

The Language-Literacy Bridges Project: Developmental Language Disorders in Children

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INTRODUCTION

- The Language-Literacy Bridges Project, conducted in the School-based Practices, Effectiveness, and Research (SPEAR) Lab at Florida State University's School of Communication Science and Disorders, investigates language learning in children through group studies with speech-language pathologists (SLPs). This research study aims to enhance understanding language development challenges, particularly in children with Developmental Language Disorders (DLD). Given the prevalence of DLD, with an estimated 7.58% of children affected, it is one of the most common neurodevelopmental disorders (McGregor, 2020). To help enhance educational results we are researching how SLP practices influence language intervention in reading outcomes within school-age children across the United States.
- Through focus group interviews, this research seeks to identify key themes among SLPs related to their professional perspectives and use of evidence-based practices (EBP), including discussion of perceived facilitators and barriers to support reading comprehension. Acknowledging the persistent challenges in reading comprehension and treatment effectiveness, this study seeks to refine intervention strategies and bridge literacy gaps in child education. The findings will contribute to advancing language-learning support and improving educational outcomes for children with DLD.

METHOD

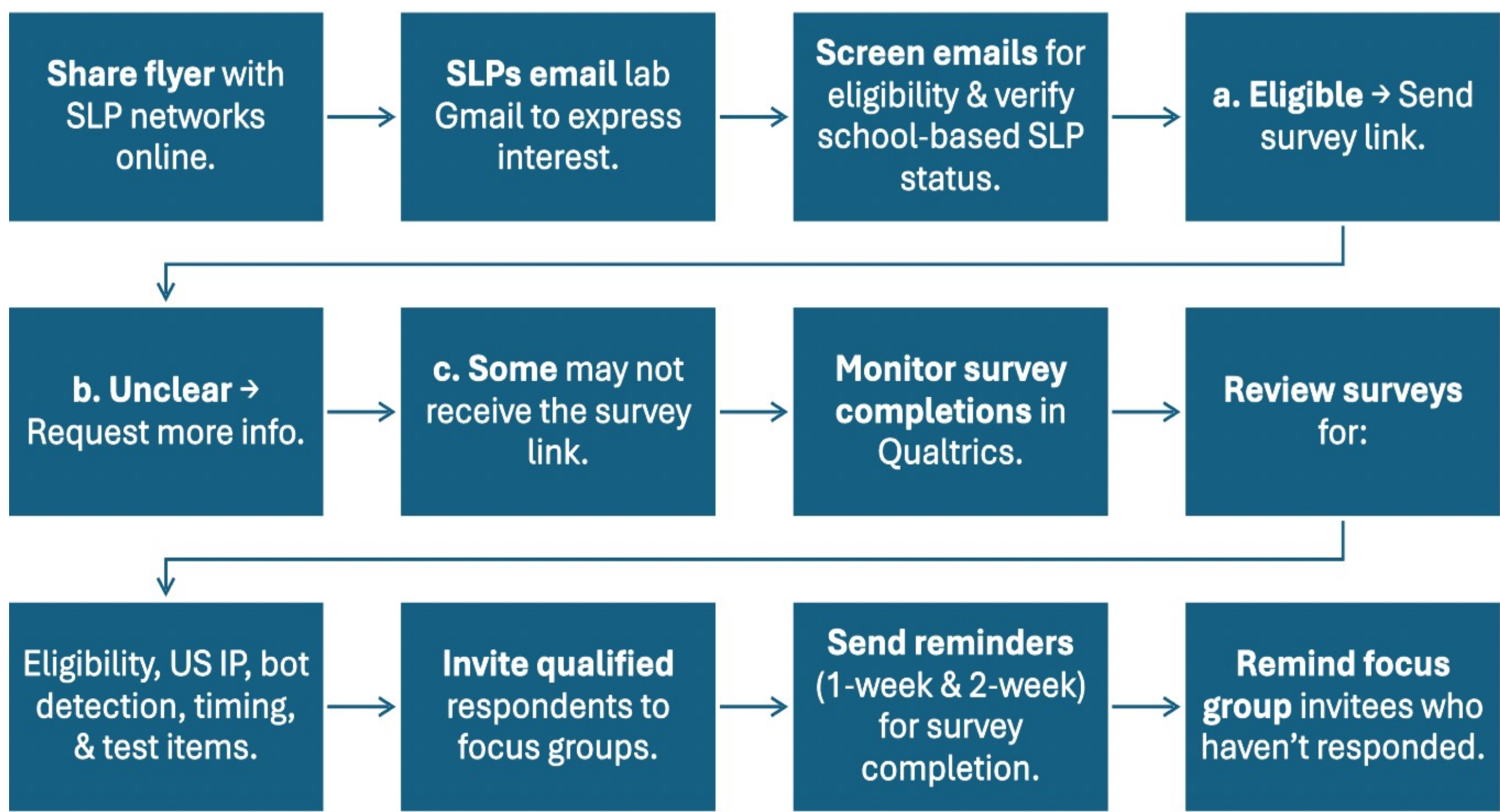
- This study uses a qualitative research method with semi-structured focus group interviews and thematic content analysis.
- 20 participants were recruited through school-based SLP communities online and a recruitment survey. Eligible participants had to be engaged in direct service provision with a speech-language therapy caseload in a school setting, and professional credentials were verified.
- 3 focus group sessions were held after school hours via HIPAA-compliant Zoom-web conferencing.
- Data saturation was reached with 20 participants in 3 groups.
- Audio transcripts of each focus group session were transcribed by AI and organized by the unit of conversational turn. Coding of transcripts was first completed manually in Word, and then with DeDoose software for summary analysis of major and sub-themes, consensus, and variation.
- Example code: P1-"I've even started working with a little bit of AI taking some of the curriculum and feeding it into AI and simplifying the text for my kids that are struggling decoders" [TECH] [CURR]

