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WORKING WITH BILINGUAL POPULATIONS: CLINICAL PRACTICES OF SPEECH-LANGUAGE PATHOLOGISTS IN NEW MEXICO

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ABSTRACT

New Mexico is uniquely positioned as a state that has more bilingual speakers than the United States on average, meaning that Speech Language Pathologists (SLPs) here are more likely to work with bilingual speakers than elsewhere. Best practices for bilingual evaluation and treatment are taught in graduate education for SLPs but the extent to which they are known and utilized by school-based SLPs differs based on many factors.

As the body of research supporting culturally responsive bilingual assessment and intervention continue to grow, it is unknown how or if clinicians are using this knowledge to assess and treat students who speak more than one language. Data from semi-structured interviews suggests many SLPs are following best practices to the best of their ability, but external factors such as systemic policy and availability of resources impact treatment and assessment.

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Aims of the Investigation

Through in-depth, semi-structured interviewing of speech language pathologists (SLPs) working with bilingual populations in New Mexico, this study seeks to understand the current practices of school based SLPs when bilingual clients are assigned to their caseload. Within the field, it is commonly understood that the majority of SLPs are monolingual (ASHA, 2022), at a time when a growing percentage of the United States speaks a language other than English at home (US Census, 2020). While clinicians often learn best practices in bilingual assessment and intervention in their graduate school training, it is not fully understood how this translates to practice and how it may vary from clinician to clinician and setting to setting. Participants were asked to identify 1) their experiences in working with bilingual populations, 2) how they currently treat and assess communication disorders in bilingual clients and 3) their thoughts and beliefs surrounding bilingual speech therapy and their training. Understanding these perspectives can improve how graduate programs address bilingualism and advance therapies offered to bilingual students.

Introduction

Bilingualism is growing within the United States. The bilingual population of the U.S. has almost tripled since the 1980s (U.S. Census Bureau, 2022). The International Expert Panel on Multilingual Children's Speech defines multilingualism to include both bilingualism and multilingualism; this paper uses the term 'bilingual' to match how participants self-identify (IEPMCS, 2012). 22% of the US population speaks a language other than English at home (U.S. Census Bureau, 2022). New Mexico is unique in that bilingual speakers represent 33% percent of the state population, a larger percentage than that

of the US as a whole (US Census, 2020). The potential for bilingual individuals to also be the client of a speech-language pathologist (SLP) is high and continues to grow in the United States. The field of speech-language pathology is tasked with meeting the needs of these bilingual and multilingual individuals with communication challenges.

However, the demographics of these service providers do not match the demographics of current clients. According to the American Speech-Language-Hearing Association (ASHA, 2022), 92% of SLPs report being white, with only 8.2% of providers identifying as multilingual. Importantly, while 65% of those multilingual providers spoke Spanish, only 46% identified as being Latinx. Thus, the number of service providers that are bilingual and match the cultural backgrounds of their clients is even lower than the 8.2% percent reported for multilingual providers in general. As of 2022, 229 of 1369 service providers in New Mexico were identified as being multilingual (ASHA, 2022). Thus, the 16.7% of providers that are bilingual in New Mexico is more than double the 8.2% national average of bilingual providers reported by ASHA (2022). New Mexico's greater concentration of both bilingual speakers and providers offer a unique opportunity to understand the practices of SLPs assessing and treating bilingual clients.

Not surprisingly, serving bilingual individuals continues to be reported as a challenge for SLPs everywhere. Santhanam and Parveen's (2018) systematic review found that SLPs working with culturally and linguistically diverse (CLD) clients reported low clinical efficacy. These difficulties included feeling less confidence, comfort, and competency when working with clients that spoke languages other than English (Santhanam and Parveen, 2018). Narayanan and Ramsdell similarly found only 24% of monolingual SLPs and 57% of multilingual SLPs that responded reported feeling confident when working with multilingual

clients, but that more exposure and training to CLD populations equated to higher confidence ratings (2022).

In addition to appropriate training, adequate resources for working with bilingual clients appear to be essential. SLPs report feeling inadequately prepared to work with CLD students due to limited resources and the lack of knowledge of languages other than English (Hayes et al., 2022; Arias and Friberg, 2016). As a result of lack of resources, SLPs may try to meet the profession's demands in ways not always aligned with evidence-based practices. Surveys of SLPs in the UK, Ireland, and the US all reveal varying levels of completing assessments in both or all a child's languages (Mulgrew et al., 2020; Arias and Friberg, 2016). In many cases, bilingual assessments were not completed if English appeared to be the dominant language (Mulgrew et al., 2020). The most common assessment tool when assessing bilingual children was a language sample in English (Arias and Friberg, 2016). The most frequently identified barriers reported included a lack of access to interpreters, lack of time, and lack of training (Arias and Friberg, 2016).

When selecting measures, most school-based SLPs appear to be using more than one measure to determine eligibility for services. The majority of SLPs surveyed use 4 or more tools for bilingual assessment, with both formal and informal components (Dubasik and Valdivia, 2021). The most common elements were case history, observation, and a language sample (Dubasik and Valdivia, 2021; Arias and Friberg, 2016). However, the most common way the school-based SLPs reported being trained in working with English language learners was through "self-teaching activities", with only 26.6% of respondents said their training was from graduate school education (Dubasik and Valdivia, 2021). While SLPs seem to be utilizing multiple measures in assessment, less is known about how this may transfer to the

treatment of bilingual students with speech and language impairments and how SLPs are being trained to intervene.

The findings of Arias & Friberg (2016) show that SLPs in school-based settings may differ from those in clinical settings. The study aimed to assess current best practices used by SLPs when assessing a suspected speech or language impairment and to specify barriers to carrying out known best practices. While Arias and Friberg (2016) found that while SLPs working in public schools are adhering more closely to best practice guidelines for bilingual assessment set forth by ASHA, there is still room for improvement in use of interpreters and selecting appropriate measures. Their survey demonstrated that only 36% of respondents often collected language samples in both English and the child's native language, and only 28% often used dynamic assessment, despite both concepts having been identified as part of best practice for bilingual assessment (Arias and Friberg, 2016). Common barriers cited by clinicians were lack of interpreters, lack of time, and lack of resources (i.e. standardized assessments). The 2016 results indicate that SLPs have advanced their understanding of bilingual best practice but still face challenges in training and implementation (Aria and Friberg). The authors share that more research is needed continue to "expand what is known" about SLPs working with bilingual, school-aged populations (Arias and Friberg, 2016).

Current Best Practices and Guidelines

Many of the best practice recommendations for the evaluation and treatment of speech and language disorders are applicable to both monolingual and bilingual students. ASHA's Preferred Practice Patterns expand on the Individuals with Disabilities Education Act (IDEA, 2004) to outline current best practices (ASHA, 2004). Similarly, the New

Mexico Public Education Department (NM PED) (also in accordance with IDEA (2004)), dictates procedures for evaluation and assessment of CLD students in their Technical Evaluation and Assessment Manual (TEAM) (New Mexico Public Education Department, 2017). TEAM Section 4, “Multilingual Assessment Issues in New Mexico”, is specifically intended to “reduce bias and provide suggestions” to better assess the state’s “diverse student population” (New Mexico Public Education Department, 2017). NM PED draws attention to the importance of the guidelines in a state that “has a history of over-identification" of CLD students “as children with disabilities”, specifically in speech and language impairments (New Mexico Public Education Department, 2017).

Specific suggestions in NM TEAM are in line with ASHA’s best practices: gathering socio-cultural information, family involvement through interview and observation, and targeted interventions with multilingual instructional supports (ASHA, 2004, New Mexico Public Education Department, 2017). Importantly, ASHA’s best practices for evaluating bilingual children includes assessment of both languages regardless of dominancy (2004), as language skills may present differently across languages. ASHA notes that the assessments used should be “ecologically valid”, and consider a student’s experiences and school curriculum, while treatment should be “culturally and linguistically relevant” and supported by trained interpreters as needed (ASHA 2004). The Preferred Practice Patterns also emphasize use of the World Health Organization’s International Classification of Functioning, Disability and Health (WHO-ICF) to assess how each client’s languages may affect their ability to participate in activities and how contextual factors may facilitate or act as a barrier to said activities (ASHA, 2004).

Purpose of Current Investigation

Evaluating bilingual children continues to be a challenge for SLPs, and how SLPs assess and treat in the state of New Mexico has yet to be explored. As bilingualism continues to grow in the United States, understanding the basis of what is currently being done in bilingual speech and language assessment and intervention may guide future recommendations or areas in which change is needed to better serve clients. Arias and Friberg (2016) examined a broad sample of SLPs best practices in schools. By focusing on one state (New Mexico) with a high percentage of bilingual speakers, this study aims to survey SLPs on current practices regarding bilingual assessment and intervention more narrowly. Thematic analysis of interviews with clinicians may not only reveal the actual assessment and intervention practices currently used by bilingual SLPs, but also show where there may be improvement in graduate education and continuing education for all SLPs working with bilingual populations.

