Discussion: The findings suggest that the pattern, magnitude, and distribution of severity of impairment in CHR were similar to that observed in FES. However, early in the illness, there may be relative sparing of reasoning and problem solving and social cognition.

S73. RELATIONSHIP OF COGNITIVE ABILITY AND PERSONALITY TRAITS WITH HOSTILE ATTRIBUTION BIAS IN NONCLINICAL SUBJECTS: THEORY OF MIND AS A MEDIATOR

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Background: Hostile attribution bias has been reported to be common from nonclinical population to serious mental illness such as schizophrenia and is known to be closely related to social cognition. The aims of this study was to investigate whether theory of mind (ToM) skills mediate the relationship between cognitive ability and personality traits and attribution bias by using the Korean version of Reading the Minds in the eyes test (K-RMET).
Methods: One hundred ninety-six (101 females) nonclinical youths were recruited. To assess general cognitive ability and ToM skills, participants were asked to complete the Raven's Standard Progressive Matrices (SPM) and the K-RMET. For personality traits, the Eysenck Personality Questionnaire (psychoticism) and Interpersonal Reactivity Index (perspective taking) were administered. To evaluate the hostile attribution bias, the Ambiguous Intentions Hostility Questionnaire was also administered. Path analysis and the bias-corrected percentile bootstrap method were performed to estimate the parameters of mediating effects.
Results: Based on Akaike Information Criterion(AIC) the best model characterized 1) two direct pathways from psychoticism and the K-RMET to hostility attribution bias and 2) four indirect pathways, wherein SPM, perspective taking and psychoticism influence hostile attribution bias through the K-RMET. The K-RMET fully mediated the association between SPM (p=.028), perspective taking (p=.027), psychoticism (p=.041) and hostile attribution bias.
Discussion: The main findings suggested that ToM skill such as the RMET plays an important role in explaining the relationship between cognitive ability and personality traits and hostile attribution bias. The development of remediation strategy of theory of mind skills may be needed to balance the enhanced hostility bias which is underlying the paranoia.

S74. AEROBIC EXERCISE AND COGNITIVE REMEDIATION IN MULTIEPISODE SCHIZOPHRENIA AND SCHIZOAFFECTIVE DISORDER: PRELIMINARY RESULTS: FROM A RANDOMIZED CLINICAL TRIAL

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Background: Cognitive remediation (CR) is an evidence-based behavioral intervention for cognitive impairment in schizophrenia. Although the effectiveness of CR is well stablished, its effects are modest, especially in terms of functional outcome. There is an emerging literature suggesting that adding aerobic exercise to CR may exert synergistic effects. Despite these promising reports, the extent to which aerobic exercise in combination with CRT can improve cognitive and daily functioning in multiepisode schizophrenia and schizoaffective disorder remains unclear.
Methods: This is a single-blinded, randomized clinical trial (NCT02864576) with two different groups: 1) patients with multiepisode schizophrenia or schizoaffective disorder receiving 3-month Aerobic exercise plus CR treatment (three weekly sessions, 40 min of Aerobic exercise and 90 min of CR), and 2) patients with multiepisode schizophrenia or schizoaffective disorder receiving Healthy lifestyle promotion plus CR treatment (three weekly sessions, 40 min of Healthy lifestyle promotion and 90 min of CR). Primary outcome measures were the MATRICS Consensus Cognitive Battery (MCCB) and the Global Assessment of Functioning (GAF), which were assessed (among others) at baseline and immediately after treatment. For the present work, the sample included in the analysis were 34 patients for whom cognitive data were available. Treatment effects on neurocognition and functional outcome were analyzed by applying the multivariate general linear model (GLM) repeated measures.
Results: After treatment, both groups exhibited a significant improvement in MCCB visual learning memory (F=14.298, p= 0.001), working memory (F=6.626, p= 0.015) and speed of processing (F=16.344, p= 0.001) domains. However, no significant benefits were evidenced for problem solving (F=2.143, p= 0.153), verbal learning memory (F= 0.321, p= 0.575) and attention/vigilance (F=0.740, p= 0.397) domains. Functional outcome, as measured by the GAF, was more improved in the Aerobic exercise plus CR group than in the Healthy lifestyle promotion plus CR group (F=4.248, p= 0.047).
Discussion: Our preliminary findings indicate that combining aerobic exercise with cognitive remediation may promote a large impact on functional outcome in patients with multiepisode schizophrenia or schizoaffective disorder.

S75. PERFORMANCE IN WORKING MEMORY AND EXECUTIVE FUNCTIONS AS IT RELATES TO THEORY OF MIND ABILITIES IN A NONCLINICAL SAMPLE OF INDIVIDUALS WITH SCHIZOTYPAL TRAITS

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Background: In recent decades, research in the treatment of schizophrenia has shifted to early detection and intervention. Unfortunately, the development of psychosis is still poorly understood, making such an endeavour more challenging. Cognitive models of psychosis suggest that neurocognitive deficits place an individual at greater risk of developing metacognitive deficits. Such deficits in metacognition have been shown to contribute to the development of positive symptomatology. A large body of literature supports that patients with schizophrenia exhibit impairments across nearly all domains of neurocognition, as well as metacognition. Theory of mind (ToM) is one of the most widely studied components of metacognition, which includes both cognitive (i.e., understanding what another person is thinking) and affective (i.e., understanding what another person is feeling) processes. Research indicates patients with schizophrenia demonstrate deficits in cognitive and affective ToM, and these deficits are associated with delusional symptomatology. If ToM is involved in the development of positive symptoms, it is expected that this deficit would be present prior to the onset of a first episode psychosis. It is unclear from current research findings if this is the case, however. Additionally, research examining the role of neurocognition as it relates to ToM is lacking. While