# Gold standards for spoken discourse analysis in aphasia: A survey of current practices

Welcome to the survey!

Thank you for agreeing to take part in this important survey regarding standardizing spoken discourse collection and analysis procedures in aphasia. Today we will be gaining your thoughts and opinions in order to better understand the current practices related to spoken discourse assessment in aphasia.

Please be assured that all your answers to this survey will be kept in the strictest confidentiality.

Find more about this initiative here: www.foqusaphasia.com

#### INDIANA UNIVERSITY INFORMED CONSENT STATEMENT FOR RESEARCH

About this study

You are being asked to participate in a research study. We are interested in understanding more about the methodology and analysis of spoken discourse in aphasia.

We ask that you self-select to participate in this survey if you have in the past or are currently collecting and/or analyzing discourse data in speakers with aphasia, whether in a research or a clinical capacity (or both). If you have not worked on discourse in aphasia, we ask that you please do not continue on to the survey.



Gold standards for spoken discourse analysis in aphasia: A survey of current practices

### IRB Protocol #: 1906457174

This consent statement will give you information about the study to help you decide whether you want to participate. Please read this statement, and ask any questions to Dr. Brielle Stark (bcstark@iu.edu) or Manaswita Dutta (mdutta@iu.edu) before agreeing to be in the study.

### TAKING PART IN THIS STUDY IS VOLUNTARY

Taking part in this study is voluntary. You may choose not to take part in the study or may choose to leave the study at any time. Deciding not to participate, or deciding to leave the study later, will not result in any penalty or loss of benefits to which you are entitled and will not affect your relationship with Indiana University or the investigators.

#### WHY IS THIS STUDY BEING DONE?

The purpose of this survey study is to collect information regarding spoken discourse acquisition and analysis methods across various work settings and research labs nationally and internationally. Findings from this survey will evaluate current practices and barriers to systematically measuring spoken discourse outcomes in aphasia.

You were selected as a possible participant because you expressed interest in the study or because you either have previously worked with or conducted research or currently work with or conduct research in aphasia.

The study is being conducted by Dr. Brielle Stark, Ph.D., and PhD student Manaswita Dutta, M.A, CCC-SLP at the Department of Speech and Hearing Sciences, Indiana University.

#### HOW MANY PEOPLE WILL TAKE PART?

If you agree to participate, you will be one of ~100 participants taking part in this research.

#### WHAT WILL HAPPEN DURING THE STUDY?

This study involves the collection of information about you or from you. If you agree to be in the study, you will be asked to complete a survey that will be sent to you electronically. The survey will take approximately 30-40 minutes to complete. You can complete the survey in more than one sitting.

WHAT ARE THE RISKS OF TAKING PART AND HOW WILL MY INFORMATION BE PROTECTED? Completing the survey involves no risk to you. We will do everything possible to protect your information. Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. No information which could identify you will be shared in publications about this study and databases in which results may be stored.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and her research associates, the Indiana University Institutional Review Board or its designees, and any state or federal agencies who may need to access your medical and/or research records (as allowed by law). State and federal agencies may include the Office for Human Research Protections (OHRP) for federally-funded research, and/or National Institutes of Health (NIH) for research funded or supported by NIH].

#### WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THE STUDY?

We don't expect you to receive any benefit from taking part in this study, but the findings from this survey will significantly contribute to our understanding of the current practices and barriers in the field regarding spoken discourse assessment in aphasia.

WILL MY INFORMATION BE USED FOR RESEARCH IN THE FUTURE? Information collected from you will not be used for future research studies or shared with other researchers for future research.

WILL I BE PAID FOR PARTICIPATION? You will not be paid for participating in this study.

WILL IT COST ME ANYTHING TO PARTICIPATE? There is no cost to you for taking part in this study.

#### WHO SHOULD I CALL WITH QUESTIONS OR PROBLEMS? Questions about this research may be addressed to researchers, Dr. Brielle Stark at bcstark@iu.edu or Manaswita Dutta at mdutta@iu.edu. You can also call us at +1 (812) 855 7760.