Methods

Research Design

This study was approved by the Institutional Review Board (IRB) of the University of New Mexico. This study utilized in-depth, semi-structured qualitative interviews of speech-language pathologists in New Mexico. Interviews were analyzed using thematic analysis (Braun & Clarke, 2006, Terry & Hayfield, 2021, and Kiger & Varpio, 2020). The current study is a follow up to a prior survey-based study completed in May 2023, which will be presented separately. The survey served to collect demographic profiles of SLPs in New Mexico across settings and was used to recruit interviewees for the research at hand. Interviews were carried out between July 7, and July 24, 2023.

Investigator Profiles

A graduate student researcher at UNM in the speech-language pathology program, Wylie Skillman (she/her), completed the interview portion of the study. Prior to graduate school, the researcher held a BS in Anthropology and had previously taught science, nutrition, and gardening to K-12 students, many of whom were bilingual. As a clinician in training, the first researcher did not have firsthand experience in evaluating bilingual clients and reports a conversational understanding of Spanish. At the time the study was conducted, she had participated in Comunidad Crecer for 2 semesters. This interdisciplinary extracurricular within the department focuses on cross-cultural growth and virtual knowledge exchanges with Comunidad Crecer, a school for children with multiple disabilities in Mexico City. In addition, Skillman had completed 8 bilingual treatment hours under the supervisor of a clinical instructor in Spanish and taken Multicultural Considerations in Communication through the UNM Speech and Hearing Sciences Department. The first researcher entered the

investigation with limited preconceptions about current best practices for bilingual speech and language interventions. The first researcher was new to interviewing and conducting qualitative research.

Dr. Carlos D. Irizarry Pérez (he/him) is an Assistant Professor at the University of New Mexico and principal investigator of the Bilingual Speech and Language Lab (BSL) at UNM. Dr. Irizarry-Pérez is a Spanish-English bilingual individual himself, identifies as Latino, person of color, and has practiced as a bilingual speech-language pathologist in the public schools in states other than New Mexico. His academic work focuses on the intervention of speech sound disorders in bilingual children and facilitating generalization of speech skills across languages. He also teaches graduate courses in bilingual acquisition, culturally responsive clinical practices, and bilingual assessment and intervention.

The third author, Dr. Rick Arenas, is an associate professor at UNM whose primary research is in the area of developmental stuttering. Dr. Arenas served as the primary consultant for questions surrounding thematic analysis processes and theme development. Dr. Arenas is monolingual.

The fourth author created the initial survey as a 2nd year graduate student working in Dr. Irizarry Pérez's BSL Lab in 2022. As a bilingual New Mexico resident, the fourth author was the first to wonder about the practices of SLPs within the state and formulated the basis of the research question at hand.

The first two authors examined their personal beliefs and potential biases surrounding the research question both prior to conducting interviews and throughout the process. The first author journaled thoughts and beliefs throughout the interviewing, analysis, and writing steps to better clarify what was guiding the thematic analysis.

Participant Selection and Setting

Recruitment and Participant Profiles

Participants consisted of six adults, all currently registered SLPs in New Mexico, with experience in the field ranging from four to thirty-one years. The gender ratio was four females to one male. Participants were recruited via distribution of an IRB-approved survey distributed in May 2023 via Qualtrics © by the fourth author. The survey was first sent to a seven-person expert panel for feedback in February of 2023. The expert panel consisted of three professors and two bilingual clinical supervisors in departments of Speech and Hearing Sciences, one monolingual, school-based SLP, and one bilingual, school-based SLP. These individuals were selected based on their areas of expertise and client demographics. We received the responses from six of the seven individuals. Based on the feedback we received, we revised our survey. We then sent this survey to the monolingual, school-based SLP to review to ensure all technical aspects worked. The survey was sent via the ASHA online member directory for New Mexico to all 1225 SLPs listed. 189 SLPs responded and the survey had a 6.5% response rate. SLPs were given the option to include contact information if they wanted to be interviewed further. All 27 respondents who left an email address were contacted via email in June 2023 to schedule interviews. If participants responded, investigators verified that all participants met the following inclusion criteria: a) identified as a bilingual SLP b) identified as working with bilingual or multilingual populations on their caseload and c) identified as working in a school setting. One bilingual participant responded to the survey and self-identified as working as a school, but interviews revealed they did not currently work in that setting. This interview was completed and coded but upon deeper discussion of inclusion criteria and the research question, was eventually discarded.

Additional information regarding participant demographics can be found in Table 1. Any therapist who did not work with bilingual populations was dismissed from the recruitment process. All respondents meeting inclusion criteria who responded to requests for interviews were included. The sample size of five participants is in line with best practices for TA, as each participant's interview made a “significant contribution” to the data set (Terry & Hayfield, 2021).

Table 1

Participant Demographic Data

Participant ID	Setting	Languages Spoken by SLP	Languages (other than English) Spoken by Students on Caseload
Participant 1	Preschool – High School	Spanish, English	Spanish, Keres, Diné, Tewa
Participant 2	Preschool – Elementary	Spanish, English	Spanish
Participant 3	Elementary	American Sign Language, English	Spanish, American Sign Language
Participant 4	Preschool	Spanish, English	Spanish, Vietnamese, French, others
Participant 6	Preschool – High School	Spanish, English	Spanish, Diné, Yoruba

Researcher-Participant Relationships

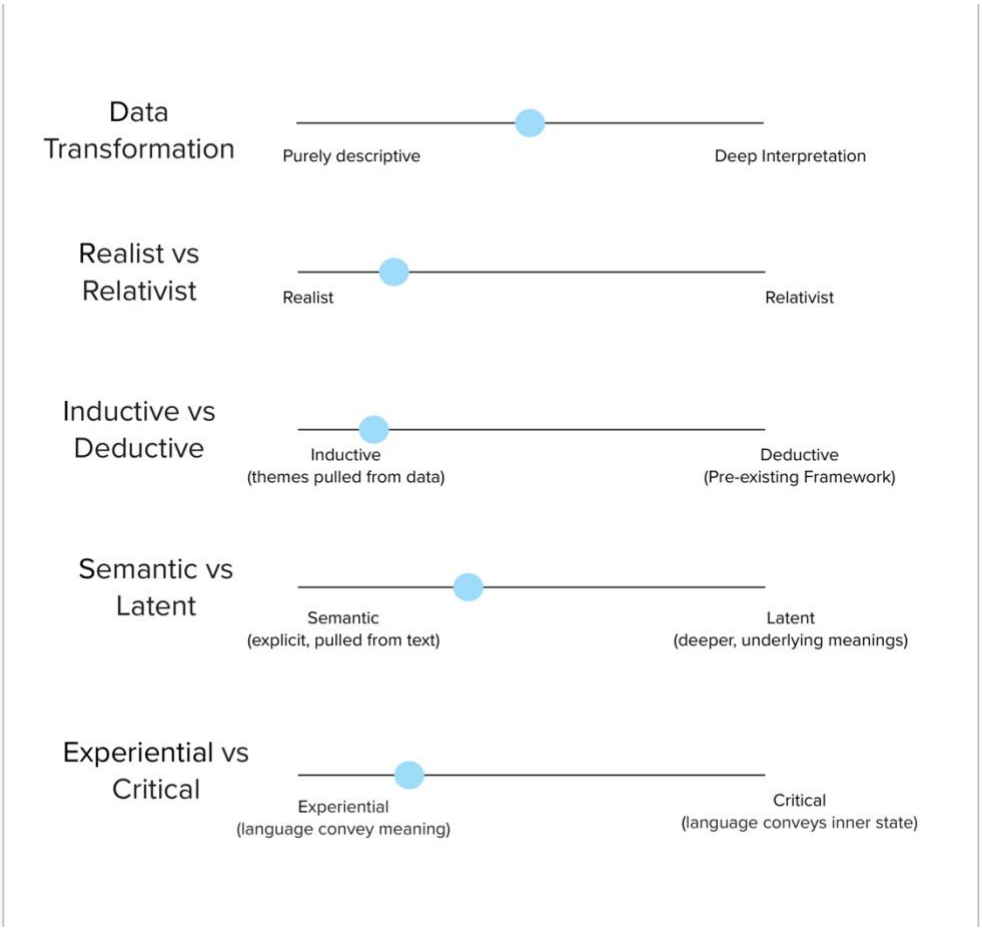
Beyond initial contact through the ASHA website inviting SLPs to take the survey, the primary investigators had limited relationships with the participants interviewed. Two bilingual SLPs who responded to interview requests had been one-time guest speakers in UNM graduate courses and were somewhat known to the researchers. While all SLPs interviewed were initially contacted via the ASHA portal for the survey, six bilingual SLPs initially responded to the request for further interviews. The goal was to have equal numbers of bilingual and monolingual provider interviews for the research. The monolingual interviewees were broken into their own data set due to size of the data set and researcher time constraints and will be discussed in a future publication.

Theoretical Framework - Thematic Analysis

This paper was published in accordance with the Consolidated Criteria for Reporting Qualitative Research checklist to promote "explicit and comprehensive" qualitative interview research (Tong et al., 2007). It was used in conjunction with a six-step process for thematic analysis put forth by Braun and Clarke (2006) and expanded on by Terry and Hayfield (2021).

We took a reflexive thematic analysis (TA) approach to research, informed by Terry & Hayfield (2021). To prepare for the interviews, the investigators read texts on thematic analysis and ethnographic interviewing (Kiger & Varpio, 2020, Braun & Clarke 2006, Terry & Hayfield, 2021). Thematic analysis was chosen to analyze qualitative data from the interviews based on its ability to "understand experiences, thoughts, or behaviors across a data set" (Kiger & Varpio, 2020). While TA is grounded in ethnography, its primary strength is the ability to "construct themes to reframe...and/or connect elements of the data" (Kiger & Varpio, 2020) without being overly descriptive or interpretive. Quality TA analysis should reflect "theoretical orientations and descriptions of the process" and positionality unique to each project's "methodological package" (Terry & Hayfield, 2021). Figure 1 details the specific positionality of the reflexive thematic analysis performed, which skewed more towards realist, inductive, semantic, experiential process with moderate data transformation. TA recognizes that the individual researcher's world views, life experience, and decision making in analysis are an unavoidable and active component of the analysis itself (Braun & Clarke, 2006). Through naming the distinct 'flavor' of TA used (Figure 1), readers can better understand how the dataset was analyzed.

Figure 1
Positionality of Reflective Thematic Analysis



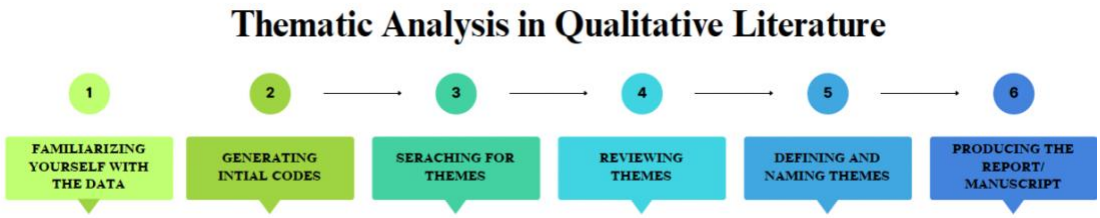
(Adapted from Braun & Clarke (2006) and Terry & Hayfield (2021))

TA was used reflexively, indicating that themes inherently involve the researchers' own worldviews, but remain rooted in the interviewee's words. Theories that informed TA included the paradigm of evidence-based practice and culturally responsive intervention practices discussed earlier. However, interpretations of data were generated from connections between the interviews, as opposed to being rooted in a particular theory. Braun and Clarke's six-step method of qualitative analysis was followed: 1) Familiarizing yourself with the data 2) Generating initial codes 3) Searching for themes 4) Reviewing themes 5) Defining and naming themes and 6) Producing the report. This process is presented in Figure 2.

While the first and second author are primarily responsible for the analysis of the data, the third author helped to clarify thematic analysis processes and offer guidance throughout. The process outlined below was not done linearly, and instead steps 1-4 were revisited at various points before themes were finalized and the manuscript written (steps 5-6).

Figure 2

Six Steps to Thematic Analysis



(Adapted from Braun & Clarke (2006) and Kiger & Varpio (2020))

1) **Familiarization with the data:** Both researchers read all six bilingual interviews between July and September 2023. Deidentified interview audio was sent to a professional transcription service and errors were corrected by the first author through relistening to interview audio while simultaneously reading the transcripts. Initial errors in transcription equated to less than five percent of total text and were clarified and edited upon relistening.
2) **Generating Initial Codes:** Kiger and Varpio (2020), in detailing Braun and Clarke's 2006 method for thematic analysis, note that coding is separate from themes in that codes represent "the most basic segments" of data and should fit into a larger framework. Conversely, themes represent broader significance and are "constructed by the researcher" as codes are analyzed to extrapolate a fuller picture (Kiger & Varpio, 2020). Inductive analysis in reviewing themes was chosen as the themes are

often more “reflective of the entire data set” and reduce risk of investigator-introduced bias (Kiger & Varpio, 2020). Both authors independently generated codes over transcripts through coding software Atlas.ti (first author) and handwriting (second author). Deeper engagement with the data came about through the collaborative discussion of initial codes, as both researchers met in person and via Zoom to revise and review codes in four of the six interviews. Once a shared understanding of codes was felt to be reached, the remaining two interviews were re-coded by the first researcher to better match the refined code list. Interrater reliability is discordant to the theory of reflexivity that underpins the TA process. Instead, both researchers agreed codes were generated semantically, using the interviewees' own language, and were discussed throughout the collaborative portion of familiarization and coding phase (see Figure 3). Codes were then refined on a rolling basis as they were consolidated, discarded, and newly generated to better reflect the shared experience of the researchers. Codes that did not match were discussed and a) overlayed on top of one another or b) changed to better match the discussion’s outcome. 39 final codes emerged.

3) **Searching for Themes:** Possible themes were derived inductively, primarily through prevalence of codes, as no pre-existing framework existed. Themes were proposed during the coding process but were not solidified until all 6 interviews had been discussed by both researchers.
4) **Developing and Reviewing Themes:** In reflexive TA, themes do not “emerge” but are instead “actively constructed” by the researchers (Terry & Hayfield, 2021). The discussion between researchers often yielded more latent themes. For example, SLPs

talking about using gathering language exposure data were first coded as “assessment measures” but were more deeply discussing an approach to their practice. Five themes arose after codes were finalized.

5) **Defining and Naming Themes:** Themes were given context to ensure they would be understood by a broader audience. To ensure the accuracy of these themes, relevant quotes from codes were sorted and ranked for inclusion in the final paper.
6) **Producing the manuscript:** The themes were deemed robust after reviewing relevant codes and ensuring quotes supported the full context of the theme. Writing and revising of the manuscript discussion and results began.

Figure 3

Research-Specific Use of the Six-Step Process

(Figure 3, adapted from Braun & Clarke, 2006)

Data Collection

Interview Process and Procedures

The first author recruited and conducted interviews with clinicians. To prepare for the interviews, the investigators read texts on thematic analysis and ethnographic interviewing (Kiger & Varpio, 2020, Braun & Clarke 2006, Terry & Hayfield, 2021). They prepared a sample interview guide, which was adjusted after input from practice interviews. The final interview guide can be found in Appendix A. In preparation, the first author interviewed the second and third authors to rehearse the interview script and to practice asking follow-up questions using the interviewee's own words. The practice interviews were discussed to identify the interviewer's strengths and weaknesses in asking open-ended ethnographic questions. The third author's extensive experience with qualitative interviewing helped to provide meaningful feedback to amend the interview guide before interviews began. This upfront preparation ensured that following interviews would have continuity in style and mitigate potential bias or leading questions for participants.

Therapists that work with bilingual populations and agreed to be interviewed were contacted via email in late May of 2023. Interviews were offered prioritizing SLPs that worked in a school setting and were monolingual, however, more bilingual participants responded to initial requests for interviews and were subsequently interviewed first, as their schedules allowed. Based on the six interested responses, interviews were scheduled via direct emails and phone calls on a rolling basis and all six bilingual SLPs that responded were interviewed. Monolingual interviews were also held and will be discussed in future work by the second author. The second author was present for 66% of the interviews but did not directly interview the participants.

The interviews took place in July of 2023 over HIPAA-compliant secure Zoom Pro connections. The sessions were recorded (audio only) and meeting IDs were unique, required passwords, and required a "waiting room" in which the researcher must approve entrance. The audio-only data was saved on a secure server using identifiers with 2-authenticator security, while video portions were securely deleted. Interviews lasted between 40- 60 minutes.

