

## **Supplemental Material S1.** Survey methodology, questions, flier, and demographic summary of participants.

This web-based survey queried clinician's confidence levels in making a differential diagnosis of CAS and dysarthria. Qualtrics software was used to develop this open survey, which was tested before deploying via social media. The survey contained 14 questions, which were presented in the set order shown below. Questions were distributed over 6 pages and respondents were able to change answers within the same page but once they had progressed to a subsequent page, they could not revise their previous answers. All survey procedures were reviewed by the Marquette University IRB and deemed to be exempt.

The first page of the survey included a description of the content, how long it was expected to take to complete, who the investigator was and a place for participants to click to indicate their agreement to participate. No identifying information, including IP address was collected. To prevent any individual from submitting more than one survey, cookies were used to assign a unique identifier to each participant's computer and the "prevent multiple submissions" function of Qualtrics was used.

A Qualtrics link was distributed electronically through social media (e.g., Facebook professional groups, Instagram accounts focused on speech sound disorders including some accounts that focus on motor speech disorders specifically) using snowball recruiting in which participants help to recruit other participants to achieve a convenience sample. In this case, clinicians were encouraged to complete the survey and also share the survey on their social media accounts to help grow the sample size. Because of this method of recruitment, it is not possible to determine how many speech language pathologists were made aware of the survey, however 447 individuals agreed to participate.

No incentives were offered for completion of this voluntary survey. Data were collected over the course of two weeks. Following the consent page, a CAPTCHA was used to ensure integrity of responses to the remainder of survey questions. Approximately 14% of respondents stopped participating after the initial consent question, which may indicate that they were bots foiled by the CAPTCHA. The completion rate was 81%. Another 6% stopped participating after completing the first question about their number of years in the field resulting in 359 survey responses to all remaining questions. The completeness rate, therefore, was 79%.

## **Results**

### *Demographics*

Collection of a limited number of demographic variables revealed that the majority of respondents (60%) had 10 or fewer years of experience. Of the respondents, 40% reported practicing in private practice, 28% in the schools, 13% in outpatient clinic, 8% in an outpatient hospital, 1% in an inpatient hospital, and 10% indicated an "other" type of setting which most often indicated a Birth-to-Three/Early Intervention, university, homehealth, or preschool setting. Overall, 55% of respondents reported working with children in the 4–6-year-old range, followed by birth-to-three (19%), equal across ages (15%), 7–10-year-olds (9%), 11–14-year-olds (1%), and 15–18-year-olds (< 1%).

### *Clinician Expertise*

Respondents reported that on average children with motor speech disorders made up 27% of their caseloads ( $SD = 24$ , range = 0–100%). In addition, they reported that on average 6% of their caseloads have pediatric dysarthria ( $SD = 11$ , range = 0–96%) and 16% have CAS ( $SD = 20$ ; range = 0–100%).

**Advertising Flyer**

**Hey Pediatric SLPs!**

**How comfortable are  
you diagnosing CAS  
and dysarthria?**

Take our brief 4 minute survey to tell us  
about your confidence in differentiating  
children with motor speech disorders!

Find the survey at:

<https://bit.ly/PediatricSLP> or linked in our Instagram bio

NOT limited to speech-language pathologists in the USA

Insta @marquette\_cml\_lab

## Survey Questions

Page 1

Consent paragraph with click to "agree" or "disagree" to participate

Page 2

Captcha to verify the respondent is not a robot

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- How long have you practiced as a pediatric speech-language pathologist?  
[Dropdowns to indicate *0–5 years, 6–10, 11–15, 16–25, 26–35, 36–45, 46+*]
- In what type of setting do you practice?  
[Multiple select response to indicate *school, private practice, hospital (inpatient), hospital (outpatient), outpatient clinic, other* with a space to write in response]
- What is your clients' average age range?  
[Multiple choice response to indicate *birth to 3 years, 4–6 years, 7–10 years, 11–14 years, 15–18 years, equal across ages*]
- What percent of your pediatric caseload in a given year has motor speech disorders?  
[Slider to indicate 0–100%]
- What percent of your pediatric caseload in a given year has a diagnosis of dysarthria?  
[Slider to indicate 0–100%]
- What percent of your pediatric caseload in a given year has a diagnosis of childhood apraxia of speech?  
[Slider to indicate 0–100%]

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- How do you feel about your ability to differentially diagnose a child with childhood apraxia of speech (verbal dyspraxia)?  
[Multiple choice to indicate *low confidence, moderately confident, highly confident*]
- How do you feel about your ability to differentially diagnose a child with childhood apraxia of speech (verbal dyspraxia)?  
[Multiple choice to indicate *low confidence, moderately confident, highly confident*]
- How do you feel about your ability to differentially diagnose a child with dysarthria?  
[Multiple choice to indicate *low confidence, moderately confident, highly confident*]
- To what extent does the following statement describe you? "I tend to not diagnose children with childhood apraxia of speech because I'm not quite sure how to make the diagnosis."  
[Multiple choice to indicate *somewhat describes me, mostly describes me, completely describes me.*]
- To what extent does the following statement describe you? "I tend to not diagnose children with dysarthria because I'm not quite sure how to make the diagnosis."  
[Multiple choice to indicate *does not describe me at all, somewhat describes me, mostly describes me, completely describes me.*]
- Please tell us anything else you want us to know about your comfort level in differentially diagnosing motor speech disorders? For instance, in your role as an SLP [indicate setting] are you prohibited from diagnosing childhood apraxia of speech or dysarthria?

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Thank you for providing your valuable insight! If you would like to be contacted about future relevant studies, follow this link that will open in a new window to provide your email address. (Please finish the current survey before switching windows to fill out your email information).

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We thank you for your time spent taking this survey. Your response has been recorded.