

Core-lexicon analyses: Usability and Reliability for Clinical Practice

Saryu Sharma, Grace Giordano, and Heather Harris Wright

Saryu Sharma
CSDI
East Carolina University
Greenville, North Carolina 27858
saryusharma05@gmail.com

INTRODUCTION

- Persons with aphasia (PWA) present with discourse deficits which negatively impact their day-to-day communication abilities.
- Variety of discourse analyses approaches for PWA have gained attention in recent years these approaches are not being readily used by speech-language pathologists (SLPs) in clinical settings.
- ✓ One reason may be that while evaluating discourse abilities, the reported discourse analysis methods require samples to be transcribed
- ✓ The analyses themselves are time consuming to complete.
- Core lexicon analysis examines specific lexical items which are required to produce a semantically meaningful and coherent narrative¹
- ✓ Clinicians check off the words produced from the core lexicon lists while listening to the recorded language samples. The lexicon list is established based on language samples collected from the control participants and the cut off criteria of 50% is used for the word categories to be included in the core lexicon assessment pool²

AIM OF THE STUDY

1) To demonstrate reliability of using core lexicon analysis with transcription (using CLAN) and without transcription by SLPs; and 2) to identify the benefits and difficulties faced by SLPs while using core lexicon analysis for clinical assessment.

MATERIALS & METHODS

Participants: 14 SLPs

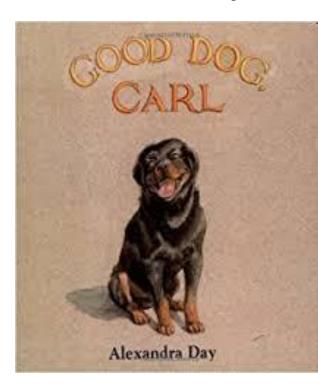
- Native English speakers
- SLPs who had experience working with PWA

Tasks:

- Listened to 2 PWA video samples
- Scored using core lexicon checklists
- Completed survey on Qualtrics

RESULTS AND DISCUSSION

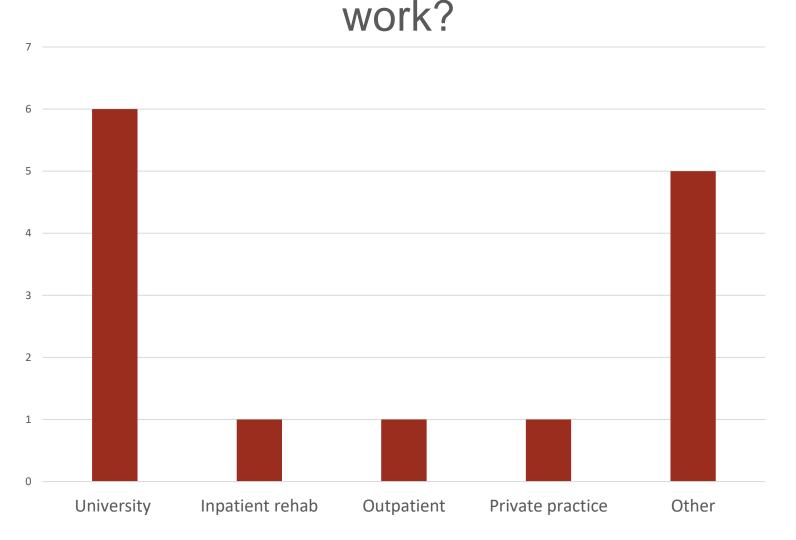
Aim 1: to demonstrate reliability of using core lexicon analysis with transcription (using CLAN) and without transcription by SLPs



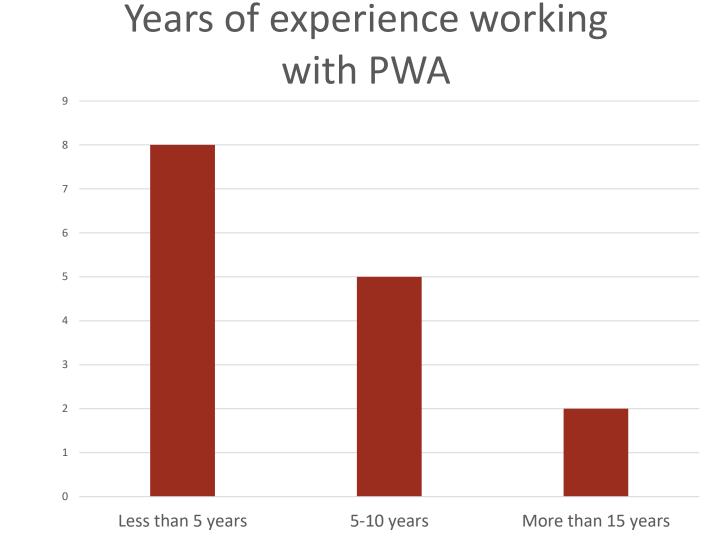
Inter-rater correlation coefficients for Good Dog Carl (GDC) and Picnic

