

the Downtown Eastside of Vancouver, BC, Canada. Data were collected as part of a longitudinal examination consisting of annual, bi-annual, and monthly neurocognitive, psychosocial, and psychiatric assessments. Neurocognitive scores were combined into five cognitive domains (Attentional Control [AC]; Processing Speed [PS]; Fluid Reasoning [Problem Solving and Reversal Learning; Gf]; Encoding and Retrieval [ER]; and Decision Making [DM]) and submitted to a latent profile analysis. The resulting profiles capturing neurocognition were validated on sociodemographic and clinical variables. Finally, the profiles were compared across previously validated, population-distinct factors derived from the Positive and Negative Syndrome Scale (PANSS), as well as on measures of psychosocial functioning.

**Results:** An optimal goodness-of-fit was reached for a three-profile model (BLRT=127.86,  $p=.01$ ). Profile 1 ( $n=207$ , 55.9%) showed stronger neurocognition (all  $p<.05$ ), with a within-profile strength in Gf ( $p<.001$ ). With the exception of ER, Profile 2 ( $n=109$ , 29.5%) exhibited inferior neurocognition across all indicators compared to Profile 1 (all  $p < .05$ ); yet showed a relative, within-profile strength in Gf ( $p < .01$ ). Profile 3 ( $n=54$ , 14.6%) generally displayed comparable impairments to Profile 2. Additionally, their performance on Gf was remarkably low compared to Profiles 1 and 2 ( $p<.001$ ). Psychiatrically, compared to Profile 1, Profile 2 exhibited more positive/disorganized symptoms and general psychopathology, as well as higher total PANSS (all  $p < .05$ ), whereas Profile 3 showed the poorest insight/awareness ( $p<.01$ ). Profiles 2 and 3 had lower levels of adaptive functioning and work productivity compared to Profile 1 (all  $p<.01$ ).

**Conclusions:** Three neurocognitive profiles were detected in a sample of precariously housed adults with multimorbidity: one profile of comparatively higher neurocognitive capacity, with less symptoms of psychosis and better psychosocial functioning; a second profile of comparatively poorer neurocognition and psychosocial functioning, with more symptoms of psychosis; and a third profile with a severe deficit in fluid reasoning and poor insight and awareness. Given their poor insight, the third profile may be comprised of particularly vulnerable persons at greater risk of unmet healthcare needs. Interventions to improve these individuals' understanding of their personal health risks might facilitate their

capacity to access services. Conversely, individuals from Profile 2 may benefit from outreach programs focusing on medication access and adherence to address their symptoms of psychosis. In sum, our findings suggest that the confluence of neurocognition and psychiatric symptoms may implicate unique treatment approaches and outcomes in precariously-housed persons with multimorbid conditions.

**Categories:** Schizophrenia/Psychosis

**Keyword 1:** neurocognition

**Keyword 2:** psychosis

**Keyword 3:** substance abuse

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## 69 Executively-Mediated Language Skills are Related to Performance-Based Social Functioning across the Psychosis-Spectrum

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**Objective:** Social impairment is observed across psychotic-spectrum disorders (PSDs). Prior work demonstrates that neurocognition may account for social impairment in chronic PSDs. Concerning specific neurocognitive facets, there is support for a relationship between language/verbal performance and social outcomes in chronic PSDs. However, few studies have investigated this relationship in at-risk and early intervention samples, despite the clinical importance in these populations. The present study aimed to identify whether language is related to social functioning across the psychosis-spectrum, utilizing a sample comprised of individuals low in schizotypal personality traits, at-risk for psychosis (high in schizotypal traits), and those who recently experienced a first episode of psychosis (FEP). As an exploratory analysis and guided by findings from general studies of neurocognition and functional outcomes in the chronic PSD literature, we also investigated potential mediating mechanisms (i.e., negative traits;

social cognition). We hypothesized that language is related to social functioning, and language is indirectly related to social functioning through negative traits and social cognition.

**Participants and Methods:** We recruited 42 participants low in schizotypal traits and 44 high in schizotypal traits from undergraduate courses, and 15 FEP individuals were recruited from an early psychosis intervention center. On average, participants were 21.55 (4.39) years old and completed 14 (1.57) years of education. A majority were female (62%) and White (82%). Participants completed the Schizotypal Personality Questionnaire – Brief Revised Updated, which was used to categorize the schizotypy groups and sum negative traits; and measures of language/verbal ability (Similarities, Proverbs Test, semantic fluency, Digit Span), social cognition (Hinting Task, Affect Naming), and examiner-rated (Global functioning [GF]: Social) and performance-based social functioning (Social Skills Performance Assessment; SSPA). We also measured verbal processing speed and COVID-19 distress as covariates. Standardized scores were used for neurocognitive variables, and we used raw scores for most other variables. We utilized hierarchical linear regression models to examine whether specific language/verbal skills accounted for unique variance in examiner-rated and performance-based social functioning. For our exploratory analyses, we created averaged z-scores for language, social cognition, and social functioning and then, employed PROCESS Macro Model 4 to examine whether negative traits or social cognition were significant mediators in two separate mediation models.

**Results:** Controlling for verbal processing speed and COVID-19 distress, language accounted for a significant portion of variance in SSPA performance,  $p = .008$ ,  $\Delta R^2 = .12$ . Specifically, better Proverbs Test performance was uniquely associated with better SSPA performance,  $\beta = .33$ ,  $p = .002$ . Controlling for study covariates, language was unrelated to GF: Social ratings,  $p = .31$ ,  $\Delta R^2 = .038$ . In exploratory analyses, language was significantly indirectly related to social functioning through social cognition,  $\beta = .15$ ,  $SE = .04$ , 95% CI [.04, .27], but not through negative traits,  $\beta = .08$ ,  $SE = .06$ , 95% CI [-.001, .17].

**Conclusions:** Our findings suggest that executively-mediated language tasks (e.g., Proverbs Test) and social cognition may be

beneficial treatment targets for social impairment. Limitations include generalizability of the present findings, small FEP sample, and cross-sectional design. Future work should replicate these findings in longitudinal models.

**Categories:** Schizophrenia/Psychosis

**Keyword 1:** language

**Keyword 2:** social processes

**Keyword 3:** psychosis

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## 70 Comparison of MCCB Autocorrelations Between Schizophrenia and Healthy Comparison Populations

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**Objective:** Deficits in cognitive ability are common among patients with schizophrenia. The MATRICS Consensus Cognitive Battery (MCCB) was designed to assess cognitive ability in studies of patients diagnosed with schizophrenia and has demonstrated high test-retest reliability with minimal practice effects, even in multi-site trials. However, given the motivational challenges associated with schizophrenia, it is unknown whether performance on MCCB tasks affects performance at later stages of testing. The goal of this study was to determine whether there are differences between people with and without schizophrenia in how their performance on individual MCCB tasks influences their performance throughout the battery.

**Participants and Methods:** The sample comprised 92 total participants including 49 cognitively healthy comparison participants and 43 outpatients diagnosed with schizophrenia. The mean age of participants was 44.2 years (SD = 12.0, range 21-69) and 61% identified as male. The Trail Making Test, Brief Assessment of Cognition in Schizophrenia, Hopkins Verbal Learning Test – Revised, Letter-Number Span,