

Outcome Measure	Neuropsychological Assessment Battery (NAB) Screening Module
Sensitivity to Change	Yes
Population	Adult
Domain	Neuropsychological Impairment
Type of Measure	Objective test
ICF-Code/s	b1
Description	<p>The Neuropsychological Assessment Battery (NAB) is a comprehensive, integrated, modular battery of 33 new neuropsychological tests developed to assess a wide array of neuropsychological skills and functions in adults who have known or suspected central nervous system disorders.</p> <p>The individual tests are grouped into five main modules:</p> <ol style="list-style-type: none"> 1. Attention 2. Language 3. Memory 4. Spatial 5. Executive Functions. <p>The <u>Screening Module</u> provides an abbreviated version of each main module. The modules include a Daily Living Test that relates to real-world, everyday living. Each module has two equivalent/parallel forms (Form I and Form II) that were created and normed simultaneously with identical task/content specifications and development methodology. The NAB is appropriate for outpatient evaluation, forensic examination, large-scale research studies, and many other clinical and research applications.</p> <p>Provides both quantitative summary scores and standardised measures of qualitative features.</p>
Properties	<p><u>Internal consistency</u>: Average Screening Module for Form 1 and 2 range from .24 (Screening Visual Discrimination) to .79 (Screening Digits Backward). Those subtests with internal consistencies below .60 include: Screening Auditory Comprehension, Screening Naming, Screening Design Construction, and Screening Mazes. Screening Digits Forward (.78), Screening Story Learning Immediate Recall (.65) and Delayed Recall (.69), may be considered acceptable.</p> <p><u>Test-retest reliability</u>: With an average interval of 193 days, test-retest reliability ranged between .52 and .74 at the Domain level: Attention (.71), Language (.70), Memory (.53), Spatial (.55), Executive Functions (.62), and Total Screening (.75)</p> <p>Coefficients were between .11 and .71 at the subtest level. Subtests with coefficients below .60 include: Screening Numbers and Letters Part A Errors & Part B Efficiency, Screening Auditory Comprehension, Screening Naming, Screening Shape Learning Immediate Recognition & Delayed Recognition, Screening Story Learning Immediate and Delayed Recall,</p>

	<p>Screening Visual Discrimination. Those subtests with acceptable test-retest reliability included: Screening Digits Forward (.65) and Digits Backward (.67), Screening Numbers & Letters Part A Speed (.69) and Part A Efficiency (.71), Screening Mazes (.63), and Screening Word Generation (.63).</p> <p><u>Alternative form reliability:</u> At the subtest level, the “generalizability” coefficients ranged from .33 to .91. Subtests below .60 included: Screening Numbers and Letters Part A Errors, Screening Auditory Comprehension, Screening Naming, Screening Shape Learning Immediate Recognition & Delayed Recognition, Screening Visual Discrimination. Screening Digits Forward (.87) and Backward (.88), Screening Numbers and Letters Part A Speed (.88) & Efficiency (.90) and Part B Efficiency (.75), Screening Story Learning Immediate (.74) and Delayed (.82) recall, Screening Design Construction (.73), Screening Mazes (.91), Screening Word Generation, may all be considered acceptable (.76).</p> <p>Generalisability coefficients for the broader Screening Domains were .55 (language) to .91 (attention), .79 (Screening Memory), .71 (Spatial), .86 (Executive Functions), and .80 (the total Screening Index).</p> <p><u>Inter-rater reliability:</u> This was not calculated for the Screening Module, but average ICC/% agreement for a range of subtests sampled from the full module were 83 to 100%.</p> <p><u>Construct validity:</u> The internal structure of the Screening Module was confirmed in CFA analyses with acceptable fit. The ability of the Screening Module to screen for impairments (as measured by the full module) was calculated using sensitivity and specificity statistics. The sensitivity (and positive predictive power) of all Screening domains were excellent (.95), however specificity (and negative predictive power) was generally poor (i.e., the ability to rule out cognitive impairment given the person does not have any cognitive impairment).</p> <p>Correlations between the Total Screening scores and the MMSE was .55 and the RBANS was .65.</p> <p><u>Concurrent validity:</u> Using a wide variety of TBI participants, the Screening Module score were used to classify range of performance (i.e., cognitive impairment). The Total Screening scores classified 22.5% of TBI participants at an impaired level (mild to severe).</p>
<p>Advantages</p>	<ul style="list-style-type: none"> • Is a brief cognitive measure that assesses multiple domains of cognition • Reasonable psychometric properties for most Domains and for total Screening scores.
<p>Disadvantages</p>	<ul style="list-style-type: none"> • Poor psychometric properties at the subtest level (brevity compromises this), although these are better at the domain and total test level.

	<ul style="list-style-type: none">• Is a very expensive test (\$4,715 for the complete test).
Additional Information	
Reviewers	Skye McDonald

References

White, T. & Stern, R.A. (2003). Neuropsychological Assessment Battery: Psychometric and Technical Manual. Psychological Assessment Resources, Inc., Florida.