

# UC Davis

## UC Davis Previously Published Works

### Title

Im One Person, I Cant Be Everywhere: Challenges and Needs of Bilingual Behavior Analysts.

### Permalink

<https://escholarship.org/uc/item/0xq0b9cb>

### Journal

Behavior Analysis in Practice, 17(3)

### ISSN

1998-1929

### Authors

Martin Loya, Melanie

Meadan, Hedda

### Publication Date

2024-09-01

### DOI

10.1007/s40617-024-00916-2

Peer reviewed



# I'm One Person, I Can't Be Everywhere: Challenges and Needs of Bilingual Behavior Analysts

Melanie R Martin Loya<sup>1</sup>  · Hedda Meadan<sup>1</sup> 

Accepted: 9 February 2024 / Published online: 26 February 2024  
© Association for Behavior Analysis International 2024

## Abstract

Autistic children from Spanish-speaking homes are part of a growing group of children at the intersection of multiple marginalized identities. Research suggests a “bilingual advantage” exists, similar to that experienced by neurotypical bilingual children, and autistic adults report positive social outcomes due to being bilingual. However, much less is known about providers' experiences who play a crucial role in whether families can maintain their heritage language(s) with their children. This exploratory qualitative study examined ethical challenges and needs of U.S.-based bilingual behavior analysts who provide home-based support for autistic children from Spanish-speaking homes. This study was informed by a demographic questionnaire and semi-structured interviews with participants ( $N = 14$ ) across the United States. Participants' experiences were analyzed thematically. Findings included major themes and subthemes including challenging ethical experiences and behavior analysts' needs to provide high quality services. Implications are presented across the organizational, provider, and research and higher education levels.

**Keywords** Autism · Bilingualism · Dual language · Applied behavior analysis · Spanish

## Introduction

The nexus of bilingualism and autism is a nascent area of research, especially as it relates to the field of applied behavior analysis (ABA) and the experiences of behavior analysts.<sup>1</sup> Bilingualism is defined as:

The ability to communicate in more than one language and can be thought of as a continuum of language skills in which proficiency in any of the languages used may fluctuate over time and across social settings, conversational partners, and topics. (American Speech-Language-Hearing Association [ASHA], *n.d.*)

Bilingualism, like autism, is a spectrum of abilities and different for everyone experiencing it. Although research is ongoing, there is a consensus that bilingualism causes no cognitive disadvantage in nonautistic populations (Ware et al., 2020), and the need for bilingual leaders in disability support services is considered a priority area for the United States (Federal Register, 2023; Kroll & Dussias, 2017). In research exploring the impact of bilingualism on autistic children, there is currently no evidence that bilingualism confers any negative impact, and similar to nonautistic children, it may grant some benefits (Conner et al., 2020; Gilhuber et al., 2023). Behavioral research has demonstrated that some children on the autism spectrum may prefer to receive instruction in their heritage languages (Aguilar et al., 2017) and may experience positive impacts from receiving care in their heritage languages, such as a reduction of challenging behaviors (Lang et al., 2011) and increases in play behaviors (Lim & Charlop, 2018). The

<sup>1</sup> The term “behavior analyst” is used in this article and includes both board certified assistant behavior analysts (BCaBAs) as well as board certified behavior analysts (BCBAs).

- Bilingual behavior analysts reported ethical challenges when providing heritage language care.
- Lack of translated resources and bilingual personnel were reported as significant barriers.
- Leaders are recommended to invest in bilingual resources and structural support to prevent employee burnout.
- Bilingual providers are recommended to seek supportive communities of practice.
- Monolingual providers are recommended to engage in self-learning and reflection to contribute to more equitable work environments.

✉ Melanie R Martin Loya  
mrm22@illinois.edu

<sup>1</sup> Department of Special Education, University of Illinois  
Urbana Champaign, Champaign, IL, USA

term “heritage language” is used here in alignment with recommendations from the Center for Applied Linguistics to refer to any language other than the dominant language in a given context (i.e., any language other than English in the United States; Kelleher, 2010).

Overall, researchers suggest that similar to nonautistic children, the language and cognitive development of autistic children is not negatively affected by growing up in a bilingual environment (Siyambalapatiya et al., 2022; Zhou et al., 2019), and there may be positives, such as improvement in executive functioning tasks (Montgomery et al., 2022; Ratto et al., 2022). The field would benefit from additional rigorous experimental research that explores the impact of heritage language care on autistic children’s behaviors, but given what is currently known, it is clear that taking linguistic differences into account when designing and implementing behavioral care could be beneficial.

The experiences and values of autistic individuals and their families are also of great importance and are crucial when developing autism supports. This is especially true when one considers concerns voiced about ABA interventions and their use with autistic children (Graber & Graber, 2023; Schuck et al., 2022), as well as concerns about inequitable access to additional language learning for autistic individuals (Davis et al., 2022). A few studies have measured the outcomes and experiences of autistic multilingual adults in the UK and the role their bilingualism plays in their lives. Researchers found a relation between autistic participants speaking more languages and a higher self-reported quality of life; participants also reported a greater ability to understand and relate to others because of their multilingualism (Digard et al., 2020, 2022; Nolte et al., 2021). Autistic participants also noted that an important facilitator in helping them learn languages was their childhood learning environment (e.g., family, school, and community settings; Digard et al., 2022). In addition, heritage-language-speaking caregivers have reported the desire to maintain their heritage languages with their children on the spectrum but report many difficulties when attempting to do so for multiple reasons, including lack of bilingual personnel and discouragement from professionals (Durán et al., 2022; Lim et al., 2021; Papoudi et al., 2021).

The above findings suggest that the ability to speak multiple languages improves autistic adults’ quality of life, highlights the importance of learning languages in childhood, and suggests behavioral supports that are inclusive of autistic children’s heritage languages may have high social validity for the autistic population as well as their families. Per the *Ethics Code for Behavior Analysts* (hereafter referred to as the *Ethics Code*), behavior analysts have a responsibility as professionals to maintain competence and engage in nondiscriminatory behavioral services that are culturally responsive and inclusive of diversity (Standards 1.06, 1.07,

and 1.08; Behavior Analyst Certification Board [BACB], 2020), which includes the right for individuals to maintain their heritage languages (Kornack et al., 2019).

### Supporting Bilingual Children on the Autism Spectrum in ABA

The field of ABA and bilingualism is an emerging topic of inquiry with room for growth. The BACB previously published practice guidelines for behavior analysts and behavior technicians<sup>2</sup> working with the autistic population; however, this responsibility was transferred to the Counsel for Autism Service Providers (CASP) in 2020. CASP’s ABA Practice Guidelines have no mention related to language differences or multilingualism (CASP, 2020). Thus, the current ABA practice guidelines offer behavior analysts no specific guidance for working with linguistically diverse students on the spectrum. Researchers have also found that studies published in prominent ABA journals vastly underreport necessary demographic information about participants, namely socioeconomic status, race and ethnicity, and language (Jones et al., 2020; Li et al., 2017). Jones et al. (2020) reviewed 551 behavior analytic articles and found that only 4% of those reported any information related to participant language. Although researchers have called for increased attention to bilingualism in ABA practice and research (Brodhead et al., 2014; Davis et al., 2022; Dennison et al., 2019; Wang et al., 2019), the currently published reviews do not provide much guidance for behavior analysts in practice. In light of the *Ethics Code* with new diversity-focused codes, it is prudent to take a closer look at the current realities of behavior analysts who practice bilingually in the United States.

To date, no studies report the experience or perceptions of bilingual behavior analysts, educators, or other service providers who support autistic children in the United States. However, reports from bilingual general educators and mental health workers in the United States highlight how they have experienced challenges and discrimination in the workplace, including experiences of undue burden and fulfilling multiple roles within their schools without targeted support or additional compensation (e.g., serving the roles of teacher, interpreter, translator, counselor; Amanti, 2019; Amos, 2018; Pope et al., 2022). In addition, reports from professionals in allied fields report challenges such as individuals holding incorrect beliefs about bilingualism and autism (e.g., it will confuse children; Hay et al., 2021; Howard et al., 2021), the need for additional professional development and mentorship to provide bilingual or heritage-language services to families and children (Vaquero &

<sup>2</sup> The term “behavior technician” is used in this article to refer to the entry level position in ABA and includes registered behavior technicians.

Williams, 2018), and how the lack of appropriate training and supervision in providing heritage language care may present ethical challenges (Verdinelli & Biever, 2009).

The studies cited above examined bilingual general educators and allied service providers' experiences and perceptions of working with bilingual children with and without disabilities across diverse environments. It should be noted that none of these studies included behavior analysts and many participating service providers lived and worked outside of the United States (e.g., Hay et al., 2021; Howard et al., 2021). At present, the BACB publishes no data regarding the language abilities of behavior analysts (BACB, n.d.), and providers and researchers have called for the BACB to acquire and publish these data (Dennison et al., 2019). It is unknown how many bilingual behavior analysts currently practice in the United States, and at the time of this writing, there are no gray or peer-reviewed literature that examines behavior analysts' experiences and perceptions of providing bilingual or Spanish-language therapy to children with autism. We know that Spanish is the most common language in the United States besides English (U.S. Census Bureau, n.d.), the Spanish-speaking population is projected to grow (Vespa et al., 2017), and that children who receive high-quality heritage language educational support tend to have better academic outcomes than bilingual children in "English-Only" educational environments (Meek et al., 2020). Furthermore, Spanish-speaking populations in the United States are often excluded from research or addressed using negative and deficit-focused language (Soto-Boykin et al., 2021, 2023) and would benefit from tailored support (Baires et al., 2023; Trelles & Castro, 2019); however, we do not currently know the experiences of practicing bilingual behavior analysts. Researchers in allied mental health fields have drawn attention to the ethical challenges of providing heritage language care without adequate training and supervision (Diaz-LePage et al., 2023; Verdinelli & Biever, 2009); therefore, there is an urgent need to understand and improve this area of practice to adequately address the *Ethics Code* core principle of ensuring competence and skills to support diverse groups of individuals (BACB, 2020).

The purpose of the present study is to gain an understanding of the challenges and needs of U.S.-based Spanish-speaking behavior analysts who work with young children with autism and their families in Spanish and contribute toward our understanding of the current state of practice. We hope this study will build a foundation toward future research and professional development for behavior analysts who support autistic children from Spanish-speaking homes. The following research question guided this study: What ethical challenges and needs do bilingual behavior analysts experience when providing Spanish-language ABA services for autistic children and their families in the United States?

## Method

This qualitative study used "a systematic approach to understanding qualities, or the essential nature, of a phenomenon within a particular context" (Brantlinger et al., 2005, p. 195). Qualitative research methods are well-suited to address exploratory research questions and have a long history of use in special education and other social sciences with well-established guidelines and quality indicators (Brantlinger et al., 2005; Braun & Clark, 2006; QR Collective, 2023). In alignment with updated recommendations to improve qualitative research in special education, reflexivity, and a critical theoretical lens were used to conceptualize, design, conduct, and analyze this study (QR Collective, 2023). A similar recommendation was also put forth to ABA researchers, organizations, and providers by Catrone et al. (2022). In particular, this study was strongly informed by critical race theory and disability critical race theory (DisCrit) to address the intersectionality and spectrum of experiences and perspectives of behavior analysts who are underrepresented in the profession and also members of historically marginalized groups in the United States (Annamma et al., 2018; BACB, n.d.). Tenets of DisCrit stress the importance of "centering of the margins" to spotlight, understand, and work toward improving the lived experiences of individuals from multiple marginalized backgrounds (e.g., consider how a disabled and racially minoritized individual may experience life compared to a nondisabled white individual in the United States; Annamma et al., 2018; Catrone et al., 2022; Love & Beneke, 2021). In addition, the authors of the present study are also bilingual BCBA's who have provided ABA support for children families around the world and in various languages and are experienced in designing, conducting, and publishing qualitative research in special education. Additional data analysis support was provided by a bilingual PhD student with experience supporting autistic children.

## Recruitment

This IRB-approved study used purposeful and snowball sampling strategies via social media (e.g., Facebook and Instagram). Behavior analysts were invited to participate in an interview upon meeting the following inclusion criteria: (1) U.S.-based BCBA or BcaBA; (2) self-identify as bilingual in English and Spanish; and (3) practice in a clinical capacity defined as: providing direct intervention to children in-home, direct caregiver training, and/or provide case management and supervision for behavior technicians who provide direct intervention in-home. Bilingualism was defined as the ability to "communicate in at least two languages, one of which must be English." This study focused on the experiences of analysts who work closely with families in the natural environment setting, rather than those in school-based or clinical settings.

## Participants

A total of 14 Spanish-speaking behavior analysts participated in this study. A majority of the behavior analysts in this study were of Mexican heritage ( $n = 8$ ) and tended to live in states with higher concentrations of Latinos or Hispanics<sup>3</sup> such as California ( $n = 5$ ), Texas ( $n = 4$ ), and Florida ( $n = 3$ ). Most of the participants ( $n = 7$ ) were second generation in the United States, followed by first generation in the United States ( $n = 5$ ), and third generation in the United States ( $n = 1$ ). One participant identified as a non-Hispanic/Latino Black woman who speaks Spanish as a second language that she learned in adulthood. Most participants self-described their Spanish ability as “native” or “fluent.” Participants reported supporting multiple Spanish-speaking families with a child on the spectrum who ranged in age from early childhood to teenage years. A summary of responses to the demographic questionnaire are included in Table 1.

## Data Collection

This study had two sources of data: a demographic questionnaire and a semi-structured interview. The demographic questionnaire included demographic questions and two Likert-style questions about level of comfort providing Spanish language services and level of support provided by their place of work. The semi-structured interview protocol featured open-ended questions to solicit the sharing of behavior analysts’ experiences and perceptions (see supplementary materials for the demographic questionnaire and interview protocol). The interview protocol was developed by the first author with revisions and feedback from the second author, additional faculty members, and two doctoral students who were BCBA’s with recent and extensive clinical experience. The protocol was piloted with one bilingual behavior analyst who met all inclusion criteria. No significant changes were made because of the pilot interview.

## Procedures

All interviews were conducted in English over Zoom by the first author. The length of interviews averaged 45 min

**Table 1** Participant Demographic Table

	Participants ( $N = 14$ )
<b>Certification</b>	
Board Certified Behavior Analyst	13
Board Certified Assistant Behavior Analyst	1
<b>Age in Years</b>	
Average	33
Range	24–46
<b>Sex</b>	
Female	13
Male	1
<b>Familial Country of Origin<sup>a</sup></b>	
Mexico	8
Guatemala	2
Peru	2
Cuba	1
El Salvador	1
Puerto Rico	1
<b>U.S. State of Primary Practice</b>	
California	5
Texas	4
Florida	3
Arizona	1
Connecticut	1
<b>Years of Experience in ABA<sup>b</sup></b>	
Average	10 years
Range	2–26 years
<b>Generation in the United States<sup>c</sup></b>	
First generation	5
Second generation	7
Third generation	1
<b>1<sup>st</sup> Generation Time Spent in the United States</b>	
Average time	19 years
Range	12–28 years

*Note.*<sup>a</sup> Numbers might not equal to 14 because some participants identified as having more than one familial country of origin and one participant does not identify as Latino or Hispanic and is a nonnative Spanish speaker; <sup>b</sup> Years of experience in ABA included time spent as a behavior technician, if applicable; <sup>c</sup> “first generation” indicates the participant was born outside the United States or in Puerto Rico; second generation indicates that one or both of the participant’s parents were born outside of the United States or in Puerto Rico; and third generation indicates that the participant’s grandparents were born outside of the United States or in Puerto Rico

and ranged from 18–75 min. The interview audio files were automatically transcribed in Zoom using the caption feature, and then manually verified and corrected by the first author. Once transcribed, the first author composed member check summaries and representative quotes for each participant within 1 week of each interview to allow participants to provide corrections or additional information about the interviews. Member checks are short interview summaries

<sup>3</sup> Due to the limited use and awareness of terms such as “Latinx” or “Latine” within these communities (Pew Research Center, 2020), the terms “Latino or Hispanic” is used in this article to refer to individuals of unspecified Latin American origin, regardless of race or nationality, and is intended to be inclusive of all genders. It should be noted that all participants in the present study used the terms “Latino” or “Latina,” “Hispanic,” or a national identifier (e.g., Cuban or Salvadoran) when describing themselves. None of the participants used gender neutral variations such as “Latinx” or “Latine.”

shared with participants so they may provide feedback, clarifications, or approval. Member checks are a critical piece of qualitative research to improve the trustworthiness and credibility of findings (Brantlinger et al., 2005). All participants ( $N = 14$ ) responded to the member check summaries, and no substantive corrections or adjustments were provided. Participants received a \$50 gift card upon completing the interview and providing feedback for the member checks.

## Data Analysis

The transcribed interviews were analyzed thematically using an iterative and collaborative process to develop a codebook (Saldaña, 2021). First, the research team independently read interview transcripts then met as a group to discuss initial thoughts and potential codes (i.e., a short phrase to summarize the content of the sentence or passage). Next, the team reread transcripts and applied codes in a sentence by sentence or section by section manner, as appropriate to the content of the interview. Then, the first author developed a codebook with frequently used codes categorized into themes with descriptions and representative quotes. The research team independently reviewed the codebook and provided feedback, corrections, and suggestions. The first author used the final codebook to independently code all interviews ( $N = 14$ ) using Dedoose (2022) qualitative data analysis software. See supplementary materials for the finalized codebook.

## Findings

Participants shared a range of experiences that presented positive and challenging events when working as bilingual behavior analysts. Participants expressed how they highly value bilingualism and believe they are providing important and needed services for families and autistic children. Participants also shared stories about the positive clinical impact of providing heritage-language support for autistic children, and how speaking the same language as the family improved their relationships. The findings included in this article focus on two major themes (1) People Don't Understand How Difficult It Is: Challenges When Working Bilingually; and (2) I'm One Person, I Can't Be Everywhere: Bilingual Behavior Analysts' Needs. These major themes and additional sub-themes are explored below.

### People Don't Understand How Difficult It Is: Challenges When Working Bilingually

Participants' challenging experiences resulted in three sub-themes related to (1) challenges with translation and interpretation; (2) discrimination by clients and colleagues; and

(3) feeling overwhelmed, overworked, and underappreciated at work.

### Translation and Interpretation Challenges

The majority of participants ( $n = 11$ ) described some challenges related to translation and interpretation within their practice. In general, participants expressed that this was an additional mental task. For example, Clara, a BCBA from Texas who is second generation, described this challenge saying:

I try really the best as I could to translate every single part, and make sure to provide [the families] with all the correct information. But it's a little bit difficult when . . . [for example, in] assessments or tools and I was like, *uhhhh*. . . I could literally feel my wheel spinning miles in my brain, not going fast enough to translate some of those things. . . . Those times were the ones that I had the most difficulty.

Araceli, another BCBA from Texas who is third generation, posits that this challenge is rooted in the fact that their professional training was entirely in English and focused on supporting English-speakers, "When we go to school, there's not a lot of talk about it, you know? There's not a lot of talk about providing services in another language, it's just providing it in English." They further describe this as a barrier to providing the best care, especially when they are newly certified, stating, "not only are we trying to be a BCBA but we're trying to be BCBA in Spanish, or in another language, and trying to help parents understand what we're still trying to understand." It should be noted that all participants in this study reported receiving their ABA graduate studies and practicum experiences in English.

Isabel, a BCBA from California who is second generation, described how imposter syndrome compounded with their difficulty learning new terminology and translating with ABA after completing their graduate studies and becoming a supervisor in their place of employment:

My entire [graduate] program was in English. The agency that I worked with had all English-speaking supervisors and all English-speaking mentors. So, off the bat, I came in speaking Spanish and they're like, "Great! You can take the Spanish caseload. We have the list of clients that would benefit from having a Spanish speaking supervisor, so, here you go." So for me, it was learning all of the ABA terminology, procedures, and everything related to what would help me do my job [in Spanish]. . . . That was probably the most difficult thing for me.

Sofia, a BCBA from California who is also second generation, had a very similar experience, noting, "[starting to

work in Spanish was] really difficult for me because I went from English to then switching over to Spanish with no training or preparation of the ABA words.” These experiences of being the only bilingual behavior analyst and receiving no training or support to practice in Spanish was a common situation shared by participants and they described it as a significant challenge in their work.

### Experiences of Discrimination

Five participants reported experiencing discrimination in their work by colleagues or families. Three out of the five participants were first-generation Americans and described how other’s perceptions of their accents contributed to the discrimination. Alex, who is first generation, described feeling like “a unicorn” within the field of ABA, due to factors of their identity such as the color of their skin, gender, and accent. They shared a story of when they worked in a Mid-western state and met a new family on their caseload who were monolingual English-speaking:

As soon as they heard me and they saw me. . . . Everything changed. I think they doubted my skills . . . just because of the way I sound. [That] family requested a change [of BCBA] because they could not understand me. . . . I felt that they were not comfortable with me. I was speaking English. Everyone understood me, you know? . . . I don't care about my accent, but they were not comfortable.

