A Tool for Assessing Conversational Discourse in Right-Hemisphere Brain Damage
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Background
- The ability to effectively communicate is vital to overall interpersonal, social, and vocational aspects of life.
- Communication deficits occur in approximately 50% of persons with RHD (Joanette et al. 1990). While deficits in communicative ability are duly noted in the RHD literature, few studies have sought to examine one form of communication that permeates all aspects of daily living: conversation (Kennedy et al., 1994; Kennedy, 2000; Minga et al., 2008; Youse et al., 2011).

Method
- The DCM was conceptualized from Sacks’ turn-taking system (Sacks et al., 1974), Nofsinger’s text Everyday Conversation (Nofsiger, 1999) and Mentis & Prutting’s Topic Maintenance Analysis (Mentis & Prutting, 1991).
- Seven types of contributions were defined:

  - Elaboration: An utterance that expands or provides greater detail about something that was discussed.
  - Novel Information: A spontaneous utterance presenting new information, not previously discussed.
  - Continuer: An utterance indicating to the conversational partner that new information has been received (“oh,” “really” etc.). A Continuer may also be an utterance or vocalization (laughter) that does not contribute to the topic but allows the conversation to continue (“Mm-hmm”, “Yeah!”).
  - Clarification: An utterance marked by elucidation of an idea, comment, question. This utterance serves to ensure that the listener clearly understands. May also be a correction of an utterance by speaker or conversational partner.
  - Question: An utterance that directly addresses a question.
  - Comment: An utterance of opinion, feeling, or thought. This utterance does not fit into any of the previous categories. Does not add any new information.

Discourse Contribution Measure (DCM)

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Results

- Despite limitations of a small sample size, no comparison group, and use of only one pre-post conversational sample, the DCM holds promise for furthering our understanding of conversational discourse in individuals with RHD.
- The DCM is sensitive enough to characterize change in conversational discourse performance.
- Patients showed variable change in their contribution to conversation. This suggests that changes in conversational patterns may take many forms depending on baseline communication features, communication partners, and normal variation.
- Use of the DCM, was straightforward for the authors, but was challenging for a CFY-SLP suggesting that experience would benefit the use of the tool.
- A spontaneous utterance presenting new information, not previously discussed.

Conclusions
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References

Future Direction
- Examine the sensitivity of the DCM in a large prospective study of participants with and without brain damage, in a variety of discourse contexts, and with multiple conversational partners of varying age as a basis of comparison.

Discussion
- The DCM showed that following structured intervention:
  - All patients demonstrated change in their contribution to conversation. Observed changes may have resulted as a consequence of intervention, may be due to normal variation in conversation or a combination of both.
  - All patients had an increase in total number of turns, comment, and novel turns.
  - Two patients (S3 & S5) increased the number of elaborations produced and decreased the total number of responses to questions.

- S4 decreased the total number of elaboration turns, increased clarification turns, and increased response to question turns.
- S3 & S4 increased in the total number of continuing turns. This suggests an improvement in the ability to understand that a speaker needs to produce multiple turns to complete a desired message.
- e.g. Topic (dogs)
- Patient: We have two new ones now and they’re pretty big.
- Partner: Ah-hu. Yeah, our dog, he was such a good boy.
- Patient: Yeah
- Partner: They’re both labs.
- Patient: Really
- Partner: Ah-hu. Yeah, our dog, he was such a good boy.

Inter-reliability and Intra-reliability were 89% and 97.2%, respectively.

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Procedure
- Two 20-minute first-encounter conversations (Kennedy et al. 1994) were video-recorded before and after participation in the Metaphor Training Program (Lundgren et al., 2010).
- The middle 10-minutes of each 20-minute first-encounter conversation was parsed into turns.
- After parsing the conversations into turns, each turn was coded for the type of discourse contribution.
- The total number of turns and total counts of each type of discourse contribution was calculated.

Reliability
- For inter-rater reliability, the first author coded and transcribed all discourse samples. A student independently transcribed 100% of the samples, and the second author coded 2/3 of the discourse samples.
- To assess intra-rater reliability, the first author recoded 100% of the sample approximately 2 months after the initial analysis.
- Reliability for transcription and coding was calculated by dividing the total agreements by the sum of agreements and disagreements and then multiplying by 100.
- Discrepancies with coding were resolved through discussion.