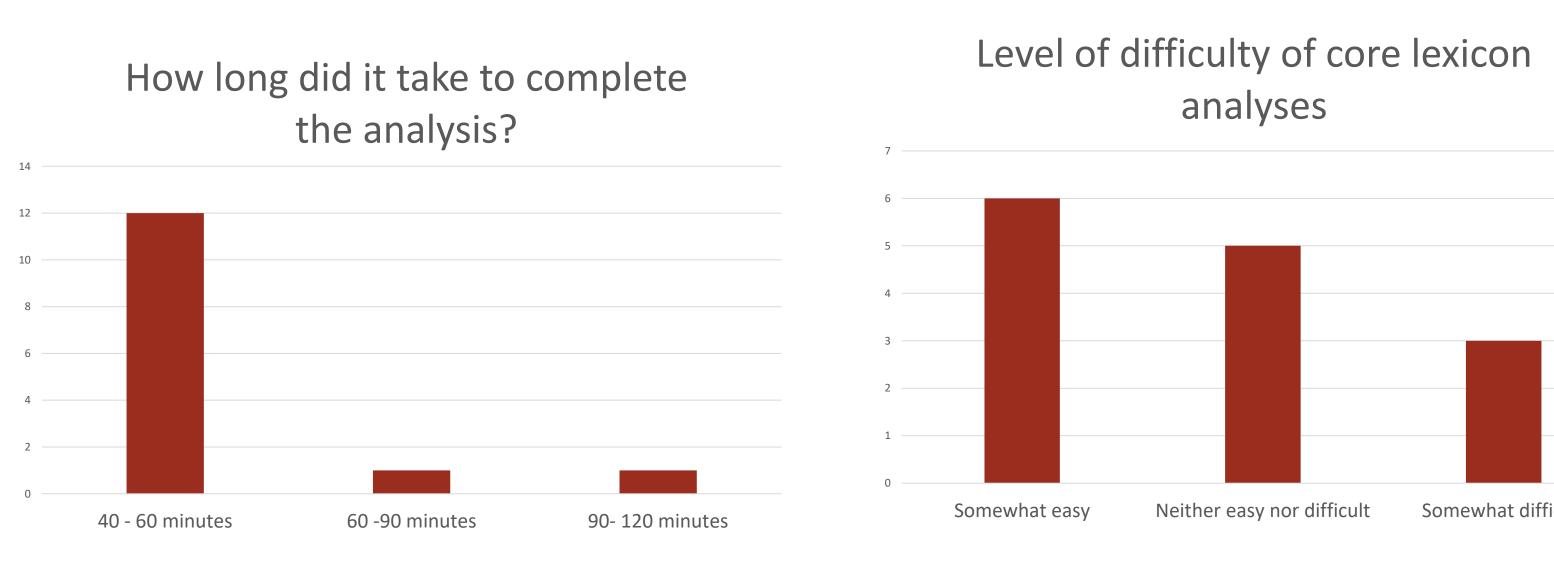
		Nouns	Verbs	Adjectives	Adverbs
GDC	ICC	.962	.913	.853	.926
Picnic	ICC	.751	.981	.914	.939