Reliability and Validity

Several measures were preemptively put in place to ensure accurate data collection and analysis. Deidentified audio was sent to a professional third-party transcription agency. Transcripts were then relistened to and double checked by the first author, with minor errors corrected in less than five percent of the text. Researchers are very confident in the accuracy of transcripts. All authors participated at some level in theme formulation. The first and second author both coded all interviews and worked collaboratively to derive larger themes.

Within thematic analysis, validity is challenged in phase four (reviewing themes) of the analysis. Themes are checked to ensure they appropriately match the "meanings evident in the data set as a whole" (Braun & Clarke, 2006). Because researchers worked collaboratively to draft and refine themes, they were judged to be valid in that they appropriately "told the story" of the data.

Participant Checking

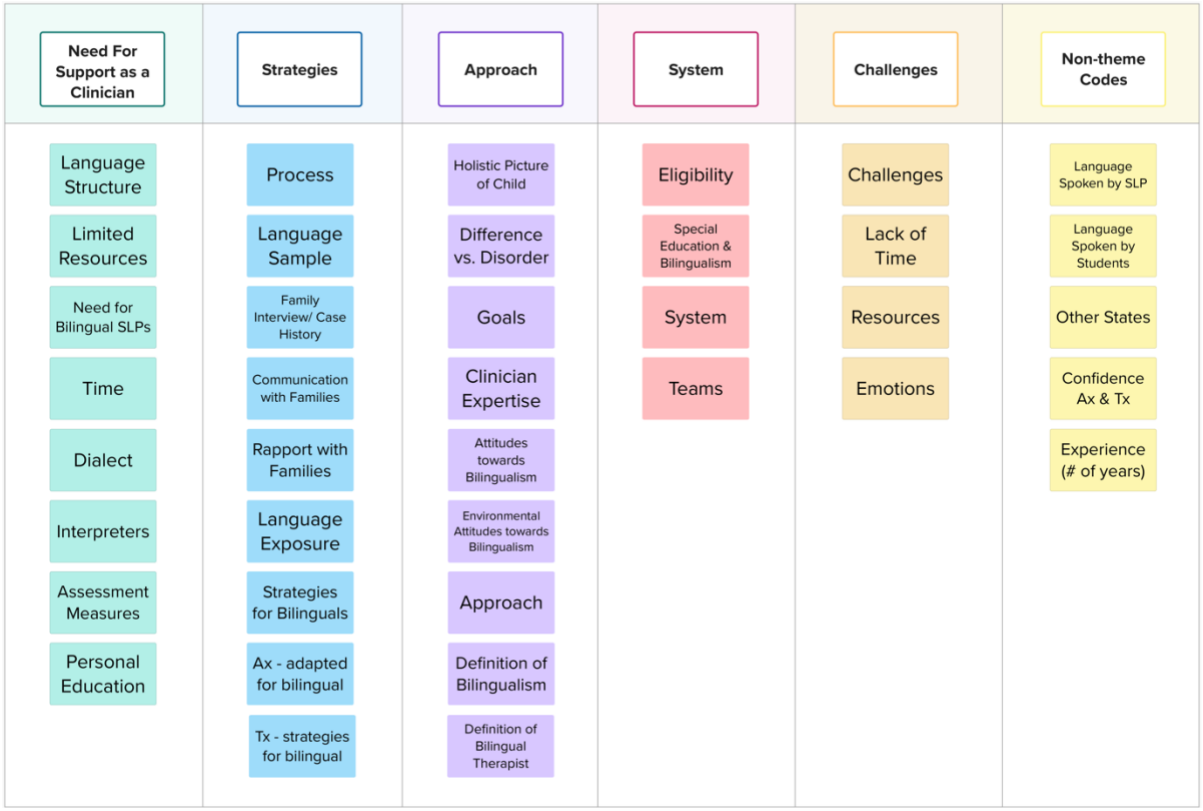
Participant checking (also referred to as member checking or informant feedback) is often used in qualitative research to "enhance the credibility of data analysis" (Varpio et al., 2017). However, as reflexive thematic analysis is heavily dependent on the themes derived from the data set as a whole, prioritizing the feedback of individual participants can "overly

romanticize" an individual's interpretations, and bring up ethical and methodological challenges (Varpio et at., 2017). Participant checking often has low response rates and may influence the data set negatively as participants may "legitimately change their perspectives" on the topic at hand (Varpio et at., 2017). Because the research aims to honestly understand what clinicians are and are not doing, participants may have felt pressured to change their answers upon second contact. Between other internal checks for validity being in place, (i.e. high confidence in transcripts and agreement between researchers in deriving themes) and few questions as to what participants meant, participant checking was deemed unnecessary.

Results

Reflexive thematic analysis of the interview transcripts revealed five major themes, derived from 39 final codes. The themes described clinician's actual practices surrounding assessment, treatment, and clinical decision making, as well as their thoughts and feelings around the processes. These themes were 1) need for support as a clinician 2) strategies 3) approach 4) systems and 5) challenges. The themes and the correlating codes are consolidated in Figure 4. Analysis and exploration of the themes are described below.

Figure 4
Themes and codes



Need for Support as a Clinician

All clinicians interviewed expressed some need for additional support when working with bilingual students. Supports were identified as being something their practice was

currently lacking in or could be improved. This included appropriate assessments, treatment tools, the education they had or had not received, the way their job was structured, and access to interpreters.

Subtheme: The need for more time. Three participants commented on the challenges of assessment regarding the time it takes to obtain a comprehensive overview of students' performance in both languages. Participant 6 remarked that time was the most challenging part of bilingual assessment. This participant plans extra time after an assessment, and often needs a second assessment round after listening to language samples to determine if the errors heard "*are typical errors in English or Spanish for any child...It can be really hard sometimes and very tricky*." They furthered this thought:

"*We have to do two language samples. That's double...I think it'd be nice if there was an allowance for if you test bilingual students, you get extra time on your productivity or your workload...because it does take a little bit more time*"

This sentiment was echoed by Participant 4 (also a bilingual evaluator):

"*It's a little bit more cumbersome...And I hate using that word, but you got to make sure you have everything in the second language, and if it's not Spanish, we have to really pull in an interpreter and work with us on that, and it takes time.*"

While it was agreed that bilingual assessments took more time, Participant 2 confirmed how necessary the process was:

"*It does take time, but hey, I got it. It's the only way I can do it. I just don't see how we can't assess in both (languages) and know*."

The three participants who currently conduct the most evaluations (Participants 1, 4, and 6) all underscored the need for systems to be in place that allow adequate time for testing in both languages and for that time to be reflected in their workload.

Subtheme: Lack of resources. Resources used in intervention and assessment were either limited or lacking for bilingual students. Four of five clinicians spoke about having to translate or create materials on their own specifically for their bilingual, Spanish speaking students. Participants 1 and 2 homed in on how not all translated materials were created equally, especially in regard to different dialects of Spanish:

> "*Even if you ask for material that's translated...some of that doesn't apply to some (to) your kids because it's not what they would say...That's sort of relating just to the cultural proficiency aspect of you can't just directly translate everything...The (translated) materials (have) to be culturally relevant and dialectically correct for our students"* Participant 2 felt they were *"asking for...more translated things in Spanish and yet complaining that it's not done right.*"

However, Participants 1, 4, and 6 noted improvement in resources for gauging typical language development in languages other than English. Participant 1 recalled how they started out learning to assess language structure for some indigenous languages, when resources were not available:

> "*I have been lucky enough that I have met a long time ago with elders from Pueblo, and they taught me the structure of the language. And so, then I can compare whenever they make a mistake or they're not being very clear to see if that's a difference or a disorder*."

By this clinician referencing creative ways to find access to language structure several times, they created the image that this is a key resource in their bilingual assessment. Participant 4 expressed how much resources had changed over the course of their career:

> "*I can access so much more information about the development of different languages than when I started like 30 years ago. Now...I have the internet and I can really search for research articles, whatever information we have about different languages...there's a great website, Bilinguistics..which has a really good array of information, if I just need something really quick that I don't have.*"

Participant 4 furthered this by sharing that "*once the research caught up with the standardized testing*" and dual language assessments were created, they could "*really look at both languages more holistically."* Participant 6 also cited Bilinguistics as their primary resource for learning different language structures and agreed that resources were "*getting better and better."*

Lack of resources was also cited in terms of assessments available to clinicians to properly diagnose students. Clinicians cited ways in which they adapted or supplemented assessment measures (see *Strategies),* but were more cautious interpreting results with bilingual students, as evidenced by Participant 3:

> "*So I do worry about the validity of the assessments because they weren't normed on a lot of people with hearing loss. And there is such a range of hearing loss that makes it kind of difficult.*"

Participant 6 felt similarly wary with standardized test scores for bilingual students, calling them "*really helpful for monolingual students*" but that it "*gets a bit trickier*" with bilingual students, saying "*we have to be much more careful*" when interpreting results.

