K 2.6 Contextualized/Context-Sensitive Cognitive-Communication Assessment & Treatment

Tips, Tools & Resources for inpatient rehab setting

Note: This is not an exhaustive list of all the tools & resources available to assist with implementation of contextualized assessment & treatment. We have not included tools and resources that we already had in use or those that we would like to implement in the future. For the purposes of this current project and the accompanying case report, we have primarily included resources and tools that we have referred to or that we have added to enhance our practice (some must be purchased while others are freely available in the open market). Copyrighted tools or presentations that we do not have permission to share but that have also informed our work are not included.

K 2. Cognitive Communication Rehabilitation (ONF-INESSS, 2016)

A cognitive communication rehabilitation program for individuals with traumatic brain injury, should provide the opportunity to rehearse communication skills in situations appropriate to the context, in which the person will live, work, study, and socialize.

Level of Evidence: A

OVERVIEW

- Description of contextualized cognitive rehabilitation
  - [http://www.projectlearnnet.org/tutorials/cognitive_intervention.html](http://www.projectlearnnet.org/tutorials/cognitive_intervention.html)

TEXTBOOKS/BOOK CHAPTERS WITH CLINICAL/PRACTICAL TOOLS

***These textbooks contain many practical resources for context-sensitive assessment & treatment that SLPs can use (i.e. reproducible forms, rating scales, worksheets, templates, questionnaires, inventories, elicitation tasks, etc...)

ASSESSMENT

Information Gathering Tools:

- Environmental Needs Assessment (Hartley 1995, Appendix C, pp. 236-239)
- Example of Ecological Inventory (Hartley 1995, Appendix D, pp. 242-246)
- IRU Contextual Communication Questionnaire (2018) *** locally developed
- OBIRS A Day in the Life templates *** locally developed

Screening Tools:


Standardized Tests/Measures:

NOTE OF CAUTION: The assessment of persons with cognitive-communication disorders (CCDs) after TBI is often challenging. Persons with TBI/ABI are heterogeneous group. They present with complex constellations of strengths and weaknesses and their communicative competence is impacted by a wide variety of factors. While some standardized tests permit the evaluation of contributing factors, it is difficult and inappropriate to make explicit statements regarding implications for functional communication based on standardized testing alone. While some standardized tests are considered “functional” in that they measure aspects of daily functioning, because the administration is standardized, they are limited in their ability to capture the unique characteristics of a person’s daily life. SLPs should carefully select which standardized tests to use and interpret them with caution and only in conjunction with other sources of information (i.e. non-standardized assessment, self-report, reports from familiar communication partners). Also, SLPs should consider limited standardized testing at the inpatient phase as the results may quickly become invalid given early recovery, length of stay is prohibitive and this can affect future test/re-test reliability. More comprehensive standardized assessment may be more appropriate later.

Higher-level:


Lower-level:


TIP: It can helpful to apply a functional approach to the administration of standardized tests (i.e. manipulation of task variables to isolate underlying processes, use of compensatory strategies, and then compared to results obtained during initial strict administration.)
Non-Standardized Tests/Qualitative Measures

Purpose of non-standardized tests:

1. Determining competencies in domains for which there are no standardized tests (e.g. discourse).
2. Describing performance in the context of real-world settings and activities.
3. Identifying cognitive and communication demands of relevant real-world contexts.
4. Describing the communication and support competencies of everyday communication partners, and
5. Exploring the effects of systematic changes in communication and cognitive demands and partner supports.

NOTE: Non-standardized, functional and context-sensitive assessment is an important part of the evaluation of persons with TBI. Often, persons with TBI demonstrate limitations in everyday activities despite good performance on standardized cognitive and language tests. The reverse can also be true where performance on standardized testing suggests difficulties however these are not observed or experienced in functional/familiar situations. When the primary goals of assessment are to identify real-world disability and plan and monitor intervention, office bound language and neuropsychological testing must be supplemented by non-standardized, functional assessment procedures. These can include observational tools, behavioural/naturalistic assessments, questionnaires, rating scales, interviews, inventories, and discourse analysis all of which are especially useful for assessing pragmatics, social communication skills, conversation abilities.

- **Analysis of communication competence in simulated settings/activities** (at the very least prior to making educational or vocational recommendations) and **real-world settings** (when possible).
  - Structured and unstructured observations in varied settings
  - Obtaining reports from others (i.e. standardized questionnaires, informal interviews)
  - Engaging everyday people in the person’s life (i.e. family members, other therapists, teachers, friends).
  - Dynamic assessment/hypothesis testing: explore impact of use of strategies, changes in cognitive/communication demands, task/activity parameters, change of communication partners (Refer to tables 3-15, 3-16, 3-17 in Hartley 1995).