For questions about your rights as a research participant, to discuss problems, complaints, or concerns about a research study, or to obtain information or to offer input, please contact the IU Human Subjects Office at 800-696-2949 or at irb@iu.edu.

CAN I WITHDRAW FROM THE STUDY?

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#### PARTICIPANT'S CONSENT

In consideration of all of the above, I give my consent to participate in this research study. I will be given a copy of this informed consent document to keep for my records. I agree to take part in this study.

I understand that this survey is assessing current methods and analysis techniques used to understand spoken discourse abilities in aphasia. By participating in this survey, I am currently or was involved in spoken discourse assessment in aphasia in my work or research setting.

 $\bigcirc$  I consent to participate in this survey

Please select today's date

Section 1: Demographic information	
In this section, we are going to ask about you and the nature of your involvement in aphasia	
assessment and rehabilitation.	
How would you describe yourself? (Mark all that apply)	<ul> <li>Researcher</li> <li>Academic/teacher</li> <li>Speech-language therapist/pathologist</li> <li>Student</li> <li>Other</li> </ul>
If you have selected 'other', please specify your designation	
How old are you?	<ul> <li>Less than 25 years</li> <li>26-40 years</li> <li>41-55 years</li> <li>More than 55 years</li> </ul>
What is your gender?	<ul> <li>Female</li> <li>Male</li> <li>Other</li> <li>I wish not to disclose</li> </ul>
If you have selected 'other', please specify your gender identity	
In which country are you currently practicing and/or doing research?	<ul> <li>United States of America</li> <li>United Kingdom</li> <li>Australia</li> <li>New Zealand</li> <li>Canada</li> <li>Other</li> </ul>
If you have selected 'other', please enter the country you are currently practicing and/or doing research in.	
What is your highest earned degree?	<ul> <li>Bachelor's</li> <li>Master's</li> <li>PhD</li> <li>Post-doctoral</li> <li>Clinical doctorate</li> <li>Other</li> </ul>
lf you have selected 'other', please specify your highest earned degree.	
How many years have you been involved in aphasia	

assessment or rehabilitation? (please round up to a single year number, e.g. '5' to represent '5 years')



In what settings do you work or have you previously worked with people with aphasia? (Mark all that apply)	<ul> <li>Acute care</li> <li>Rehabilitation</li> <li>Community health</li> <li>Long-term care facility</li> <li>Private practice</li> <li>Hospital-based outpatient clinic</li> <li>University research lab or clinic</li> <li>Other</li> </ul>
If you have selected 'other', please mention the setting in which you work with or have worked with people with aphasia.	
Of the above settings, which setting is the PRIMARY setting in which you collect discourse data? (you will answer later questions in this survey in regards to the setting you select here)	<ul> <li>Acute care</li> <li>Rehabilitation</li> <li>Community health</li> <li>Long-term care facility</li> <li>Private practice</li> <li>Hospital-based outpatient clinic</li> <li>University research lab or clinic</li> <li>Other</li> </ul>
If you have selected 'other', please mention the setting in which you work with or have worked with	

setting in which you work with or have worked wit people with aphasia.



Section 2: Spoken discourse measurement in aphasia In this section, we are going to ask about if and how you measure spoken discourse in aphasia, your reasons for doing so, and your barriers to discourse collection, transcription, analysis, and interpretation.		
We are asking you specifically to answer for yourself. Your workplace may have similar procedures to what you do, but to best understand person-to-person techniques, we ask that you answer about your own experiences. Please answer these according to your PRIMARY setting for discourse collection, which you indicated earlier.		
Of the speakers with aphasia that you see/assess, how often do you collect and/or analyze spoken discourse samples from speakers with aphasia in a clinical or research setting?	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>	
Why do you collect spoken discourse data? (Mark all that apply)	<ul> <li>To gain information regarding aphasia symptoms for clinical intervention purposes</li> <li>As an outcome measure for aphasia treatment in research</li> <li>As an outcome measure for aphasia treatment in clinical practice</li> <li>As a part of a research study investigating language profiles in aphasia</li> <li>Other</li> <li>Not applicable</li> </ul>	
If you have selected 'other' as an option, please describe the reasons for why you collect spoken discourse data.		
What type(s) of discourse genres do you collect to evaluate spoken language in aphasia (Mark all that apply)?	<ul> <li>Description of a single picture (e.g., Cookie Theft picture description from the Boston Diagnostic Aphasia Examination)</li> <li>Story from a sequence of pictures (e.g., pictures from Nicholas &amp; Brookshire [1993])</li> <li>Retell of a fictional story (e.g., Cinderella story)</li> <li>Procedural discourse (e.g., how to make a peanut-butter jelly sandwich)</li> <li>Personal recount (e.g., important life event)</li> <li>Opinion (e.g., current event)</li> <li>Role play (of a familiar interaction)</li> <li>Conversation (with clinician or family member)</li> <li>Interview (biographical or otherwise), conducted by a clinician</li> <li>Other</li> <li>Not applicable</li> </ul>	

If you have selected 'other' as an option, please list the type of discourse genres you collect to evaluate spoken language in aphasia.



<ul> <li>AphasiaBank protocol</li> <li>Nicholas and Brookshire protocol</li> <li>Story Retell procedure (SRP)</li> <li>Quantitative Production Analysis (QPA)</li> <li>Shewan Spontaneous Language Analysis (SSLA)</li> <li>Systematic Analysis of Language Transcripts (SALT)</li> <li>Profile of Word Errors and Retrieval in Speech (POWERS)</li> <li>Language Assessment Remediation and Screening Procedure (LARSP)</li> <li>Self-developed protocol (please provide details below)</li> <li>Standardized aphasia assessment tools that include discourse generation tasks (e.g., WAB, BDAE)</li> <li>Other</li> </ul>
<ul> <li>I do not have sufficient skills and knowledge in discourse collection</li> <li>I have not received adequate training in discourse collection</li> <li>I do not have access to tools and resources (e.g., computer hardware/software, recording equipment)</li> <li>I do not have enough confidence to carry out discourse sample collection</li> <li>Specific discourse collection protocols are difficult to apply/interpret</li> <li>No barriers</li> <li>Other</li> <li>Not applicable</li> </ul>
<ul> <li>Time constraints</li> <li>I do not have enough skills and knowledge in discourse transcription</li> <li>I have not received adequate training in discourse transcription</li> <li>I do not have access to tools and resources (e.g., computer hardware, software programs for coding)</li> <li>I do not have enough confidence to carry out discourse transcriptions</li> <li>Specific discourse transcription protocols are difficult to apply/interpret</li> <li>No barriers</li> <li>Other</li> <li>Not applicable</li> </ul>

barriers to discourse transcription.



<ul> <li>I do not have enough skills and knowledge in discourse analysis</li> <li>I have not received adequate training in discourse analysis</li> <li>I do not have access to tools and resources (e.g., computer hardware, software programs for analysis</li> <li>I do not have enough confidence to carry out discourse analysis</li> <li>Specific discourse analysis protocols are difficult to apply/interpret</li> <li>No barriers</li> <li>Other</li> <li>Not applicable</li> </ul>
<ul> <li>Time constraints</li> <li>I do not have enough skills and knowledge</li> <li>I have not received enough training</li> <li>I do not have access to resources</li> <li>I do not have enough confidence to carry out discourse analysis interpretation</li> <li>No barriers</li> <li>Other</li> <li>Not applicable</li> </ul>
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barriers to discourse analysis interpretation.



Section 3: Data collection procedures In this section, we are going to ask about how you personally collect spoken discourse data in aphasia.			
		Please answer these according to your PRIMARY se	etting for discourse collection, which you
		indicated earlier.	
Over the course of assessing and/or treating an individual (for clinical or research purposes), how many samples (i.e., discourse tasks) do you typically collect and/or analyze per speaker?	$\bigcirc$ 1-2 samples $\bigcirc$ 3-4 samples $\bigcirc$ 5-6 samples $\bigcirc$ > 6 samples		
Over the course of assessing and/or treating an individual (for clinical or research purposes), how many discourse genres (e.g., story retell, personal narrative) do you typically collect and/or analyze per speaker?	<ul> <li>1-2 genres</li> <li>3-4 genres</li> <li>5-6 genres</li> <li>&gt; 6 genres</li> </ul>		
Over the course of assessing and/or treating an individual (for clinical or research purposes), how many samples would you ideally like to collect and/or analyze per speaker?	$\bigcirc$ 1-2 samples $\bigcirc$ 3-4 samples $\bigcirc$ 5-6 samples $\bigcirc$ > 6 samples		
Where do you collect the spoken discourse samples (e.g., quiet room, during a therapy session)? (Mark all that apply).	<ul> <li>Sound booth</li> <li>Quiet room</li> <li>A hospital or rehab facility room with typical daily distractions (e.g., background noise)</li> <li>Participant's home</li> <li>Other</li> <li>Not applicable</li> </ul>		
If you have selected 'other' as an option, please mention the location or type of setting you collect spoken discourse samples.			
Do you record the spoken discourse data you collect?	<ul> <li>○ Yes</li> <li>○ No</li> <li>○ Not applicable</li> </ul>		
lf yes, what instruments do you use to collect the data? (Mark all that apply)	<ul> <li>Laptop with a webcam</li> <li>Laptop (sound only)</li> <li>Video recorder</li> <li>Audio recorder</li> <li>External microphone</li> <li>Cellphone (e.g., iPhone, Android phone)</li> <li>Tablet (e.g., iPad)</li> <li>Other</li> </ul>		
If you have selected 'other' as an option, please describe the instruments that you use to collect your discourse data.			
If no, how do you analyze the data?	<ul> <li>Transcribe in real time</li> <li>Analyze or complete rating scale in real time without transcription</li> <li>Other</li> </ul>		



If you have selected 'other' as an option, please describe how you analyze your spoken discourse data (if not recorded)?	
If you do not personally record the spoken discourse samples, who records the samples?	<ul> <li>Another researcher</li> <li>Another clinician/speech-language pathologist</li> <li>Research assistant</li> <li>Graduate student</li> <li>Undergraduate student</li> <li>Other</li> </ul>
If you have selected 'other', please list the personnel who is involved in the recording of spoken discourse samples.	
Typically, how long is each recorded discourse sample?	<ul> <li>&lt; 1 minute</li> <li>1-3 minutes</li> <li>3-5 minutes</li> <li>5-7 minutes</li> <li>&gt; 7 minutes</li> <li>The time may vary with the discourse type</li> <li>Not applicable</li> </ul>
If the time varies, please specify the typical length (in minutes) for a single picture description task sample (e.g., Cookie Theft picture)	
Please enter a single number, representative of a minute. If the typical time is 1 minute, please write: 1.	
If the time varies, please specify the typical length (in minutes) for a picture story sequence task sample (e.g., pictures from Nicholas & Brookshire [1993])	
Please enter a single number, representative of a minute. If the typical time is 1 minute, please write: 1.	
If the time varies, please specify the typical length (in minutes) for a fictional story retell task sample (e.g., Cinderella story)	
Please enter a single number, representative of a minute. If the typical time is 1 minute, please write: 1.	
If the time varies, please specify the typical length (in minutes) for a procedural discourse task sample (e.g., how to make a peanut-butter jelly sandwich)	
Please enter a single number, representative of a minute. If the typical time is 1 minute, please write: 1.	



If the time varies, please specify the typical length (in minutes) for a personal recount task sample (e.g., an important life event)	
Please enter a single number, representative of a minute. If the typical time is 1 minute, please write: 1.	
If the time varies, please specify the typical length (in minutes) for an opinion-based discourse task sample (e.g., current event)	
Please enter a single number, representative of a minute. If the typical time is 1 minute, please write: 1.	
If the time varies, please specify the typical length (in minutes) for a role-play discourse task sample (e.g., of a family interaction)	
Please enter a single number, representative of a minute. If the typical time is 1 minute, please write: 1.	
If the time varies, please specify the typical length (in minutes) for a conversation task sample (e.g., with familiar or unfamiliar communication partner)	
Please enter a single number, representative of a minute. If the typical time is 1 minute, please write: 1.	
If the time varies, please specify the typical length (in minutes) for an interview (e.g., biographical or otherwise) conducted by a clinician.	
Please enter a single number, representative of a minute. If the typical time is 1 minute, please write: 1.	
If the time varies, please specify the typical length (in minutes) for any other type of spoken discourse task sample that you utilize to collect data.	
For this, please 1) say the type of discourse task and then 2) how low a typical sample takes. Please list a single number, representative of a minute. If the typical time is 1 minute, please write: 1.	



## Section 4: Data analysis procedures

In this section, we are going to ask about how you personally transcribe, code, and analyze spoken discourse data in aphasia and your views regarding the collection of reliability information on transcriptions, coding, and analysis.

# Please answer these according to your PRIMARY setting for discourse collection, which you indicated earlier.

Once the spoken discourse data are collected, what are the steps undertaken? (Mark all that apply)	<ul> <li>Listen to the recorded samples</li> <li>Transcribe samples verbatim</li> <li>Code transcripts (e.g., coding of paraphasic errors)</li> <li>Perform detailed analysis of transcripts (e.g., lexical-syntactic analysis using CLAN software)</li> <li>Perceptual judgment-based analysis (e.g., rating of fluency or informativeness, main concept analysis)</li> <li>Make clinical judgment of language ability</li> <li>Other</li> <li>Not applicable</li> </ul>
If you have selected 'other' as an option, please describe the steps you undertake once the discourse	

describe the steps you undertake once the disc data is collected.



Section 4.a. This sub-section specifically asks you about TRANSCRIPTION of discourse	
samples:	
How often are samples transcribed?	<ul> <li>Never</li> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> <li>Not applicable</li> </ul>
If discourse samples are not transcribed, please describe your reasons for not transcribing the samples.	
How often do you personally transcribe the collected discourse samples?	<ul> <li>Never</li> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> <li>Not applicable</li> </ul>
If you personally do not always transcribe the discourse samples, please list the other personnel who transcribe the discourse samples you collect (Mark all that apply).	<ul> <li>A researcher who holds a PhD in a related field</li> <li>A clinician/speech-language pathologist</li> <li>Research assistant or lab manager (not currently enrolled in university, paid for their time)</li> <li>Undergraduate research assistant (is currently enrolled in university, is paid for their time)</li> <li>Graduate level research assistant (is currently enrolled in university, is paid for their time)</li> <li>Graduate level research assistant (is currently enrolled in university, is paid for their time)</li> <li>PhD student whose work involves the data collected</li> <li>Undergraduate student, volunteer (i.e. NOT paid for their time)</li> <li>Graduate student, volunteer (i.e. NOT paid for their time)</li> <li>Other</li> </ul>

If other, please describe.



Section 4.b. This sub-section specifically asks you about CODING of discourse samples:	
How often are samples coded?	<ul> <li>Never</li> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> <li>Not applicable</li> </ul>
If discourse transcriptions are not coded, please describe your reasons for not coding the samples.	
How often do you personally code the transcribed discourse samples?	<ul> <li>Never</li> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> <li>Not applicable</li> </ul>
If you personally do not always code the discourse samples, please list the other personnel who code the discourse transcriptions (Mark all that apply).	<ul> <li>A researcher who holds a PhD in a related field</li> <li>A clinician/speech-language pathologist</li> <li>Research assistant or lab manager (not currently enrolled in university, paid for their time)</li> <li>Undergraduate research assistant (is currently enrolled in university, is paid for their time)</li> <li>Graduate level research assistant (is currently enrolled in university, is paid for their time)</li> <li>Graduate level research assistant (is currently enrolled in university, is paid for their time)</li> <li>PhD student whose work involves the data collected</li> <li>Undergraduate student, volunteer (i.e. NOT paid for their time)</li> <li>Graduate student, volunteer (i.e. NOT paid for their time)</li> <li>Other</li> </ul>

If other, please describe.