Subtheme: Personal Education

All clinicians shared some sentiment of having to learn more upon entering the field after graduate school. Depending on when and where they had received their graduate education, some SLPs felt inadequately prepared to work with bilingual populations:

"*I think counseling should have been a class"* said Participant 1, as they often encountered parents that "*feel guilty*" about their child receiving speech therapy services. Participant 2, a clinician who had been practicing relatively the same amount of time stated that the only classwork that had touched on bilingualism "*was a kind of prep for the interpersonal communication portion...but it was (the) closest to looking at "multicultural-ness*". Participant 3 shared they had foundational knowledge, but still "*didn't really have a lot of the ASL*." They continued "*It's such a small population, so I kinda had to do that on my own.*" Instead, it was the "*day-to-day experiences and seeing it in action...really taught* [*me*] *the most*".

Participant 6 wished that education surrounding bilingualism was "*even better and more infused in the general SLP curriculum, as opposed to in the special bilingual classes*". They then made the comparison to child language development, which is covered in many different classes, whereas bilingual issues are covered "*once in your bilingual language development course, and that's it.*"

Even Participant 4, an SLP that described their graduate training in bilingual treatment as "*the Cadillac of graduate programs*" still felt that their practice had grown primarily through their experience in the schools as opposed to strictly education in school:

"*If it's not meaningful and not in a good context, kiddos aren't gonna learn. We're not doing isolated skills. We're teaching meaning, so I say that was in terms of my practice,*

that's what really evolved with more and more experience was how to do that, how to create...meaningful lessons for kiddos."

Lastly, Participant 2 expressed their willingness to continue learning, despite time constraints: "*I've had to go back and relearn information because what I was taught initially does not go*". The participant's comments highlight both how some graduate education programs have changed in the past 30 years and can also act as recommendations for ways in which these programs may evolve – primarily with a greater focus on bilingualism, counseling, and reinforcing the need for continuing personal education.

Strategies

Clinicians extended and expanded a variety of strategies when working with bilingual students (as opposed to monolingual students). Strategies were directly linked to a clinician's process and the tools they employed regularly as part of bilingual assessment and intervention. As discussed in the Theme *Need for Support as a Clinician,* SLPs felt limited in the assessments measures available to administer a bilingual student and hesitant to determine eligibility based on a standard score alone. By looking at the tactics SLPs employ, we gained a better understanding of the process bilingual children may experience in New Mexico schools. Under this theme, three subthemes emerged: reliance on caregiver interview and rapport, language sample and language exposure, and multi-modal assessment and treatment strategies.

Subtheme: Reliance on Caregiver Interview and Rapport

All five clinicians expressed how important a thorough family/caregiver interview was in the assessment process. Even clinicians that did not regularly evaluate students still noted the importance of the interview, and furthered ways in which they communicate with families.

Participant 4 stated that having "*a speech language evaluator that speaks the language of the family*" that can "*communicate and get information and establish that rapport*" was the most important aspect of a bilingual evaluation. Conversely, the most challenging aspect of an evaluation was when the clinician didn't speak the language of the family, and still had to "*figure out how to establish rapport and trust."* The same SLP noted a difference between a telephone interpreter and an in-person interpreter, the latter made it

"*feel easier to get more valid information*" because families "*felt a little more comfortable in that setting.*"

The thought that rapport was crucial to assessment and intervention came up frequently and was framed as a bigger hurdle in bilingual evaluations. Participant 6 stated that they often used more Spanish with families than with the students themselves, and that families had a need for education about "*what the process looks like...and sort of holding space for different feelings they might be having*". They did this to combat any "*perceived negativity*" around speaking a language other than English at home and worked to "*build relationship first*". Another clinician, Participant 1, explicitly took time to encourage parents to continue speaking their home language, and explained to both parents and students alike that no language was "*good*" or "*bad*", "*It's just different*".

When asked how they communicate with families, clinicians shared creative ways in which they stayed in touch or updated families on a child's progress. For example, Participant 3 shared the myriad of ways they have supported parents of children who use ASL:

> "*...we try to support the parents as well. Many times once the kids get to elementary school, their signing explodes and the parents are like, "I don't know what they're saying...I can't help them with their homework...He's trying to tell me something and I'm not getting it. And he is getting frustrated." And so, we do parent sign classes."*

These sign classes were held in the evening, with childcare available to make it more accessible to families. The school tried to "*hook them up with community resources*" like deaf role models and other schools in the area. The SLP sends home examples with pictures and a communication notebook to help "*bridge that gap*" so that communication partners are

"*able to understand and give that reciprocity*" and for parents to be "*tuned into what their kids are learning*", which they stated was "*good practice in general*".

The practice of sending home resources was shared by two other Spanish-speaking clinicians, so that students could share things with their parents. Participant 6 described that "*thinking about...how they can help (the student's) family be involved in the process*" to be a crucial part of intervention.

Subtheme: Language Sample and Language Exposure

All clinicians independently cited the importance of getting a language sample as part of their process, in addition to understanding the child's language exposure at home. No clinicians mentioned using a formal assessment for determining language exposure, and instead often included it as part of the initial interview. For Participant 6, it was "*the first thing*" they try to understand and use it "*to inform whatever's going to come next*". Participant 2 described a similar need to first understand the culture and "*where these kids are coming from, even though it's the Hispanic families, they're not all the same and they're not coming from the same home*". This sentiment was enriched by Participant 1, who made it a point to visit the child's classroom, to "*see how the classroom is designed*" and ask "*How is the kid comparing to other kids? What is the proficiency of the teachers in Spanish?*". This clinician also said upon meeting the student, they "*always greet them in Spanish*" to help make them comfortable and assess proficiency.

Similarly, Participant 6 felt language exposure was a key piece of pre-assessment as they didn't "*like to throw kiddos into a standardized test in Spanish because sometimes they get kind of frustrated if they don't have as much Spanish or whatever the second language might be*". Instead, they prefer to "*start with the most basic and personal*

experiences...because that's probably the vocabulary (the student will) have the most Spanish in."

Subtheme: Multi-modal Assessment and Treatment Strategies

Assessment **-** SLPs discussed assessment in terms of what was available to them, which was always described as limited (primarily due to the populations the tests were normed on). As mentioned, all clinicians used informal measures like a language sample and asked about language exposure. The formal assessment measures cited by clinicians that currently complete evaluations were: Preschool Language Scales 5th Edition (PLS-5), Bilingual English-Spanish Assessment (BESA), Contextual Probes of Articulation Competence (CPAC-S), Goldman-Fristoe Test of Articulation Third Edition, Spanish (GFTA-3), Bilingual Articulation and Phonology Assessment (BAPA) and Clinical Evaluation of Language Fundamentals Spanish Edition (CELF-5).

Participant 6, an evaluator, succinctly described their process:

> "*I do my evaluations, I do my observations, questionnaires, gather that data, formal testing, whatever it might be...language sample, speech sample. And I look at it and I analyze it, comparing it... to normative information, normative development. And then I try to make some sort of recommendation about if this child is in the average range or close to average for typical in terms of development. And if they're not, how far below average are they? Are they "significantly below", which, for the definition of speech or language impairment is the...threshold in New Mexico."*

The clinician continued: "*Is it like a protocol? No, it's more just, like a living process as you go through it. Every time I get a student, I make sure I'm checking out those different things.*"

Participant 4 echoed this by saying they weren't always reporting standardized scores,

because the test "*isn't designed for a child that speaks primarily [another language] and is learning some English*" but that they could still "*get some data"*.

Participant 3, an SLP who worked with deaf and hard of hearing students and had done assessments previously, pointed out that while most students already came with recommendations from district-provided evaluations, the evaluations for deaf and hard of hearing students "*don't really have to prove on a standardized assessment that they have the significant deficits in speech and language*". This is because "*the state of New Mexico recognizes just a hearing loss as an... eligibility; the students can receive special education services...and speech and language services without having to qualify*". However, the SLP still explained how evaluations may include "*a fully signed voice-off test*" and an English or Spanish test to compare a child's vocabulary across languages.