- **Communication Checklists:**
  - General Behavioural Observation Forms
  - Checklist of Listening Behaviours (Hartley, L. 1995)
  - Pragmatic Protocol (Prutting & Kirchner, 1987)

- **Analysis of Conversational Discourse**
  - **Analysis procedures:** Rating scales (used during live or videotaped interactions):
    - ***measures of content and topic management appear to be the most useful in identifying conversational impairments.
      - The Pragmatic Protocol (Prutting & Kirchner, 1987)
      - Analysis of Topic (in Hartley, 1995)

- **Discourse Analysis (monologic discourse)** ***very time consuming, may not be appropriate for inpatient setting will depend on patient goals, level of impairment, etc...***
  - **Common elicitation tasks:** story retelling, story generation, personal event retelling, procedural discourse, picture description.
• **Analysis procedures**: measures of cohesion, sentence-level grammatical complexity, measures of productivity, efficiency propositional analyses, lexical selection

• **Analysis/Description of Communication Partner Competencies**
  o The adapted Kagan Scales for TBI interactions: Measure of Support in Conversation and Measure of Participation in Conversation (Togher et al, 2010)

**Tipsheets/Guidance Documents:**

• American Speech-Language-Hearing Association (ASHA) handout: Person-Centered Function on Function
• Social Communication and TBI: A guide for Professionals (Struchen, M., an educational product of the Texas TBIMS, TIRR Memorial Hermann)
• Tips on Naturalistic Assessment – ***locally developed

**Webinars/Tutorials/Courses:**

• ASHA ICF webinars https://www.asha.org/slp/icf/
• CCD Level 1 – Assessment and Treatment of Cognitive-Communication Disorders: Evidence Based Practice & Clinical Insights, A Clinical Course for Speech-Language Pathologists (Instructor: Sheila McDonald, hosted by OSLA). *in-person course, registration fee. www.osla.on.ca or www.brainandcommunication.ca
• Assessment Issues http://www.projectlearnet.org/tutorials.html#assessment
• Context Sensitive vs Decontextualized Learning Trials (Ylvisaker, Hubbard & Feeney, 2006)
  http://www.projectlearnet.org/tutorials/learning_trials.html

**TREATMENT/INTERVENTION**

**Treatment planning:**

• Pilot-Goal Setting Questionnaire (IRU, HSN, 2015) ***locally developed
• Instructional planning worksheets & other reproducible forms (Sohlberg & Mateer, 2011)
• University of Oregon – College of Education, Brain Injury and Concussion Clinic Resources (BrICC)
  o BrICC Intervention Selection Table 2016 (available by internet search)
  o BrICC Rounds Portfolio, 2017 (available by internet search)

**Methods that are useful for practice in contexts of personal relevance:**

• Self-talk
• Role play
• Script training/Advance Scripting
• Compensatory strategy training
• Environmental modification
• Communication partner training
• Assisted cueing
• Group treatment
• Performance of real world tasks
• Simulated tasks/activities
• Assertive communication training
• Echo technique/broken record technique
• Home visits
• Joint sessions with other therapists
• Workbooks, brain games can provide useful structured practice *when used to practice compensatory strategies* (*otherwise there is no strong evidence that workbook stimulation or brain fitness type activities work).

**Tipsheets/Guidance Documents:**
• Cheat sheet: Contextualized vs Quasi-contextualized vs Decontextualized Treatment ***locally developed
• Social Communication and TBI: A guide for Professionals (Struchem, M., an educational product of the Texas TBIMS, TIRR Memorial Hermann)
• Role of the SLP in Brain Injury Rehabilitation [PPT] (Brain and Communication Series, OSLA, 2017) [https://sites.google.com/site/communicationinbraininjury/](https://sites.google.com/site/communicationinbraininjury/)

**Manuals:**

**Webcasts/Webinars:**
• FREE-BIAUSA webinar: Rehabilitation Interventions for Traumatic Brain Injury: What Works Best for Whom? with Dr. Jennifer Bogner (PPT handout and PCORI Results summary provided once registered) [https://shop.biausa.org/products/PCORI092717CD/20170927rehabilitationinterventionsirecordedwebinar](https://shop.biausa.org/products/PCORI092717CD/20170927rehabilitationinterventionsirecordedwebinar)

**Websites/Online Resources/Self-Study:**

**Intervention Programs:**
• TBI Express Partner Training Resources (collaboration & elaboration videos, observation sheets for videos, communication skills toolkit) [http://sydney.edu.au/health-sciences/tbi-express/resources.shtml](http://sydney.edu.au/health-sciences/tbi-express/resources.shtml)
• Group Interactive Structured Treatment (GiST) [http://www.braininjurysocialcompetence.com/](http://www.braininjurysocialcompetence.com/)

**References**

**Journal Articles:**


Books/Book Chapters:


