

potentially similar group with post-concussion syndrome (PCS) which has been shown to have a strong psychological component.

Participants and Methods: Participants included 44 consecutive outpatients (Mean age = 47.89, SD = 13.05, 84% Female, 75% Caucasian) referred from a Long COVID clinic with cognitive complaints related to COVID, while the comparison group of PCS patients included 50 consecutive referrals (Mean age = 38.82, SD = 16.24, 52% Female, 90% Caucasian) related to cognitive complaints attributed to PCS. A series of t-tests between the 2 groups was conducted on the PAI validity, clinical, interpersonal, and treatment consideration scales. PAI clinical subscales were also compared. To control for multiple comparisons, $p < .01$ was utilized and effect sizes were compared.

Results: The results demonstrated that both Long COVID (SOM $M = 68.66$, $SD = 12.56$; DEP $M = 63.39$, $SD = 12.70$) and PCS groups (SOM $M = 65.28$, $SD = 12.06$; DEP $M = 70.32$, $SD = 16.15$) displayed the highest mean elevations on PAI SOM and DEP scales but no statistically significant differences in mean scale elevations between Long COVID and PCS groups on SOM ($t [92] = 1.33$, $p = .80$) and DEP ($t [92] = -2.11$, $p = .097$). However, results demonstrated statistically significant differences on the paranoia subscale (PAR; $t [92] = -3.27$, $p = .009$), antisocial features subscale (ANT; $t [92] = -2.22$, $p = .01$), stress subscale (STR; $t [90] = -3.51$, $p = .006$) and suicidal ideation subscale (SUI; $t [92] = -2.73$, $p = .000$) of the PAI. Specifically, the mean scores for the PCS group were higher across the paranoia ($M = 57.30$), antisocial features ($M = 52.24$), stress ($M = 58.44$), and suicidal ideation subscales ($M = 57.82$) of the PAI than the Long COVID group. While these patterns of reporting differed between groups, mean scores for both groups were in the normal range.

Conclusions: Results support the similarities in emotional/personality functioning across Long COVID and PCS patients and the importance of evaluating psychological functioning in these samples as a standard part of neuropsychological evaluations. Further, the results suggest that psychological treatment strategies utilized with PCS patients may be helpful for Long COVID patients, but more research is needed.

Categories: Infectious Disease (HIV/COVID/Hepatitis/Viruses)

Keyword 1: concussion/ mild traumatic brain injury

Keyword 2: infectious disease

Keyword 3: personality

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59 Perinatal Risk Factors and Cognitive Outcomes in Children HIV-Exposed, Uninfected

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Objective: Children who are HIV-exposed uninfected (CHEU) are at risk of neurodevelopmental impairments due to perinatal HIV and antiretroviral therapy exposure as well as additional health and psychosocial burdens. There is limited understanding of the impact of perinatal risk factors on long-term outcomes of CHEU. The present study investigated the association between perinatal risk factors and the intellectual and language abilities in CHEU and children who are HIV-unexposed uninfected (CHUU).

Participants and Methods: CHEU and CHUU, 6 to 10 years, of age underwent neurodevelopmental assessments through the Kids Imaging and Neurocognitive Development (KIND) study at the Hospital for Sick Children in

Toronto, Canada between January 2020 and August 2022. CHUU were recruited from the community with similar sociodemographic backgrounds based on residential area in Toronto and parental income levels. Measures of Full-Scale IQ (FSIQ), Verbal Comprehension (VCI), Visual Spatial skills (VSI), Fluid Reasoning (FRI), Working Memory (WMI), and Processing Speed (PSI) were evaluated with the Wechsler Intelligence Scale for Children – Fifth Edition. Core Language, Receptive Language, and Expressive Language skills were assessed with the Clinical Evaluation of Language Fundamentals – Fifth Edition. Perinatal risk factors included birthweight, birth complications (e.g., premature rupture of membranes, jaundice, etc.), maternal smoking and alcohol use during pregnancy, and NICU admission. Analyses of variance and chi-square tests were performed to investigate group differences and multiple regression analyses tested the relation between neurodevelopmental measures and birth factors. Significance was held at $p < 0.05$.

Results: 36 CHEU (21 female, 8.74 ± 1.56 years) and 26 CHUU (12 female, 8.53 ± 1.50 years) children were included. For both groups, mean standardized scores of the cognitive abilities assessed were in the average range. CHEU had significantly lower birth weight than CHUU, but there were no differences between these groups with respect to maternal smoking and alcohol use, birth complications or NICU admission. There were no between group differences identified for the intellectual and language abilities. In the CHEU group, birthweight was significantly associated with lower VCI, WMI, and expressive language. In the CHUU group, prenatal alcohol and smoking exposure was associated with lower VCI scores. Birth complications were associated with lower WMI, PSI, and FSIQ scores.

Conclusions: In this interim analysis, perinatal risk factors impacted neurodevelopmental outcomes of CHEU and CHUU differently. While the groups did not differ in frequency of birth complications and maternal smoking and alcohol use, these factors negatively impacted aspects of intellectual ability in the CHUU group. CHEU with lower birthweight are at greater risk of working memory and language difficulties, supporting the need for early interventions and close neuropsychological follow-up of this population throughout childhood.

Categories: Infectious Disease (HIV/COVID/Hepatitis/Viruses)

Keyword 1: HIV/AIDS

Keyword 2: intellectual functioning

Keyword 3: language

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60 Differential Benefits of Internal Strengths and Socioemotional Support on Neurocognition and Daily Functioning Among People with HIV

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Objective: Positive psychological attributes have been associated with better health outcomes and quality of life among people with HIV (PWH). Recently, we identified two latent factors (internal strengths, socioemotional support) among 7 positive psychological attributes through factor analysis (Ham et al., 2022). Depression was inversely associated with both factors. Our current aim was to investigate associations between these latent factors, neurocognition, and daily functioning among PWH.

Participants and Methods: 106 PWH and 90 HIV- participants were included in cross-sectional analyses ($M_{age} = 51.3$, 77% men, 60% White). Seven positive psychological questionnaires, a neuropsychological battery covering 7 domains, two daily functioning questionnaires (Patient's Assessment of Own Functioning (PAOFI); Independent Activities of Daily Living (IADL)), and a depression symptom questionnaire (Center for Epidemiologic Studies Depression Scale) were administered. Internal