Treatment - Clinicians described relying less on pre-made materials when treating bilingual students, and more on multimodal supports that didn't require translating. Clinicians cited "following the child" and play-based interventions for younger kids, regardless of language. Three clinicians relied heavily on storybooks, thematic units, and student interests. Participant 1 reasoned that finding out a child's interests was the most helpful aspect of intervention, because you can map language to anything, "*from eating ice cream to creating a new telescope or whatever they like to do*." Tools like articulation card decks and more speech-specific materials were less available to clinicians treating bilingual students, which led to them using materials that didn't require as much translation work or could be easily adapted. Storybooks were mentioned by three clinicians: picture books were "*easier to adapt*" (Participant 6), had multicultural options "*so they can see themselves*" (Participant 1) and could easily be tied to "*thematic units*" (Participant 4) within the classroom to connect to

curriculum. Visual supports, or "*things they could touch, feel, hear, and see at all times*" (Participant 2) were talked about by three SLPs, to "*make sure we're all communicating about the same thing*" (Participant 3).

Participant 4 highlighted a theme present in most clinicians' practices – ensuring that the material in treatment was relevant to the instruction in the classroom:

> "*I might present the book (and) whatever language concepts we're working on in the native language. But then as we work through this thematic unit, which may be three weeks long, by the end we'll be doing them in English as well. So, you're kinda bridging it... that's really the focus - of really pulling in a lot of the visuals and a lot of the repetition, but not just rote repetition. Repetition that makes it meaningful and interesting."*

Similarly, Participant 3 described this as "*trying to meet them where they are with their skills*" and being "*cognizant of making sure that they're hopefully developing in both languages*". The concept of transferring skills from one language to another was talked about by two SLPs who "*go to the strongest language because concepts can be transferred to the other one*" (Participant 1) and "*think about the fact that they're gonna be an English dominant, English-only school and classroom for the rest of their school career*" (Participant 6). Instead of strictly treating in one language or another, Participant 6 said they "*tend to think about using the Spanish to scaffold their skills*".

Approach

Clinicians' beliefs informed a more holistic approach to assessing and treating bilingual students. When asked to directly compare monolingual vs bilingual assessment and intervention, clinicians were quick to indicate that a) they took a larger perspective and b)

made adjustments as necessary. SLPs all referenced the importance of "*relationship building*" and tailoring therapy to meet a child's unique goals and interests. Clinician-generated phrases like "*using all the tools in the toolbox*" (Participant 3), "*doing what you need to do*" (Participant 2), "*shades of gray*" (Participant 4) and "*looking holistically*" (Participant 4) lend to the notion that working with bilingual students is not always a straightforward checklist. SLPs work to "*see the kids as individuals*" (Participant 1) and because standard scores can't always be used in a normative way, "*there is some wiggle room as long as we have the data*" (Participant 4). Clinicians portrayed varying comfort levels with bilingual assessment and intervention, seemingly correlated to how long they had been practicing in the question area. In learning more about the individual values and thoughts that underpin interviewee's approaches, three subthemes were drawn out: ideals, goal writing, and the difference vs disorder paradigm.

Subtheme: Ideals

When asked how their actual practices differed from their ideal practice, clinicians offered up scenarios that were more well-resourced. The findings underscore the theme *Need for Support as a Clinician* but also revealed how clinicians would change environments and supports to offer even better speech and language therapy services. All clinicians cited access to tools in multiple languages and some way to obtain or access a "*comprehensive case history*" for all of the providers and educators interacting with the student (Participant 2). Three of the five clinicians directly cited access to highly trained interpreters with "*cultural awareness*" to assist in evaluations and IEP meetings (Participant 1, 2, 4).

Regarding evaluation, Participant 4 said "i*n a perfect world, we'd have multiple, really good, valid, reliable tests that we could use, that are normed on bilingual populations*

here in the United States...that are available for two through adulthood. That would be wonderful."

Continuing the theme of practicing under ideal conditions, Participant 6 shared their process:

"*I would say an absolute ideal would be to have a clinician who knows both of those languages, or two clinicians that can, put together,... know those child's languages, to have lots of access to information about typical development in that language... And then lots of time.*"

In summary, the gap between clinicians' current practice and their ideals revealed a desire for more relevant translated resources, assessments normed on bilingual populations, and trained, bilingual SLPs to treat and evaluate bilingual students.

Subtheme: Goal Writing

When asked about the process for writing goals for bilingual students, four clinicians explicitly stated "*it doesn't vary too much*" and "*it (isn't) different because your goals are going to be on what functional skills... they need to be successful in the classroom*" (Participant 4). Participant 3, explained how they based goals on New Mexico education standards and made sure to expand goals to include "*signs, gestures, (and) words*" with young deaf and hearing-impaired students to "*build on communication*" and "*help them express their ideas*".

A few clinicians expressed uncertainty when answering this question in interviews, but all demonstrated they were following evidence-backed best practice, regardless of whether they vocalized that or not.

Subtheme: Difference vs Disorder Paradigm

Three SLPs interviewed referenced the popular shorthand “difference vs disorder”, which is often used with CLD students to confirm that errors heard in speech are not due to the influence of a native language or dialect. The prevalence of this framework points to clinicians' awareness of dialectical and ELL differences when treating and diagnosing speech sound disorders. In the comments that follow, SLPs describe this as a facet of their approach when deciding if a child needs services:

“*For children who are predominantly Spanish speakers and do have a disorder, then we write that, (we) say (the student) is deficient. If (the student) has some English skills, but they are not (disordered), it's not a disorder*” (Participant 2)

Participant 3 also talked about this distinction: “*If their home language scores are within normal limits then we would not identify them as having a disability...It would just be that language difference and then we would provide them with English as a Second Language support rather than special education support.*”

Interestingly, the two clinicians that were district-level evaluators (Participants 4 and 6) did not specifically use the phrase “difference vs disorder” but instead presented more nuanced views of how both a difference and a disorder may exist simultaneously (i.e. “difference within a disorder”):

“*Looking at that second language learner, that ELL piece, and seeing “are these typical ELL errors?” which gets really hard sometimes...I do a lot of consultation...with other providers. I call another bilingual speech language pathologist who I work with, my mentor, and we troubleshoot stuff a lot together and (they) call me similarly. And sometimes just talking it through helps*” (Participant 6).

This detailed parsing is most likely due to the regularity with which the evaluators are involved in determining eligibility for services, whereas other SLPs in schools are often receiving a caseload of children who have already been deemed eligible for services.

System

Clinicians spoke about how systemic culture and policies at multiple levels (district, state, and school) influence how intervention and assessment are carried out. When asked how they would go about assessing a student who speaks a language other than English, three of the five participants quickly cited the New Mexico Technical Evaluation and Assessment Manual (TEAM). Evaluating clinicians spoke to how they received referrals (primarily Child Find screenings and IDEA Part C to Part B transitions) and the specifics of who might be on their evaluation team (bilingual psychologists, motor evaluators, educational diagnosticians, physical therapists, occupational therapists, nurse, audiologist). The evaluating team would look different "*based on what specific areas (they) are evaluating*" (Participant 4). Both evaluators emphasized that they were not alone in making these decisions, that the team was "*really helpful for when you're not sure or you wanna bounce ideas off of somebody*" (Participant 6).

The evaluating SLP's role was to "g*ather a lot of data, interpret it and maybe go back and collect a little bit more and then write it up into a report...Review it with the family in whatever language they're most comfortable in, give them whatever recommendations we have and then pass it off to the IEP team*" (Participant 6). Participant 4 underlined the fact that evaluations in these larger districts truly were a team effort: "*I write up my speech and language report, and (the other team members) write up their other pieces and we put them all together for a very large, full developmental evaluation.*"

Participant 2, a clinician that had spent most of their career in a different state, expressed frustration over the process of having evaluation teams separate from SLPs: "*I don't get to see any of (the evaluation) because here's the deal... In my district, there is*

someone else (that) does the evaluation and I do grit my teeth...to me, especially a bilingual evaluation, it must be complete. I must have all that data and I don't have it. And I don't even see it. And there's no way to see it unless, I guess I go to (the district office) and I do a carpool."

This SLPs frustration at the process confirmed their desire to know more about the students on their caseload to better provide culturally relevant intervention.

Subtheme: Bilingualism, Inequity, and Special Education

Clinicians spoke to how treatment, specifically, often defaulted to English because it was the language of instruction. Participants 1 and 2 shared their sadness over the lack of "*true bilingual education*" available in the state . Participant 3 explained that "*because the curriculum moves so fast, the reality is, is that... English drives a lot of it. And really, (the students) are kind of forced to make the quickest progress and develop more in English because that is usually the language of instruction*".

