11 Adaptation of the Children's Cognitive Screening Instrument (CCoSI) for use with Video Teleconferencing

Laila Amawi[1,2], Alexander Marsh[1,2], Molly Bishop[2], Ingram Wright[1,2]
[1]School of Psychological Science, University of Bristol, Bristol, United Kingdom. [2]Bristol Royal Hospital for Children- University Hospitals Bristol & Weston NHS Trust, Bristol, United Kingdom

Objective: The CCoSI is a brief screening instrument that is designed to detect cognitive impairment in children aged 5y0m-16y11m shortly after acquired brain injury (ABI) by evaluating language, fluency, attention, memory, and visuospatial domains. Each domain translates to a CCoSI index and is composed of a series of brief subtests. This study assessed the feasibility of modifying the Children's Cognitive Screening Instrument (CCoSI) into an electronic version (eCCoSI) and administering it using video teleconferencing (VTC).
Participants and Methods: Tasks and stimuli were modified for online administration. Typically developing children aged 5y0m-16y11m were tested using the modified eCCoSI via VTC. The eCCoSI was administered using Skype for Business and Microsoft Teams.
Participants attended one 25-minute video assessment session over either platform. Results of VTC-assessed healthy controls were compared to age-matched peers ([25] Female: [19] Male; mean age = [11.54], SD = [3.01], age range =5.00-15.75) who had been previously tested face-to-face (FTF) with the original CCoSI at the Bristol Royal Hospital for Children (BRHC).
Age-related trends in performance were also examined across FTF and VTC for comparability.
Results: 44 typically developing children were virtually assessed ([25] Female: [19] Male; mean age = [11.79], SD = [3.03], age range =5.05-16.92). Results from a 2x2 ANOVA with age-group and modality as independent factors showed no significant difference in performance between participants tested FTF and VTC over the CCoSI Attention, Fluency, Language, Memory, and Visuospatial indices. No significant result of interaction between age and modality was found; however, there was a significant result of age-group.
Conclusions: VTC assessment is a feasible alternative to FTF administration of the CCoSI within healthy controls. Results from the present study are promising for the use of the eCCoSI in clinical practice. Further research should attempt to replicate these results within clinical populations.

Categories:
Assessment/Psychometrics/Methods (Child)
Keyword 1: brain injury
Keyword 2: teleneuropsychology
Keyword 3: pediatric neuropsychology
Correspondence: Professor Ingram Wright, University of Bristol and Bristol Royal Hospital for Children- University Hospitals Bristol and Weston, ingram.wright@uhbw.nhs.uk

12 Measuring effort on a continuum provides improved insight into concussion baseline cognitive assessments

Heather C. Bouchard[1,2], Kate L. Higgins[1,3], Julia E. Maietta[4], Julia M. Laing[1,2], Douglas H. Schultz[1,2]
[1]Center for Brain, Biology and Behavior, University of Nebraska-Lincoln, Lincoln, NE, USA. [2]Department of Psychology, University of Nebraska-Lincoln, Lincoln, NE, USA. [3]Department of Athletics, University of Nebraska-Lincoln, Lincoln, NE, USA. [4]Department of Psychiatry & Behavioral Sciences, University of Oklahoma Health Sciences Center, Oklahoma City, OK, USA

Objective: Baseline assessment of cognitive performance is common practice under many concussion management protocols and is required for collegiate athletes by the NCAA. The purpose of baseline cognitive assessment is to understand an athlete's individual uninjured cognitive performance, as opposed to using population normative data. This baseline can then serve as a reference point for recovery after concussion and can inform return-to-play decisions. However, multiple factors, including lack of effort, can contribute to misrepresentation of baseline results which raises concern for reliability during return-to-play

https://doi.org/10.1017/S1355617723010937 Published online by Cambridge University Press