Section 4.b. This sub-section specifically asks you about ANALYSIS of discourse samples:	
How often are the samples analyzed?	<ul> <li>Never</li> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
If discourse samples are not analyzed, please describe your reasons for not analyzing the collected samples.	
How often do you personally analyze the collected discourse samples?	<ul> <li>Never</li> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
If you personally do not always analyze the discourse samples, please list the other personnel who analyze the discourse samples you collect (Mark all that apply).	<ul> <li>A researcher who holds a PhD in a related field</li> <li>A clinician/speech-language pathologist</li> <li>Research assistant or lab manager (not currently enrolled in university, paid for their time)</li> <li>Undergraduate research assistant (is currently enrolled in university, is paid for their time)</li> <li>Graduate level research assistant (is currently enrolled in university, is paid for their time)</li> <li>Graduate level research assistant (is currently enrolled in university, is paid for their time)</li> <li>PhD student whose work involves the data collected</li> <li>Undergraduate student, volunteer (i.e. NOT paid for their time)</li> <li>Graduate student, volunteer (i.e. NOT paid for their time)</li> <li>Other</li> </ul>
If other, please describe.	
How are discourse samples analyzed?	<ul> <li>Computerized Language Analysis (CLAN)</li> <li>Systematic Analysis of Language Transcripts (SALT)</li> <li>Computerized Propositional Idea Density Rater (CPIDR)</li> <li>PRAAT</li> <li>Manual coding and analysis (e.g., main concepts, local and global coherence analysis)</li> <li>Standardized aphasia assessment ratings (e.g., the WAB, BDAE)</li> <li>Clinical judgment and summary</li> <li>No specific procedure</li> <li>Other</li> </ul>

If you have answered 'other', please specify how you analyse your discourse samples



Section 4.c. These next questions will ask more about choices and procedures regarding data	
analysis	
Do you personally train your raters?	<ul> <li>Yes</li> <li>No</li> <li>I teach in conjunction with other(s)</li> </ul>
Who trains the raters? Please note if this trainer is consistent, and/or the training method (e.g. a video).	
Is there a specific training protocol to train raters on transcription, coding, and/or analysis?	○ Yes ○ No
Please elaborate on the protocol that is used to train your re-raters on transcription, coding, and/or analysis. Please also mention who created this protocol (if that is known) and how long your lab / clinic has used it.	
Is this protocol freely available and easily accessible online?	○ Yes ○ No
If you would like to share where your information is kept, please include a link here:	
What are the ways you (or people you train) determine utterance boundaries when transcribing?	<ul> <li>T-units</li> <li>C-units</li> <li>Full ideas</li> <li>Noun phrase</li> <li>Verb phrase</li> <li>Syntactic indicators (e.g., well-formed sentence)</li> <li>Intonational indicators</li> <li>Pauses</li> <li>Both syntactic and intonation/pausing indicators</li> <li>Semantic criteria (e.g., semantic categories such as object vs. action)</li> <li>Other</li> </ul>

If you have answered 'other', please describe how you differentiate utterance for analysis.



