

Table 1

Results of survey in Appendix A. Standardized tests recommended by speech-language pathologists (n = 30) and rationale for their use. Numbers in parentheses refer to the individual respondent. Respondent characteristics are listed below. NC = no comment. (?) = unable to identify respondent.

Assessment Tool	Rationale for use	Strengths and limitations
American Speech Language Hearing Association Functional Assessment of Communication Skills for Adults	(26) used to obtain self-reports of abilities in variety of communication situations, tasks	(26) + having both client & family or friend fill it out, can compare clients perceptions of skills with other's perceptions = awareness of abilities/disabilities
Aphasia Diagnostic Profiles	(6) assess language skills	(6) + easy to administer (6) + easy scoring (6) + includes assessment of praxis (6) - limited assessment of word-finding, reading, writing
Apraxia Battery for Adults	(22) looks at speech and non-speech oral motor control (23) NC	
Assessment of Intelligibility of Dysarthric Speech	(23) NC	
Assessment of Language Related Functional Activities	(10) functional approach to assessing reading comprehension, money, problem solving, detail following	(10) + fast (10) + each sub-test can stand alone (10) + serves a range of severity
Attention Process Test	(22) screen for vigilance for vigilance, reaction time, information processing	(22) + lacks ambiguity- a 2 is always a 2 (22) - a bit abstract
Behavioural Assessment of the Dysexecutive Syndrome	(?) Deficit specific (23) no specific comment	
Brief Test of Head Injury	(4) good for patients with short attention span and who are 'lower' level – i.e., RLA levels IV-VI (4) neurocognitive screening for early assessment of cognitive and language skills (19) cognitive-linguistic tool, for acute and rehabilitation patients	(4) + screens areas (4) + fast (4) - if someone does well in an area, doesn't mean that they are "functional" (9) + brief (9) + has language and gestural scoring and can be used to track recovery
Boston Diagnostic Aphasia Examination	(1) for language evaluation, as appropriate (6) especially with left brain involvement (11) aphasia assessment	(3) + covers a full range of language disorders in all modalities (6) + time-tested (6) - lengthy (6) - scoring is time-consuming

Assessment Tool	Rationale for use	Strengths and limitations
	<p>(21) use sub-tests as a ten minute screening for reading, writing and yes/no questions.</p> <p>(23) NC</p>	<p>(11) + good overall assessment of comprehension, expression, reading and writing</p> <p>(15) + quick screening for American English patients</p> <p>(15) + can be used to observe how impaired cognitive function adversely affects language</p> <p>(15) - not culturally sensitive</p> <p>-some items are unfamiliar to current 18-30 year olds</p> <p>(21) + the long version is quick and the short version is even quicker</p> <p>+ not that costly</p> <p>(21) - no norms for normal folks</p> <p>- brief screening tests</p>
Boston Diagnostic Aphasia Examination – Revised Edition		<p>(4) + good test</p> <p>(4) - pictures for lexical info are atrocious</p>
Boston Naming Test	<p>(?) for language evaluation, as appropriate</p> <p>(?) NC</p>	<p>(4) + can pick up subtle difficulties such as visual perception errors, perseverations, formulation problems</p> <p>(4) - as it's visual, doesn't tap into word retrieval difficulties when visual referent not present</p>
Burns Inventory Complex Neuropathologies	<p>(1) useful when time constraints on initial evaluation, usually followed by deficit specific testing</p> <p>(6) assesses attention, perception and working memory underlying language/communication function</p> <p>(11) short but thorough test for short attention spans</p> <p>(19) a quick way to assess those with moderate problems or to pinpoint a few more severe problems with those with overall milder impairments</p>	<p>(6) + quick</p> <p>(6) + 3 inventories targeting primary deficit areas</p> <p>(6) + results tie to therapy suggestions</p> <p>-criterion referenced scores only</p> <p>-limited number of items</p> <p>(11) - does not give high level cognitive information</p> <p>+quick and covers wide range of areas</p> <p>(18) + speed</p> <p>+ assesses auditory and visual memory</p> <p>(18) - does not assess auditory memory beyond immediate repetition</p> <p>(18) - does not assess language skills (although you can also administer the left hemisphere inventory but that was designed for aphasia and is too low level for most of my</p>

