapeutic sessions, where the patients are confronted to their reproduced hallucinatory experience and are encouraged to enter in a dialogue with their virtual persecutor. CBT includes 9 weekly sessions consisting of learning modules and task assignments. Subjects will be evaluated at baseline and post-treatment to assess primary (auditory verbal hallucinations as measured with the Psychotic Symptoms Rating Scale) and secondary outcomes. Mixed Anova analyses will be performed to measure and compare the effects of both interventions.
Results: Presently, 37 patients have been recruited and 9 have abandoned the study. Our preliminary results on 28 patients show that there is no significant difference between the treatment conditions for all our measures. As expected, more participants will be required to show the superiority of VRT over CBT. However, when performing separate ANOVA analyses for each condition, VRT shows significant improvements of auditory verbal hallucinations severity after the treatment (on our primary outcome) contrarily to CBT. VRT also produced significant decreases on the beliefs that voices are omnipotent and malevolent, on psychotic symptomatology, depressive symptoms and an increase on quality of life. CBT obtained no significant improvements.
Discussion: While limited by the small number of patients, such findings are nonetheless already supporting the hypothesis of the superiority of VRT on auditory verbal hallucinations. As expected, a moderate effect is found for our adapted short CBT for psychosis, though not significant at this point. The current trial will contribute to the validation of a novel innovative approach answering a fundamental clinical need.

S59. CHILDHOOD TRAUMA IS ASSOCIATED WITH SOCIAL COGNITION AND SCHIZOTYPAL PERSONALITY TRAITS IN PSYCHOTIC AND HEALTHY POPULATIONS

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Background: Childhood trauma is a transdiagnostic risk factor for adult psychiatric disorders, including schizophrenia and bipolar-I disorder. Recent meta-analytic and epidemiological studies suggest a 3-fold increase in risk for psychotic symptoms in adulthood, following childhood trauma exposure. However, associations between trauma exposure and schizotypal personality traits, as well as cognitive and social cognitive abilities, have been less well studied in clinical populations spanning the psychotic-mood spectrum.
Methods: Participants were 79 schizophrenia cases, 84 bipolar disorder cases, and 75 healthy control participants who completed the Childhood Trauma Questionnaire (CTQ), the Schizotypal Personality Questionnaire (SPQ), and a standard battery of cognitive tests (to measure executive functions, working memory, attention, immediate and delayed memory), as well as social cognitive tests of facial emotion processing (the Ekman 60 faces task) and Theory-of-Mind (The Awareness of Social Inference Test; TASIT). The CTQ measures childhood trauma exposure on 5 domains (physical abuse, emotional abuse, sexual abuse, physical neglect, emotional neglect); clinically significant levels of childhood trauma exposure on at least one domain (according to specified thresholds for each domain) were evident in 54 schizophrenia cases, 55 bipolar disorder cases, and 26 healthy individuals. Trauma-exposed and non-exposed groups were compared on schizotypal personality features (referred to as 'schizotypy'), cognitive and social cognitive abilities.
Results: In both the clinical groups and healthy controls, trauma-exposed participants reported higher levels of schizotypy, especially suspiciousness, relative to non-exposed individuals; this was revealed in the context of higher overall schizotypy levels in both schizophrenia and bipolar disorder, relative to healthy controls. Similarly, while the schizophrenia group showed lower social cognitive and cognitive performances relative to both the bipolar disorder and healthy control groups, trauma-exposed individuals showed deficits in social cognitive, but not general cognitive abilities, regardless of case versus control status.
Discussion: These findings suggest that childhood trauma exposure has long-term effects on schizotypy, especially suspiciousness, and complex social cognitive abilities in both healthy and psychotic populations. However, there was no interaction of clinical group with trauma exposure in relation to schizotypal personality dimensions, and the influence of early life trauma on cognitive functions was not distinguishable from the effects of psychotic illness in adulthood. It is possible that traumagenic processes contribute to paranoid ideation and social cognitive disturbances that contribute to psychosis-proneness in the general population, consistent with historical models of schizotypy as latent liability for schizophrenia and related psychotic disorders.

S60. SPANISH ADAPTATION AND VALIDATION OF THE SFRT-2 IN PATIENTS WITH SCHIZOPHRENIA AND HEALTHY CONTROLS

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Background: Social cognition (SC) impairment is common among patients with schizophrenia. This multidimensional construct comprises four domains: a) theory of mind (ToM); b) social perception (SP); c) attributional style (AS); and, d) emotion perception (EP). Especially within SC subdomains, SP, along with neurocognition, seems to be highly related to functional outcome in this population. However, nowadays and to our knowledge, only one measure of SP is available in Spanish and none of the existing SP measures have been adapted to native Spanish-speaking population. The scarce number of SP tests available, highlights the need of reliable instruments in Spanish. Therefore, the aim of the present study was to adapt and validate the SP assessment tool "Situational Feature Recognition Test 2" (SFRT-2) into native Spanish-speaking patients with schizophrenia and healthy controls (HC).