Clinicians expressed sentiments that bilingual students may be more likely to experience some of the harms that can come into play in larger systems. When asked about special education, SLPs shared a certain hesitancy about qualifying bilingual children:

"*It really does seem like when students start struggling in the general education environment for whatever reason, whether it be a language issue or a cognitive issue or an attention issue, that right away the teacher says, "This kid needs special ed." And it's like, well, they need support, but what could that look like before we get to the special ed realm? And does it have to be special ed? Does it have to be full-time special ed?*" (Participant 3)

Participant 3 continued: "*I do think that the bilingual kids are probably a higher percentage of kids that are being qualified for special ed. When if you could give that better general ed support, they may not need it.*"

Participants 3 and 4 made similar remarks about not wanting to "*qualify kids who don't need to be qualified*" and "*advocating for good services*". Participant 4 added that this also meant knowing when to dismiss students: "*therapists in the schools can really hold on to kids too long, and it's not a good use of the kiddo's time, or our resources*".

Furthering the subtheme of bilingualism and special education, Participant 6 broadened the framework for the hesitancy other SLPs expressed:

"*I think for all the different reasons that we think about with bilingualism, one of the big ones being systemic racism, and...just general racism or discrimination, or deficit views of bilingualism. And bilingualism is obviously gonna be associated with being of a different race or having a different color skin, etcetera, or... the cluster (of) traits that come together. And so these students are going to be at higher risk of experiencing all sorts of negative things, whereas monolingual English-speaking students might not...it depends. Obviously, it's complicated...*"

Through this exploration of systemic inequity, the clinician tapped into the vigilance that other clinicians shared over ensuring they provide quality bilingual assessment and intervention. While they all shared their enthusiasm for promoting bilingual education and high-quality services, they were keenly aware of how larger systems impacted their ability to do so.

Challenges

Providing assessment and intervention for bilingual children is challenging. Responses to several interview questions exemplified barriers SLPs face in multiple domains. Challenges were divided into two subthemes: *Teams* and *Processes*. The two subthemes intersected, such that some teams made processes more difficult, and some processes made teams more difficult. Teams were thought of as people working with the students (families, interpreters, other SLPs, classroom teachers, etc.) and the culture they engaged in. Processes were defined as the strategies and methods used in bilingual assessment and intervention.

Subtheme: Teams

A key part of many bilingual teams are interpreters. Interpreters were often brought in for families that speak a language other than English, Spanish, or ASL (as these were the language the clinicians worked in). Three SLPs spoke about how while the translator was necessary, it could be difficult to obtain the thorough background information required for diagnosis. This was exemplified by Participant 4:

"*Often the interpreter isn't a person here with us anymore, it used to be. Now, there's someone that's over the phone on speakerphone listening in, and we're talking and then they're interpreting.... A lot of times we'll have to do multiple sessions...because it's just so much information to go through and it takes so long with the interpreter.*" (Participant 4)

Participant 6 added they found themself "*hoping that the family's able to give us as much information or ...hoping that we're not missing something when asking for it in translation (through an interpreter".*

Participant 2 shared that it was "*hard*" for them to not be the evaluator and treating therapist, and often felt it was difficult to access crucial information from the evaluation

team. Participant 2 was unable to voice their concerns over how the evaluation was completed and what measures were chosen: "*They're only assessing English. And the comment was made that...even your regular...education students don't do well with this measure. And I'm thinking, has anybody hollered?*".

Four of the five SLPs spoke very highly of the folks they worked with and shared how other bilingual clinicians were helpful in collaboration for more difficult cases. However, it is evident bilingual SLPs are often asked to take on extra work or outside roles when compared to their monolingual colleagues. This can lead to feelings of discouragement withing the field.

When asked what they wish had been different about their education, Participant 6 disclosed they wished that bilingualism was "*more infused in the general SLP curriculum*". By "*bilingual issues*" being more elective, it felt like the load was unevenly shared:

"*I find it really sad when I have colleagues who have had the same education and definitely have the same certification and...who think, "Oh, I don't do the bilingual (stuff)"...and they sort of don't take ownership of it. Because every speech and language pathologist should be prepared to work with multilingual, bilingual, bi-dialectal, whatever it is and I think a lot of people just sort of like schlep it off as "not my thing" and "I'll let the bilingual people deal with it" and...so many people just...wash their hands of it and I just find that so frustrating and sad.*"

Participant 2 clinician succinctly agreed: "*if you're not proficient in this area (of bilingualism), then get to it!*"

The last aspect of challenges within teams was regarding teachers. Teachers play a key part in making appropriate referrals for evaluation, in accordance with a Response to

Intervention (RTI) process outlined by the NM TEAM and IDEA (New Mexico Public Education Department, 2017). Two clinicians shared the overlapping sentiments that a) teachers were "overworked and under-resourced" and b) RTI was not being utilized well:

"*I think that there's more teachers that want to push (students) out for somebody else to help them than there are teachers that want to provide that good support within the classroom. I think part of that is the teachers aren't given the training and skills that they need to diversify the instruction and support those...kids who need a little bit more*" (Participant 3).

Participant 6 had faced similar challenges: "*A lot of times teachers just...look at RTIs like checking a box, like, "I did my six to eight weeks, now, it's your turn to test them." And then they feel like we're being sort of gatekeeper-y, and then it...gets...sort of adversarial (as teachers say) " Why won't you qualify them? They clearly need help." It gets messy.*"

They furthered the thought: Most teachers are "not train*ed about what RTI is supposed to do when the student is doing well at tier two, and that's just: they're supposed to stay at tier two. You're just supposed to keep giving them that little bit of extra help until it no longer helps or until they don't need it.*"

These feelings dovetail with the difficulty of potentially over qualifying or under qualifying students that need more help to access their education. Participant 6 often heard colleagues say, "*Well, you know, they definitely need the extra help*" or "*They're not going to get it elsewhere.*" The clinician met this challenge with "*the only thing I can really do is take a little bit more time and think a little bit more deeply about (my bilingual students) to help make sure it's helpful for them.*"

Subtheme: Processes

Clinicians face challenges in multiple aspects of their jobs, some of which are exacerbated in working with bilingual students. The feeling that bilingual clinicians also acted as advocates for families and students was apparent in all interviews and is exemplified by Participant 6:

> "*I do get frustrated... that there's not resources to help translate....materials. Official documents are produced in English and that's it. And maybe if the family makes a stink, the district will pay to have it translated. So I think that's frustrating for families."*

Participant 3 shared how they had amended their practice to better support families and "*use all the tools in the toolbox*": "*Some of it evolved from the kids that...go home for the summer and their parents don't sign. And it's kind of heartbreaking that they're isolated at home and they love school and they live to come to school and they hate breaks because nobody communicates with them. It's harder, it's frustrating*."

While all clinicians shared challenges around their practice, they all seemed to genuinely enjoy their work. Participant 1 felt grateful to each of the "*amazing kids*" they had worked with: "*They all have made my life totally different than it would've been if I did not meet them.*" Despite the barriers, clinicians seemed hopeful for the direction the field was going.

Discussion

This study used thematic analysis to examine the daily practices of bilingual speech language pathologists working in school settings in New Mexico. Through a semi-structured interview using open-ended, ethnographic interviewing style questions, 5 bilingual SLPs described their practices for treatment and intervention for bilingual students on their caseloads. The resulting codes from the interview transcripts were ultimately grouped into 5 themes. The resulting themes allow for personal insight into what guides individual SLPs to practice how they do. Moving forward, the themes may help to inform gaps in current best practice guidelines and further practice-based evidence in bilingual speech and language services.

First, clinicians all identified there were areas in which they needed extra support when working with bilingual students. This primarily arose in the form of having limited resources: there were fewer assessments normed on bilingual populations to accurately report data, fewer prepackaged intervention items accessible for speech and language treatment, and no allotment for the extra time involved in completing two language samples or conducting a caregiver interview through an interpreter. In terms of clinician's personal education, interviewees documented either less bilingual focus in their graduate training or having shifted their practice based on experiences in the field.

The clinicians interviewed expressed how their strategies and approaches either differed or converged between monolingual and bilingual students. There was overlap in goal-writing, as most clinicians stated that the way they wrote goals did not change based on the child's language. This is in accordance with best practices for bilingual language intervention put forth by ASHA (n.d.). Assessment practices differed in that bilingual

evaluation seemed to rely more heavily upon triangulating data from different scores and relying more heavily on the caregiver interview to create a holistic picture of the child and learn about language exposure. This is in line with Dubasik and Valdivia's 2021 findings that most school-based SLPs used 4 or more tools when completing bilingual assessments, which may help to create a more holistic picture of bilingual students beyond a standardized score.