Assessment Tool	Rationale for use	Strengths and limitations
		high outpatients.)
Children's Orientation and Amnesia Test	(?) orientation screening for children and adults (16) post-traumatic amnesia indicator, orientation, baseline	(9) + marker for period of post-traumatic amnesia
Clinical Evaluation of Language Fundamentals	(4) for kids	
Cognitive Linguistic Quick Test	(1) useful when time constraints on initial evaluation, usually followed by deficit specific testing (6) assess cognitive skills supporting communication (23) NC	(1) + easy and quick to administer
Communicative Abilities in Daily Living	(6) assess functional communication skills	(6) + good complement to diagnostic batteries (6) + assess function in "real" situations (6) + allows credit for nonverbal communication
Controlled Oral Word Association Test	(22) organization of lexicon, word retrieval (25) verbal fluency	(22) - sometimes the time limits provoke real anxiety (25) + sensitive for higher level patients and provides some information on mental flexibility (25) - only have norms for ages 25 and older (25) - not useful for English as a second language or illiterate patients
Dex Questionnaire	(1) diagnosis specific	
Discourse Comprehension Test	(23) NC (26) tests comprehension of narrative discourse, by explicitness and salience, and by reading or listening	(26) + y/n questions are helpful in identifying comprehension problems for main ideas vs. Details and stated vs. implied information. (26) – y/n questions can bias results
Expressive One Word Picture Vocabulary Test		
Florida Affect Battery	(23) NC	
Frenchay Dysarthria Assessment	(23) NC	
Fullerton		
Functional Independence Measures	(6) Requirement of facility; Prospective Payment System tied to use	(6) + relatively quick (6) - poorly sensitive to communication status changes (6) - scoring guidelines do not reflect all aspects of communication/cognition with which speech language pathologists are concerned

Assessment Tool	Rationale for use	Strengths and limitations
Functional Linguistic Communication Inventory	(23) NC	
Galveston Orientation and Amnesia Test	(?) orientation screening for children and adults (19) post-traumatic amnesia indicator, orientation (26) tests for orientation; used to test for post-traumatic amnesia	(9) + marker for period of post-traumatic amnesia (26) + adequate for use with inpatients (acute rehabilitation) (26) - clients who have poor day-to-day recall can still do very well on this (i.e., not very sensitive)
Goldman-Fristoe-Woodcock Auditory Memory Battery (Recognition Memory Subtest)	(5) use as a cognitive measure of verbal working memory	(5) + short (5) + easy to administer (5) + good norms for wide age range
Jacob's Cognitive Screen	(14) good for screening of cognitive communication	(14) + quick
Kagan's Rating Scales	(2) provides detail of the way communication partners interact with the person with TBI and of the communicative opportunities available to the person with TBI	(2) + provides an in depth view of communication in real life contexts (2) + excellent way to derive treatment goals (2) + has face validity for the client and their family
La Trobe Communication Questionnaire	(2) provides overview of a number of domains which are critical to take into account when planning speech pathology interventions (e.g. work, family, relationships)	(2) + excellent tool to measure insight (2) + provides some directions for treatment (2) + based on Gricean maxims (2) + specifically designed for people with TBI
Measure of Cognitive Linguistic Abilities	(18) addresses language skills in more depth than the SCATBI (20) assesses more higher level language skills than most other language batteries	(18) + addresses higher-level language skills such as reading comprehension of longer passages and complex inferential material (18) - normative sample size too small -dividing the group by age and years of education is a great idea but some of the groups are too small and there are a few subtests with SD's of 0 in some test groups - doesn't that mean a group of 1? (18) - too long to use the whole test (18) - while the rating scales for pragmatics, spoken language and written narratives are useful, scoring those with norms makes no sense (18) - annoying typos and graphic layout errors (20) + assesses higher level language levels

Assessment Tool	Rationale for use	Strengths and limitations
		(20) + assesses language without looking at nonlinguistic cognitive areas (20) - normative sample is too small
Mini Inventory of Right Brain Injury	(23) NC	
Mini Mental Status Examination	(23) NC	
Mt. Wilga High Level Language Test	(2) similar to SCATBI re: overview; some items based on Luria; seems to capture many of the typical communication breakdowns following TBI	(2) + can usually administer in one sitting (2) - not standardized
Nelson-Denny Reading test	(26) used to test reading comprehension for lengthy text in question format; includes additional timed section; tests reading vocabulary	(26) + useful for identifying reading/studying abilities under constrained (timed) conditions
Neurobehavioral Cognitive Status Examination (now Cognistat)	(11) quick overview of all possible deficit areas	(11) + related to language areas (11) + gives quick easy quantification
Peabody Picture Vocabulary Test		
Pediatric Test of Brain Injury – Research version	(19) neurocognitive screening tool, baseline and tracks recovery	
Porch Index of Communicative Abilities	(7) research purposes	
Preschool Language Scale – Third Edition		
Pro-Ex	(5) functional assessment which is related to communication skills	(5) + good information (5) + correlates highly with discourse performance
Prospective Memory Screening test	(6) assesses working memory	(6) + measures skills not generally assessed by other test instruments (6) - challenge to administer (stimulates clinician's working memory!)
Rancho Los Amigos Levels of Cognitive Function		
Reading Comprehension Battery for Aphasia	(4) reading comprehension, functional reading, written expression (22) the functional reading subtest tells me how to structure handouts, home exercises,	(3) + able to test both oral and comprehension of reading skills at all levels (4) + good for inferential language (4) - would like to see a supplemental subtest

Assessment Tool	Rationale for use	Strengths and limitations
	etc.	for patients who have strong reading comprehension levels pre-morbidly (6) +easy to administer
Reading Comprehension Battery for Aphasia – Second Edition	(23) NC	(4) + good for assessing basic overall reading at a 6 th grade level.
Receptive One Word Picture Vocabulary Test		
Rehabilitation Institute of Chicago Evaluation of Communication Problems in Right Hemisphere Dysfunction – Revised	(23) NC	
Repeatable Battery for Assessment of Neuropsychological Status	(27) to get an overview of deficits and then use a subjective battery to probe further	
Rey Auditory Verbal Learning Test	(15) for verbal learning/memory and to observe use of or lack thereof of strategies	
Rivermead Behavioural Memory Test	(?) I especially like the story retell portions of the test because it identifies language formulation issues when clients score well on other tests (23) NC (26) assess “functional” memory & prospective memory	(?) + more functional than other tests (21) + not too expensive + can give in 12 minutes (21) - not a good indicator of progress (21) - I have done research and pre and post treatment scores do not correlate with treatment progress. (26) + quantifies prospective memory problems; - many of our mildly memory impaired folks do very well but still self-report memory loss
Ross Information Processing Assessment	(3) examines a variety of cognitive skills in various modalities	(3) + fairly quick (11) + gives good memory info, processing and verbal problem solving (11) - is redundant in questions - does not give high level executive functioning testing (14) - don't have to know much to get a fair score + comparison to same age peers (19) + standard scores + helps with placement and schooling (19) + age equivalents

Assessment Tool	Rationale for use	Strengths and limitations
		(19) + specific and structured to determine therapy strategies
Ross Information Processing Assessment – Geriatric Edition	(23) no specific comment (29) primary tool that we use	(29) + reliable and valid with older adults, easy to administer
Ross Information Processing Assessment – Second Edition	(7) to profile various information processing skills (29) for the client under 60 years old, usually outpatients	(7) + fairly quick test (7) + gives rough profile of patient's processing skills + scaled scores strengths and weaknesses within subjects and percentiles among other TBI patients (29) + reliable and valid with older adults, easy to administer
Scales of Cognitive Ability for Traumatic Brain Injury	(2) provides an overview of cognitive-communication disorders following TBI (3) standardized protocol for higher level neurological involvement. Especially work-related therapy (4) great overall tool; good for higher level patients: RLA level: VI+ (5) good for higher-level cognitive-linguistic assess (6) assess cognitive skills supporting communication function; assist in decisions regarding treatment plan (5) to assess communicative-cognitive and verbal/working memory (16) for more specific or in-depth testing (18) covers a broad range of cognitive and Linguistic skills (22) use the recall and reasoning portions: integration and inferencing abilities, some visual and auditory memory info. (23) NC (24) assesses a range of cognitive communication abilities. (26) use text recall and a few other subtests	(1) + screening of broad range (1) + normed on ABI (2) + gives a severity rating (2) - limited standardization data (2) - only useful for diagnosis - not very useful for therapy planning (4) + nice attempt for looking at higher level language such as multiple meanings, deductive reasoning, etc. (4) - organization is a little weak (5) + good overall (5) - too high level for some patients (6) + comprehensive (6) - lengthy (6) - scoring not user-friendly (14) + good for the rehab setting to assist with planning higher level goals (15) + covers many areas of cognitive-communicative function at varying levels of complexity (18) + covers a broad range of cognitive and linguistic skills (18) - standard scores compare to patients with TBI not to normals (18) - does not assess any area in depth (18) - does not test memory beyond one-second delay and less than one minute of distracting questions