REFERENCES

- Thank you to the Center of Undergraduate Research and Academic Engagement for the opportunity to participate in the Undergraduate Research Opportunity Program (U.R.O.P).
- Thank you to Dr. Shannon Hall-Mills for her support and leadership throughout this project.



Participant Interview Flow Chart



Participant Interview Questions

| Question Category | Question |
|-----------------------|---|
| Opening question | Tell me about the experiences you have had with supporting reading comprehension to students during language intervention. How long have you provided this support? |
| Introductory question | Let's talk about what you do when you need to make decisions regarding the direction of language intervention for students on your caseload. What do you have to consider? What knowledge and skills do you need? What resources do you need? |
| Transition question | What do you like about providing language intervention then supports reading comprehension? If you could change only one thing about your current experience with language intervention to support reading comprehension, what would it be? |
| Key question | What knowledge and skills do you feel you have best developed to target reading comprehension through language intervention? |
| Key question | What knowledge and skills related to children's reading comprehension would you like to add to your repertoire? Which ones do you feel you need most urgently? |
| Key question | How do you collaborate with teachers to support students' reading comprehension? |
| Key question | How do you collaborate with families to support students' reading comprehension? |
| Ending question | Is there anything you would like to share about your views or practices supporting reading comprehension that you have not yet had a chance to share? Is there anything you would like to add? |

Code Frequency Analysis

| Code | Description | % of Total Codes |
|--------|---|------------------|
| [LANG] | Language-based instructional approaches | 19.4% |
| [ROLE] | Role definition & collaboration | 18.8% |
| [CHAL] | Service delivery challenges | 17.3% |
| [SPEC] | Considerations for special populations | 16.8% |
| [PD] | Professional development & resources | 16.2% |
| [TEXT] | Text-based strategies | 15.7% |
| [CURR] | Curriculum & assessment issues | 14.7% |
| [TECH] | Technology integration | 5.8% |

RESULTS

Areas of Consensus:

- Misalignment between curriculum materials and student abilities and reading levels
- The language-literacy connection: All participants articulated the relationship between language skills and reading comprehension.
- Inadequate service delivery model and time constraints: Universal frustration with limited time and frequency of sessions.
- Text Complexity issues: Strong agreement that curriculum texts are often inappropriately complex.

Areas of Variation:

- Technology integration: Varying levels of emphasis on technology tools.
- Professional preparation: There is a significant variation in training backgrounds, from reading specialist certification to minimal formal literacy training.
- Service delivery approaches: Variation in pull-out vs. push-in services and collaboration models.

Implications:

- SLPs perceive themselves as playing a vital role in supporting reading comprehension but face significant structural barriers to effective intervention. There appears to be a critical need for professional development specifically designed for SLPs supporting reading comprehension.
- SLPs are adapting materials and approaches to bridge the gap between student abilities and curriculum expectations.
- SLPs struggle with implementation within current service delivery constraints.
- Collaboration with classroom teachers and other specialists is valued but challenging to implement effectively.
- Interrater reliability rates were 80% or higher for coding each transcript.

DISCUSSION

- The focus groups described their experiences and roles with helping teachers with their instruction and the learning outcomes of students without DLD which reinforces the findings of the Powell (2018) study.
- The conclusions of the Catts & Kamhi study were also reinforced as the focus groups agreed that reading comprehension is a complicated skill involving a multitude of vocabulary, syntax, and contextual knowledge.
- Limitations: SLPs were recruited through online networked groups (selection bias). Results are based on self-report (vs. direct observation). Group discussion may mask disagreements.
- Future research to help further knowledge could be through recruiting SLPs specifically who work with special needs children to compare the data. Another idea for future research is tracking the progress of students with DLD through testing with SLP treatment, as there were concerns if SLPs make a difference with such a short time frame with students.