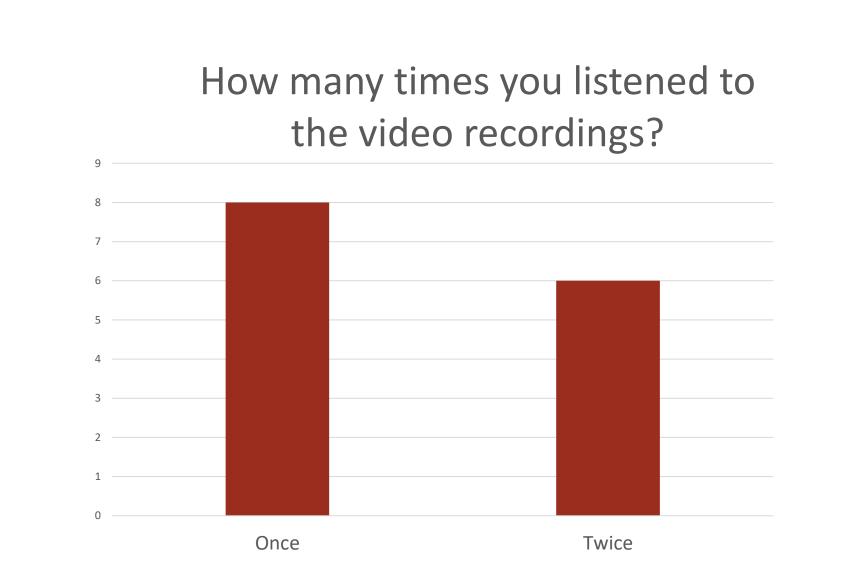
Aim 2: to identify the benefits and difficulties faced by SLPs while using core lexicon analysis for clinical assessment.

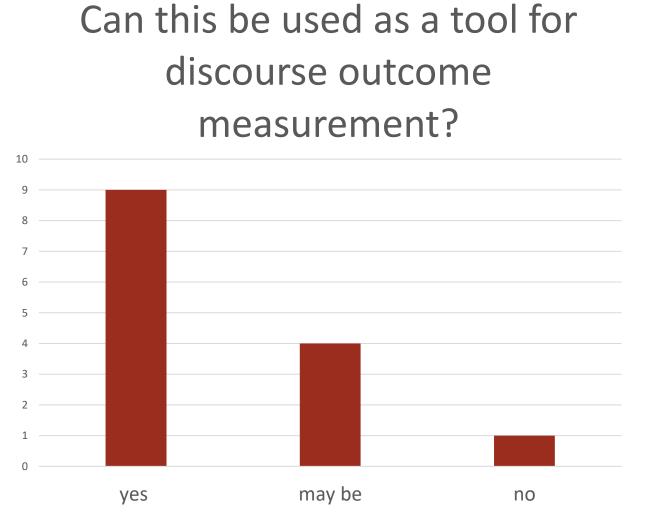


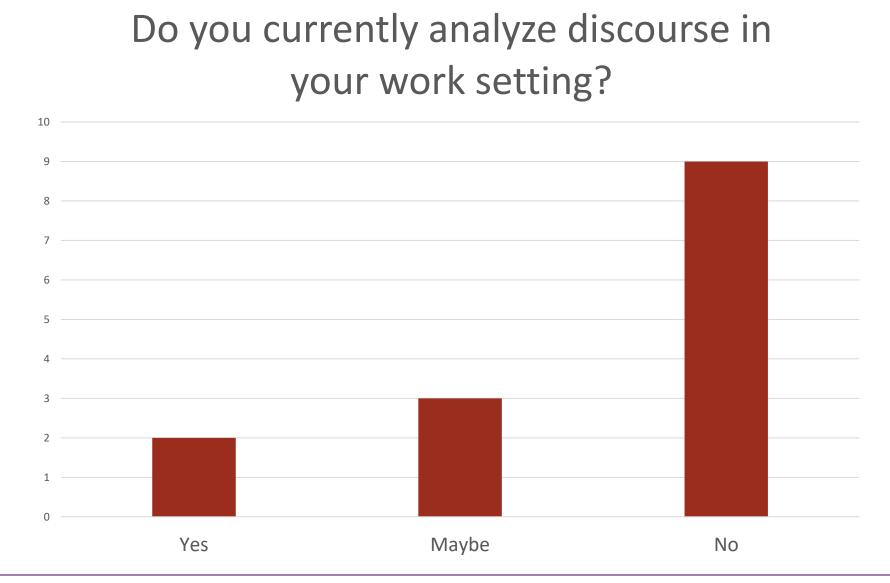
In what type of setting do you

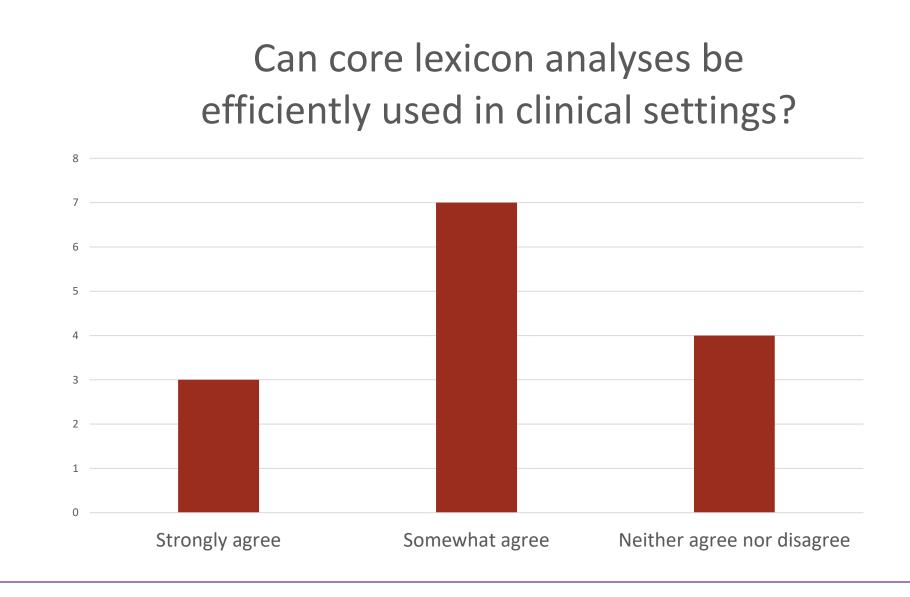


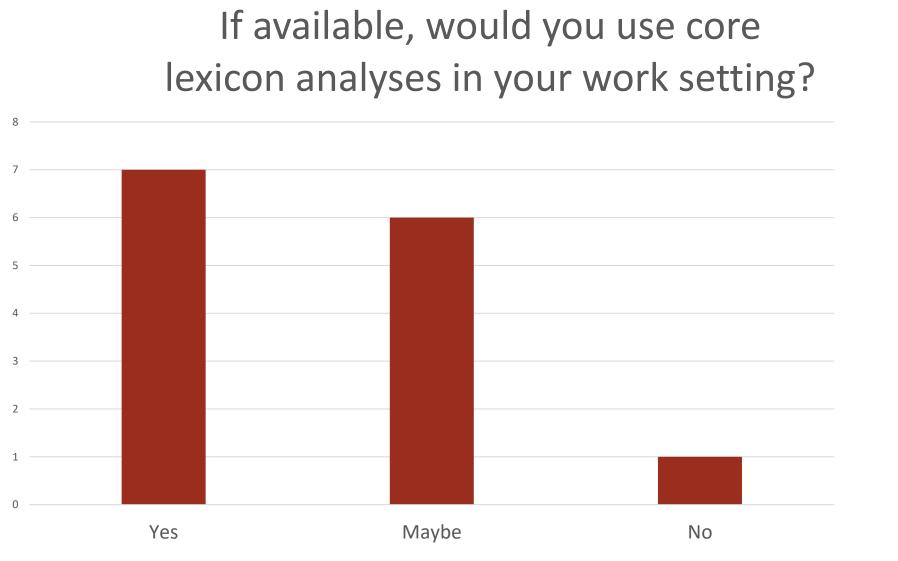












Discussion

- This study provides empirical evidence for using core-lexicon measure for discourse analysis in clinical settings.
- Results indicated that core lexicon analysis is a reliable measure for assessing discourse tasks in PWA.
- Subjective results from the survey are also indicative of the fact that this analysis could be efficiently used in the clinical settings. This *measure can be used with minimal training and language samples do not require transcription for analyses to be reliable*, which can further encourage SLPs to incorporate discourse analysis within the language assessment battery for PWA

References

MacWhinney, B., Fromm, D., Holland, A., Forbes, M., & Wright, H. (2010). Automated analysis of the Cinderella story. *Aphasiology, 24*(6-8), 856-868. MacWhinney, B., Fromm, D., Forbes, M., & Holland, A. (2011). AphasiaBank: Methods for studying discourse. *Aphasiology, 25*, 1286-1307.