What specific discourse measures do you extract most often from spoken discourse analysis? (Mark all the apply).	<ul> <li>Rate of speech (e.g. words per minute)</li> <li>Sample length (i.e., duration of sample in terms of time)</li> <li>Gross output (i.e., in terms of total number of words or utterances)</li> <li>Fluency (e.g. halting, telegraphic speech, hesitations, retracings)</li> <li>Word class variables (e.g. number or percent of nouns, verbs, etc)</li> <li>Syntactic variables (e.g. noun-verb ratio, % of complete sentences, mean length of utterance, etc)</li> <li>Grammatical errors (e.g. agrammatism, paragrammatism)</li> <li>Lexical variables (e.g. lexical diversity, propositional idea density, open-closed class word ratio)</li> <li>Informational content (e.g. correct information units)</li> <li>Functional / macrostructural information (e.g. story grammar, main concept analysis, cohesion, coherence)</li> <li>Error paraphasias (e.g. number and type of paraphasias, false starts, retracings)</li> <li>Conversational speech (e.g. communicative effectiveness, topic management, turn taking)</li> <li>Other measures</li> </ul>
Please indicate how frequently you evaluate speech rate (e.g. words per minute)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
Please indicate how frequently you evaluate sample length (e.g., duration of sample in terms of time)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
Please indicate how frequently you evaluate gross output (e.g., in terms of total number of words or utterances)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
Please indicate how frequently you evaluate fluency (i.e., halting, telegraphic speech, hesitations, retracings)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
Please indicate how frequently you evaluate word class variables (e.g., number or percent of nouns, verbs)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
Please indicate how frequently you evaluate syntactic variables (e.g. noun-verb ratio, % of complete sentences, mean length of utterance, etc.)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>



Please indicate how frequently you evaluate grammatical errors (e.g. agrammatism, paragrammatism, morphological)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
Please indicate how frequently you evaluate lexical variables (e.g. lexical diversity [TTR, MATTR], propositional idea density, open-closed class word ratio)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
Please indicate how frequently you evaluate informational content (e.g. correct information units)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
Please indicate how frequently you evaluate functional / macrostructural information (e.g. story grammar, main concept analysis, cohesion, coherence)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
Please indicate how frequently you perform error analysis (e.g., number and type of paraphasias, false starts, retracings)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
Please indicate how frequently you evaluate conversational speech (e.g. communicative effectiveness, topic management, turn taking)	<ul> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
Please list any other specific discourse measures (in addition to the ones listed above) you use most often in spoken discourse analysis. Please also indicate how frequently you use these measures (i.e., rarely, sometimes, usually, always).	
How do you select your discourse outcome measures? (Mark all that apply)	<ul> <li>They were used in publications describing a similar therapy/assessment programs as mine</li> <li>They were used in populations similar to my population</li> <li>The lab/facility has consistently used these outcomes in the past</li> <li>There are normative data available for these discourse measures</li> <li>There are published psychometric properties describing the measure's stability and validity</li> <li>There are unpublished psychometric properties from my own lab describing the measure's stability and validity</li> <li>I have training/experience in using these discourse outcome measures</li> <li>Other</li> </ul>
If you have answered 'other', please describe how you	

select your discourse outcome measures.



Thinking about people involved in transcribing, coding and/or analysis of discourse data, what are the typical education backgrounds of these people? (Mark all that apply)	<ul> <li>Speech-language pathology</li> <li>Psychology</li> <li>Neuroscience</li> <li>Linguistics</li> <li>Education</li> <li>Not applicable</li> <li>Other</li> </ul>
If you have answered 'other', please mention the educational background of your re-raters.	



Section 5	
In this section, we are going to ask you some q discourse-derived outcomes (e.g. validity, stab	
Please answer these according to your PRIMAR	
indicated earlier.	
Select all times when you collect data regarding inter-rater and/or intra-rater reliability.	<ul> <li>Transcription</li> <li>Coding</li> <li>Analysis</li> <li>Do not check reliability</li> </ul>
If you do not collect inter- or intra-rater reliability data, please elaborate on the reasons why not.	
How often do you evaluate the psychometric information (e.g., reliability, validity, and acceptability) of the measures you use for spoken discourse analysis?	<ul> <li>Never</li> <li>Rarely</li> <li>Sometimes</li> <li>Usually</li> <li>Always</li> </ul>
If the reliability is checked, who is involved in the reliability check? (Mark all that apply)	<ul> <li>Myself</li> <li>A researcher who holds a PhD in a related field</li> <li>A clinician/speech-language pathologist</li> <li>Research assistant or lab manager (not currently enrolled in university, paid for their time)</li> <li>Undergraduate research assistant (is currently enrolled in university, is paid for their time)</li> <li>Graduate level research assistant (is currently enrolled in university, is paid for their time)</li> <li>Graduate level research assistant (is currently enrolled in university, is paid for their time)</li> <li>PhD student whose work involves the data collected</li> <li>Undergraduate student, volunteer (i.e. NOT paid for their time)</li> <li>Graduate student, volunteer (i.e. NOT paid for their time)</li> <li>Other</li> <li>N/A</li> </ul>
If you have selected 'other', please list the other personnel who conduct the reliability check.	
If applicable, please list the tool (e.g., manual checking, software) that you use to check reliability.	
Regarding inter-rater and/or intra-rater reliability, indicate what discourse-derived measures you consistently check for reliability	<ul> <li>Total utterances</li> <li>Total words (or tokens)</li> <li>All outcome measures of interest (e.g. MLU, main concepts)</li> <li>Some outcome measures of interest</li> <li>Other</li> <li>Not applicable</li> </ul>
If applicable, please elaborate on how you choose which measures to assess inter- and intra-rater reliability.	



