

Progress Towards Clinically Practicable Discourse Outcomes

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Introduction

Navigating everyday conversation in stroke-induced (PWA) or primary progressive aphasia (PwPPA) is best indexed in discourse. Such complex communicative exchanges are high-priority treatment targets identified by PWA (Worrall et al., 2011) and primary outcomes (Ash & Grossman, 2015; Brady et al., 2016). Thus, solving barriers to the clinical feasibility of discourse analyses is essential to ensure real-world implementation. Standardization and normative data have reduced implementation barriers related to the qualitative nature and subjectivity of discourse measurement. However, approximately 80% of practicing SLPs report *time* as an enduring barrier (Bryant et al., 2016). This presentation reviews checklist-based measures of discourse samples, which reduce or eliminate the need for lengthy/ specialized transcription, saving time.

Methods and Results

Existing micro- and macro-linguistic, checklist-based measures of discourse are picture or story-specific, allowing for standardization. These measures evaluate lexical items (CoreLex), main concepts and sequencing and story grammar elements in PWA and PwPPA.

CoreLex checklists (Dalton et al., 2020) are normed micro-linguistic elements specific to a given story. Credit is given for each lexeme on the checklist, regardless of form, but excluding synonyms. Presence of CoreLex elements is sensitive to age-related changes in healthy controls and differentiates healthy controls from PWAs, as well as aphasia subtypes and fluent vs. nonfluent aphasia (Dalton & Richardson, 2015; Kim et al., 2019). CoreLex performance correlates with other discourse measures and standardized tests, suggesting it may serve as an index of overall language performance.

Main concept analysis (MCA) is a hybrid micro-/macro-linguistic measure of quantity, accuracy, and completeness of discourse (Nicholas & Brookshire, 1993, 1995). MCA checklists based on healthy control transcripts exist for several pictures/stories (e.g., Kong 2009). For MCA, utterances that match the MCs in checklists are scored for accuracy and completeness (e.g., Kong 2009, Richardson & Dalton, 2016; 2020). MCA scores differentiate between healthy controls and PWAs or PwPPA (e.g., Dalton & Richardson, 2019, 2020) and correlate with standardized assessments (Dalton & Richardson, 2019; Kong et al., 2016; Richardson et al., 2018) and functional measures (Armes et al., 2020; Cupit et al., 2010; Doyle et al., 1995; Ross & Wertz, 1999).

Main Concept, Sequencing, and Story Grammar (MSSG) is a multilevel analytic approach complimenting the psychometrics and procedural knowledge of MCA with story grammar component coding and easy-to-obtain sequencing information (Greenslade et al., 2020). MSSG yields scores for MCA, sequencing, MC + sequencing, total episodic components, and episodic complexity. MSSG can generate performance profiles, similar to the Story Goodness Index (Le et al., 2011), mapping participants' ability to tell accurate, complete, and logically sequenced stories against their production of episodic structure. For all MSSG variables, performance differs between healthy controls and PWAs, and between controls and aphasia subtypes (Richardson et al., 2021).

Conclusions

Normative data, checklists, and freely available training that can be completed at a clinician's own pace - like that available for CoreLex, MCA, and MSSG analyses - are chipping away at the barriers and improving the clinical feasibility of discourse analysis. Additionally, organizations like FOQUSAphasia are connecting researchers and clinicians, effectively reducing the time needed to translate new research into clinical practice.

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