Assessment Tool	Rationale for use	Strengths and limitations
		<p>(18) - some items out of date for younger clients</p> <p>(19) - hard to find time to do full assessments (use screenings and parts of tests)</p> <p>(24) + created for persons with TBI. Material is appropriate for 18-year-olds, and up. Some functional materials such as problem solving scenarios where the person with TBI needs to consider their deficits while solving functional problems, as well as recalling recipes as well as stories. Also looks into the causes of some of these problems by looking at attention.</p> <p>(24) – norms! This assessment is normed on persons with TBI, so you find out if the person you are evaluating is a “normal” or typical TBI patient. Missing a number of assessment areas, but this can be made up with the use of other tests to augment (i.e., reading comprehension, more in depth writing, more difficult or higher level visual attention skills, etc).</p> <p>(26) - as an entire battery of tests, it is too long</p> <p>(26) + normative data on TBI (don't use it much, prefer Woodcock Johnson Psychoeducational Battery cognitive subtests).</p>
Sklar Aphasia Test	(23) NC	
Sydney Psychosocial Reintegration	(2) provides an overview of a number of domains which are critical to take into account when planning speech pathology interventions	<p>(2) + quick to administer</p> <p>(2) + established validity and reliability</p> <p>(2) + has norms for person with TBI and their significant others</p>
Test of Auditory Processing – Upper Level		(18) - only normed up to 17 years 11 months
Test of Everyday Attention	(?) deficit specific (23) no specific comment	
Test of Language Competence	(4) for kids	(4) + great test for kids
Test of Problem Solving	(4) for kids	
Test of Nonverbal Intelligence	(23) NC	
Test of Nonverbal Intelligence – Third Edition	(1) as appropriate to situation	

Assessment Tool	Rationale for use	Strengths and limitations
Wechsler Memory Scale Third Edition	(23) NC	
Western Aphasia Battery	(23) NC	
Woodcock Johnson Test of Psycholinguistic Abilities Revised		(1) + good high level tasks for specific drill down areas (1) + strong norms including pediatrics /grade level equivalents (1) - not normed for ABI or other disease categories
Woodcock Johnson Tests of Cognitive Abilities Third Edition	(21) high level testing matches my population	(?) + comprehensive battery (21) + good norms (21) + can pick and choose the subtests - hard to get full picture of client in one hour with this tool (21) - expensive test
The Word Test	(4) for kids (23) no specific comment	

Work settings, patient diagnoses, and patient ages reported by survey respondents.

1.

Setting: rehab hospital, community private practice, nursing home

Diagnoses: ABI, anoxia, bleed, tumor, CVA

Ages: 15-60, occasionally 4 - 15

2.

Setting: Community private practice

Diagnosis: TBI

Ages: 15-60

3.

Service: acute inpatient rehab

Diagnoses: CVA TBI

Age Range: 21-100+

4.

Setting: acute care, inpatient rehab, outpatient

Diagnoses: TBI, CVA, PD, VCD, other neurological diagnoses

Ages: 3-99

5.

Setting: hospital and university clinic (outpatient and home health)

Diagnoses: TBI, post concussive syndrome, subcortical CVA)

Age range: 14-55

6.