To quantify inter- or intra-rater reliability, what metrics do you typically employ?	<ul> <li>Intraclass correlation coefficient</li> <li>Percent agreement</li> <li>Pearson's r or other correlation coefficient</li> <li>Other</li> <li>None</li> <li>N/A</li> </ul>
If other, please list other metrics you use to quantify inter- or intra-rater reliability	
How often do you collect test-retest data for your samples?	<ul> <li>Never</li> <li>Sometimes</li> <li>Often</li> <li>Usually</li> <li>Always</li> </ul>
If not always, please describe reasons for not	

If not always, please describe reasons for not collecting test-retest data



Section 5.a. Psychometric data, in general.	
In general, do you actively look for psychometric properties (measurement stability such as test-retest reliability; validity) of discourse outcomes prior to choosing them?	<ul> <li>○ Yes</li> <li>○ No</li> <li>○ Sometimes</li> </ul>
Please describe the reason(s) why you actively look for psychometric properties of discourse outcomes prior to choosing them.	
Please describe the reasons(s) why you do not actively look for psychometric properties of discourse outcomes prior to choosing them.	
Please elaborate on specific psychometric properties you are most interested in.	
In general, do you feel that there is adequate data evaluating psychometric properties of spoken discourse outcome measures?	○ Yes ○ No
Do you actively look for whether normative data is available for the discourse outcome measures prior to choosing them?	<ul> <li>Yes</li> <li>No</li> <li>Sometimes</li> </ul>
Please describe the reason(s) why you actively look for whether normative data are available for the discourse outcome measures prior to choosing them.	
Please describe the reason(s) why you do not actively look for whether normative data are available for the discourse outcome measures prior to choosing them.	
Do you currently feel that there is adequate normative data on discourse-derived measures?	<ul> <li>Yes</li> <li>No</li> <li>Sometimes, depending on the measure</li> <li>I don't believe normative data are required for discourse-derived measures being used</li> </ul>
If there was a database of psychometric properties and/or normative data of discourse outcomes in speakers with and without aphasia across a variety of discourse tasks (e.g., hosted on AphasiaBank, for instance), would this be useful?	○ Yes ○ No
Why or why not?	
What are your barriers to collecting psychometric data? (Mark all that apply)	<ul> <li>Time</li> <li>Funds</li> <li>Personnel</li> <li>Knowledge and training regarding collecting psychometric information (e.g., statistical analysis to use)</li> <li>Other</li> </ul>



If you have answered 'other', please describe your other barriers to collecting psychometric data.	
Do you go to any resource (freely available) to identify what information to report in your clinical report/research study manuscript regarding spoken discourse analysis? For example: reporting rater reliability, inclusion/exclusion parameters, description of discourse analysis procedures.	○ Yes ○ No
Please provide a link to these resources or describe here	
Please share a few insights into how to facilitate using, analyzing, and publishing spoken discourse data in aphasia.	

Thank you for your cooperation in completing this survey. If you are interested in the area or if you are willing to be contacted for a survey follow-up, please email Dr. Brielle Stark at bcstark@iu.edu or visit our FOQUSAphasia website (www.foqusaphasia.com)