Bilingual treatment differed in that there was a stronger reliance on visual supports and resources that didn't need to be translated, as well as some well-intentioned hesitancy to ensure the child was not being placed in speech and language services for a language difference or needing ELL support. Treatment was also scaffolded to match a student's language proficiency and meet academic goals. Clinicians seemed to echo ASHA's preferred practice pattern that treatment and materials be relevant to the individual's "language proficiency, sociocultural experiences (and) educational curriculum" (ASHA, 2004). When asked to identify how their ideals may differ from their practice, the majority of clinicians imagined a world with more time, more bilingual SLPs, more tests normed on bilingual populations, and more resources that were relevant and translated for their students.

A more latent theme arose around the systems that speech and language therapy exists in. Interviews touched on how these systems influence the services students receive. Clinicians that performed more evaluations discussed the teams they interact with to complete comprehensive evaluations, while clinicians who focused more on treatment explored who they may work with in a school and how they interface with families and caregivers. One clinician that did not perform evaluations (Participant 2) expressed frustration over having outside evaluators and feeling limited by the information that was available on students, which was an understandable barrier to providing the quality of

services the clinician would have liked to. Many SLPs spoke to how they thought bilingualism interfaced with eligibility for special education and the care they took to ensure students had access to services they needed for academic success. Clinicians brought up concerns that bilingual students may be more likely to be overqualified for special education or experience larger, systemic inequities than monolingual students, especially for students and families with limited English proficiency.

All therapists shared additional challenges, primarily with teams of people working together for the child and the processes that informed treatment and evaluation. Bilingual SLPs, although they often spoke favorably about other team members and relied on one another, were often tasked with additional bilingual duties (having to translate their resources, counseling bilingual families, acting as an interpreter, etc.). Their experiences show how bilingual SLPs can often take on additional work as the "default" bilingual person when the onus should be equal amongst educators and providers. While many noted how far the field had come in terms of how others think about bilingualism, clinicians often felt there was farther to go in what was expected of bilingual clinicians.

Limitations

The principles of practice shared in this paper represent a small sample of bilingual SLPs working in New Mexico. Additionally, the inclusion criteria ask that participants to self-identify which setting they work in and if they are a bilingual SLP, monolingual SLP, or an SLP that is bilingual (and only practices in English). Codes and resulting themes are expected to differ if interviews were conducted with SLPs that identified differently. A second set of interviews with monolingual SLPs will be forthcoming from the second author to expand what is known about the day-to-day decisions school-based SLPs make. Regarding

self-identification of setting, one bilingual SLP identified as working in a school but their interview was unable to be included after the interview revealed they were not school-based. Many of their sentiments echoed that of current participants and the themes and codes were not changed after the data was discarded.

The results of the study examine bilingual SLPs while not parsing apart types of bilinguals. Three of the bilingual interviewees had learned a language later in life and may have had different perspectives on the experience of their students than a simultaneous bilingual. Heritage language speakers may have had different insight into the intersectionality and cultural aspects at play when working with bilingual students and their families. For the sake of the interview questions asked, these identities were not questioned or included.

Limitations of Thematic Analysis

Because TA is best designed to recognize "patterns across a data set", it may not as easily recognize idiographic themes, or patterns within a particular case (Terry & Hayfield, 2021). TA may also not be the best method to relate findings to a larger theory or framework. While the theories of evidence-based practice and culturally responsive intervention helped researchers place themes in context, this research was not intended to explain a theoretical framework or explore a more phenomenological process. While the data set is on the smaller end of what is considered appropriate for TA (Terry & Hayfield, 2021), the "thickness" of the data from each interview confirmed that TA was the best method of qualitative analysis for this particular research question.

Future studies

Future studies may use a similar format with SLPs in other geographic areas to determine if regionality was at play in clinical decision-making. Additional data may further

what is known about bilingual practices and how it aligns with current best practice recommendations for bilingual speech and language intervention.

Six interviews were conducted with monolingual therapists at the same time and will be the subject of another paper. By contrasting the experiences of monolingual and bilingual therapists, we may have more insight into how SLP's practices differ based on the languages they speak and how they relate to the bilingual students on their caseload.

In conclusion, we now have a better understanding of the day-to-day practices carried out by bilingual SLPs in New Mexico. This research may be used to better guide graduate education programs, continuing education opportunities, and for larger systems to implement changes that would facilitate better support for bilingual clinicians the students they serve.

Clinical Implications

Arias and Friberg were not alone in their call for more research to "expand what is known" about SLPs working with bilingual school aged- children. At least in New Mexico, we now have a better understanding of daily practices (2016). In line with the findings that school-based SLPs are adhering to evidence-based practice and ASHA preferred practice patterns when they can, all five SLPs interviewed indicated they would collect a language sample in both English and a child's native languages, as opposed to the 36% of SLPs surveyed in 2016 (Arias and Friberg, 2016). Prior research shows that most clinicians use more than one measure to assess bilingual students (Dubaski and Valdivia, 2021). Similarly, all SLPs interviewed cited using three or more measures in their current assessment practices. Frequently identified barriers for SLPs in New Mexico are similar to those nationwide: lack of time, lack of resources, and lack of access to interpreters (Arias and Friberg, 2016).

Lastly, the majority of clinicians interviewed felt inadequately prepared to work with bilingual students upon graduating, similar to Hayes et. al 2022 survey.

Practical Recommendations

In line with findings from the interviewees, change in three domains may better support implementing better speech and language services for all students. First, by incorporating bilingualism into each course in graduate school (as opposed to an elective "bilingual competency"), monolingual and bilingual clinicians alike may feel more confident in working with bilingual students and their families. Through repeated exposure to updated evidence based-practices, future clinicians will have a sound understanding of bilingual speech and language acquisition. Throughout the US, it's not a question of *if* a school-based SLP will encounter a bilingual student on their caseload, it's a question of *how many*. Second, while funding and research may never allow SLPs to have gold standard assessments normed on every population they may encounter, dynamic assessment (or test-teach-retest) is an evidence-based way to provide student-specific, culturally relevant assessment that focuses on the learning process. By creating more dynamic tests normed on more diverse populations, assessment practices can aim to be both "ecologically valid" and culturally relevant for many bilingual students (ASHA, 2004). Third, in a profession that requires thirty hours of continuing education every three years, ASHA should require that those offering continuing education hours ensure their materials are culturally and linguistically relevant to our bilingual clients. By listening to the lived experiences of bilingual SLPs, we can bend the arc of our profession to be one that aims to promote growth and justice for our clients, our colleagues, and ourselves.

Appendix A: Interview Guide

Italicized questions were possible follow up questions, asked only if needed. Otherwise, questions were reframed or clarified using the participant's own words.

Demographics

1) Confirm the school setting the SLP works in, population age range, works with bilingual populations (gathered via initial survey).
2) Other than English, what languages are spoken by students on your caseload?
3) What languages do you speak and/or work in (if relevant)?
    a. *How are you determining who is bilingual on your caseload?*
    b. *What is your definition of bilingualism?*

Assessment and Intervention

1) This question is about **assessment**. Tell me how you go about **assessing** a child that speaks more than one language.
    a. How confident are you in assessing bilingual populations? Provide scale of 0-10: 10 being “I do this every day” and 0 being: “I’ve never done this”
    b. What have you found to be most helpful when assessing children that speak more than one language?
    c. What have you found to be most challenging when assessing children that speak more than one language?
    d. How does assessment for a bilingual child compare to assessment for an English-speaking child?

e. *Make sure you know about: eligibility criteria, team members, protocol, any favorite assessments? Are they available?*

2) This question is about **intervention**. Tell me how you go about **treating** a child that speaks more than one language.
    a. How confident are you in intervention with bilingual populations? Provide scale of 0-10: 10 being "I do this every day" and 0 being: "I've never done this"
    b. What have you found to be most helpful when treating children that speak more than one language?
    c. What have you found to be most challenging when treating children that speak more than one language?
    d. How does goal writing for a bilingual child compare to goal writing for an English-speaking child?
    e. *How are you communicating with families?*

Thoughts and Beliefs

1) This question is about your thoughts and beliefs surrounding bilingual speech therapy. Ideally, how would you approach assessment and intervention with a bilingual child? Does this differ from what you do? If so, how?
    a. Talk to me more about the ideal. How did you come to that ideal? Through your education, experience, etc.?
        a. *Has this changed over time? If so, how?*
2) Regarding your practice, how did you come to what your intervention and assessment looks like? Is it tied to resources available, school protocol, etc.?

a. *Has this changed over time? If so, how?*

Can you tell me more about your belief surrounding how the special education process works?

a. *Insurance? Special education qualification processes?*
b. *Do you feel that this system is working?*
c. *How does that compare to children that only speak English?*
d. *Are you working to align your views/AHSA policy with how things work at your site?*

Education

1) Is there anything that you wish would have been different in your education in working with bilingual clients?

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