Setting: Comprehensive inpatient rehabilitation center in major medical center

Diagnoses: Various neurological diagnoses, primarily CVA, TBI, dementia

Age range: generally geriatric but accept individuals from age 14

7.

Setting: TBI Residential Facility

Diagnoses: TBI, Primarily sub-acute some CVA's and anoxia

Age range: mostly 18-40

8.

Setting: University Clinic

Diagnoses: Cognitive-linguistic Impairment due to stroke, TBI, dementia, motor-speech

Age Range: 18-75+

9.
Setting: Level 1 trauma Center with full neurorehabilitation comprehensive program for adults and children input and outpatient

10.
Setting: Hospital; Service: Inpatient rehabilitation, acute hospital, outpatient
Diagnoses: TBI, CVA, Tumor
Age Range: pediatric to adult

11.
Setting: Hospital inpatient acute, outpatient rehabilitation
Diagnoses: TBI, CVA, Aphasia, Dysarthria, Cognitive Communicative
Age Range: 18-90+

12.
Setting: Hospital acute rehabilitation
Diagnoses: CVA
Age Range: primarily 40+ but can include 16+

13.
Setting: Inpatient acute
Diagnoses: CVA, aneurysm, SDH (or other bleeds) TBI
Age Range: 18-90

14.
Setting: Inpatient acute and outpatient rehabilitation
Diagnoses: CHI, CVA, IVH, brain tumors
Age Range: birth-geriatrics

15.
Setting: Inpatient acute and outpatient rehabilitation
Diagnoses: aneurysm, degenerative neurologic disease, dementia, encephalopathy, epilepsy, myasthenia, pulmonary disease, spinal cord injury, CVA, tumors, TBI
Age Range: 18-100

16.
Setting: Home health
Diagnoses: CVA, other neurologic disease, dementia, dysphagia, occasional TBI's
Age Range: 60+

17.
Setting: University Medical Center
Service: outpatient

Diagnoses: TBI
Age Range 15-55

18.
Setting: Hospital
Service: Outpatient
Diagnoses: TBI, aphasia, RCVA, PD, dysphagia, voice disorders
Age Range: 16-90+

19.
Setting: University Hospital/Level 1 Trauma Center; acute and inpatient and outpatient rehabilitation
Diagnoses: TBI, CVA, BT, AVM, other neurological
Age Range: 0-80+

20.
Setting: Outpatient rehabilitation clinic affiliated with a hospital
Diagnoses: TBI, stroke, tumor
Age Range: 18-80

21:
Setting: Rehab facility (CORF/CARF), inpatient and outpatient
Diagnoses: BI, CVA, aneurysm, trauma, tumor, hydrocephalus, infection, etc.
Age Range: 18-65

22.
Setting: Community-based outpatient rehabilitation clinic
Diagnoses: CVA, TBI, Parkinson's, tumor resections, 'mild' cognitive change
Age Range: 17-99

23.
Setting: University clinic outpatient service
Diagnoses: TBI, CVA, neurodegenerative disorders
Age Range: open; typically, TBI=18-40; CVA=60+

24.
Setting: Hospital inpatient, acute, rehabilitation and outpatient
Diagnoses: CVA, brain tumor, Parkinson's, tracheostomized/ventilator, TBI
Age range: 18-104

25.
Setting: Hospital outpatient comprehensive program
Diagnoses: TBI, stroke

Age range: vast majority 18-40 years of age, no younger or older age limits at this time

26.

Setting: University clinic chronic outpatient

Diagnoses: older adolescent and adult TBI, stroke

Age range: 18-65

27.

Setting: Hospital inpatient-subacute, acute, long-term; outpatient

Diagnoses: CVA, neurogenic disorders, multiple med, head and neck cancer, TBI

Age range: (No response)

28.

Setting: Acute hospital rehabilitation unit

Diagnoses: CVA

Age range: 16-geriatric

29.

Setting: Senior living campus; subacute, long-term care, outpatient, home health

Diagnoses: dysphagia, dementia, aphasia, dysarthria

Age range: 60-100

30.

Setting: Secondary school, outpatient just re-entering school setting

Diagnoses: aphasia, apraxia

Age range: 18 years old