

Discriminability ($z = -0.44$). SRT ($z = -0.70$), CRT Accuracy ($z = -1.37$), TMT-B ($z = -0.79$), HVLT-R Total Recall and Percent Retained (z 's = -0.88), and Delayed Recall and True Positives (z 's = -1.27) were low average.

Conclusions: In this sample of pre-surgical bariatric candidates with average intelligence, baseline evaluations revealed mild deficits in reaction time accuracy, visual motoric set-shifting, and verbal learning/memory. These deficits may be the result of microvascular changes in the brain secondary to physical compromise. Results provide additional insight into potential early-onset executive dysfunction, psychomotor slowing, and verbal learning/memory difficulties. In addition to these relative areas of neuropsychological weakness, candidates demonstrated relative strengths in attention, working memory, and visuospatial functioning. These insights provide pre-surgical evaluators with additional information to tailor recommendations and treatment approaches that foster surgical success. With a remote, concise, easy-to-administer battery of tests, routine neuropsychological assessment for bariatric surgery candidates is both a feasible and a useful tool for identifying areas of cognitive strengths and weaknesses. Documenting a patients' cognitive baseline can assist with monitoring long-term vascular risk-factors and potential cognitive impairment.

Categories: Teleneuropsychology/ Technology

Keyword 1: vascular cognitive impairment

Keyword 2: teleneuropsychology

Keyword 3: neuropsychological assessment

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93 Acceptability and Usability of Tablet-Based Neuropsychological Tests among South African and Ugandan Adolescents With and Without HIV

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Objective: Neuropsychological (NP) tests are increasingly computerized, which automates testing, scoring, and administration. These innovations are well-suited for use in resource-limited settings, such as low- to middle- income countries (LMICs), which often lack specialized testing resources (e.g., trained staff, forms, norms, equipment). Despite this, there is a dearth of research on their acceptability and usability which could affect performance, particularly in LMICs with varying levels of access to computer technology. NeuroScreen is a tablet-based battery of tests assessing learning, memory, working memory, processing speed, executive functions, and motor speed. This study evaluated the acceptability and usability of NeuroScreen among two groups of LMIC adolescents with and without HIV from Cape Town, South Africa and Kampala, Uganda.

Participants and Methods: Adolescents in Cape Town ($n=131$) and Kampala ($n=80$) completed NeuroScreen and questions about their use and ownership of, as well as comfort with computer technology and their experiences completing NeuroScreen. Participants rated their technology use –comfort with and ease-of-use of computers, tablets, smartphones, and NeuroScreen on a Likert-type scale: (1) Very Easy/Very Comfortable to (6) Very Difficult/Very Uncomfortable. For analyses, responses of Somewhat Easy/Comfortable to Very Easy/Comfortable were collapsed to codify comfort and ease. Descriptive statistics assessed technology use and experiences of using the NeuroScreen tool. A qualitative question asked how participants would feel receiving NeuroScreen routinely in the future; responses were coded as positive, negative, or

neutral (e.g., "I would enjoy it"). Chi-squares assessed for group differences.

Results: South African adolescents were 15.42 years on average, 50.3% male, and 49% were HIV-positive. Ugandan adolescents were 15.64 years on average, 50.6% male, and 54% HIV-positive. South African participants were more likely than Ugandan participants to have ever used a computer (71% vs. 49%; $p < .005$), or tablet (58% vs. 40%; $p < .05$), whereas smartphone use was similar (94% vs 87%). South African participants reported higher rates of comfort using a computer (86% vs. 46%; $p < .001$) and smartphone (96% vs. 88%; $p < .05$) compared to Ugandan participants. Ugandan adolescents rated using NeuroScreen as easier than South African adolescents (96% vs. 87%; $p < .05$). Regarding within-sample differences by HIV status, Ugandan participants with HIV were less likely to have used a computer than participants without HIV (70% vs. 57%; $p < .05$, respectively). The Finger Tapping test was rated as the easiest by both South African (73%) and Ugandan (64%) participants. Trail Making was rated as the most difficult test among Ugandan participants (37%); 75% of South African participants reported no tasks as difficult followed by Finger Tapping as most difficult (8%). When asked about completing NeuroScreen at routine doctor's visits, most South Africans (85%) and Ugandans (72%) responded positively.

Conclusions: This study found that even with low prior tablet use and varying levels of comfort in using technology, South African and Ugandan adolescents rated NeuroScreen with high acceptability and usability. These data suggest that scaling up NeuroScreen in LMICs, where technology use might be limited, may be appropriate for adolescent populations. Further research should examine prior experience and comfort with tablets as predictors NeuroScreen test performance.

Categories: Teleneuropsychology/ Technology

Keyword 1: cognitive screening

Keyword 2: adolescence

Keyword 3: technology

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94 Equivalence of In-person and Virtual Administration of the Delis-Kaplan Executive Function System's Color-Word Interference Subtest in Youth Recovered from Concussion and Controls

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Objective: Virtual testing can reduce cost and burdens, as well as increase access to clinical care. Few studies have examined the equivalency of virtual and in-person administration of standardized measures of executive functioning in children. During the COVID-19 pandemic, we utilized virtual administration of the Delis-Kaplan Executive Function System, Color-Word Interference Test (DKEFS-CW) in our ongoing longitudinal research study exploring outcomes in children clinically recovered from concussion compared to never-concussed peers. In the current study, we explore the equivalence of scores obtained via in-person and virtual administration of the DKEFS-CW in youth recovered from concussion and never-concussed controls.

Participants and Methods: Participants included 112 youth ages 10-18 ($M_{age} = 14.05$ years, $SD = 2.296$; 53.5 % Male) who completed the DKEFS-CW in-person ($n = 63$) or virtually ($n = 49$) as part of their involvement in the parent study. Of these, 38 were recovered from concussion ($M_{days\ since\ injury} = 91.21$, $SD = 88.91$), and 74 were never-injured controls. Virtual administration was done via Zoom by presenting digital scans of the DKEFS stimulus book using the screen-sharing function. Participants set up and joined the Zoom call from a secondary device (cell phone) that was set in a stable position to provide a view of their screen, mouse and keyboard setup.

Group (in-person vs remote) differences in DKEFS-CW scores were examined using independent-samples t-tests for all subtest conditions (color naming, word reading, inhibition, and inhibition/switching). T-tests/chi-square tests were used to examine between-group differences in demographic variables (i.e., age, sex, maternal education, IQ, concussion history). Demographic variables that were significantly different by group were then included as covariates in ANCOVA models