Alex was a seasoned provider who reported experiencing discrimination due to their accent and appearance. Some participants also shared experiences of discrimination by their own colleagues. For example, Camila, who is also first generation, described being the only bilingual BCBA at their clinic in a border region with many Spanish-speakers. Their treatment programming decisions were negatively received by other providers in the area:

I would program [play skills] like [a Mexican children’s game] instead of playing . . . I don't know . . . I don't know what other games people play, because I’m not white! So, we would have to play Ring around the Rosie, but I don't know how to play that! I had to Google the song, you know? So, to me, it was easier to just get [my students] to play whatever it is that I already know how to play, and I can program for them to try to learn all these other kinds of games. And to me it was about the skills. And there were a lot of comments [from other behavior analysts in their community] like, “Oh, it's the ‘spicy’ clinic” or “it's the one with the ‘weird’ games” and . . . It was scary.

Daniela, a BCBA from California, described experiencing hiring discrimination when she first entered the field of ABA in the 1990s. She noted how her past experiences continue to affect her current perspectives stating, “I really am so against treating people differently. I was treated that way at the start of my field.” Many of these experiences of overt discrimination also occurred with covert instances of discrimination leading to participants feeling distress at work.

### Overworked, Underappreciated, and Blurred Lines at Work

Participants shared stories of working longer hours to translate documents and provide support for their Spanish-speaking families without recognition or compensation compared to their English-only speaking peers at work. Isabel noted, “I don't think many people understand how difficult being a bilingual therapist is and how much quicker we burn out because of it.” Sara, a BCBA from California who is first generation, agreed:

I've seen the burnout in bilingual BCBAs . . . I think things are being thrown at us [by administrators] because we speak Spanish. “Carry all of this behind you without the support,” so yeah, it's kind of sad. And at the same time, it's like, is there something we can do? Or is it just the system itself? It's insurance at the end. There's nothing we can do. But, I don't know, it's kind of sad.

Sara further described feeling powerless to change what they view as a systemic problem fueled by insurance billing requirements. Isabel furthers this sentiment when she described how administrators focus on billable hours to promote increased revenue but do not factor in additional unbillable hours:

How much extra time did I spend translating a document that wasn't translated for me? Yeah, you saw my assessment, I billed for eight hours. But how many more hours did I do because I had to sit and translate the assessment so that the family understood, and I can appropriately get consent for that document? . . . so, I think there's a lot of that stuff that gets missed because we're bilingual. And because we come from this culture that says power through, power through. We tend to push ourselves more and at the end, I think, burnout just kicks in and you're like, I'm out!

Clara shared a story on behalf of their friend, a fellow bilingual behavior analyst who worked at another agency in the region:

I have a friend and [her employer] totally take[s] advantage of the fact that she's one of the few clinicians that speaks the Spanish language. And you know, we've chatted [together] late at night, because we're both trying to translate something, and she gets paid less than other clinicians that don't do all of that extra work! So, I feel that the skills of those that have it, they're not as recognized or valued. Even though [employers] take advantage of us.

The behavior analysts described shared experiences of working additional hours that went unrecognized and uncompensated by administrators and clinical directors.

Isabel introduced another experience with their story above about the extra work required to gain appropriate and ethical consent from families. Experiencing ethical challenges due to their bilingual work was shared by half of the participants ( $n = 7$ ). Besides the challenge of obtaining appropriate and full consent, additional ethical challenges faced by participants included an increase in the potential for multiple relationships and stepping outside their defined role as behavior analysts to support families. Several participants discussed multiple relationships in the context of culture, and how sharing the same culture as families can blur boundaries. Bonnie, a BCBA from California who is first generation, said, “I feel like in Spanish speaking homes, sometimes it can be so casual when parents bring up things that are outside of the treatment plan . . . that happens more in my bilingual homes than my nonbilingual homes.”

Participants also described how they step outside their defined professional role to support the families on their caseload. Sara described this saying, “I stop supervising and I become a translator.” Isabel described the challenge of not becoming families’ “one stop shop” to access community support, translate medical forms, or decipher letters from their children’s school that were not translated for them. Isabel furthered, “that was the biggest barrier, because we just wanted to make sure that [the families] have everything that they need, and it took some time to be like, but no! That's not our role.” Camila tied the challenges of multiple relationships and working beyond their defined role back to culture: “I think that we have struggled because the culture is also very different to the American culture. So, trying sometimes to fit the very strict, very squared model that is ABA as prescribed by the BACB . . . sometimes it's very hard.” Participants experienced a range of experiences in their work as bilingual behavior analysts including difficulty translating, feeling overburdened, and struggling to navigate ethical challenges such as dual relationships or feeling pressured to work outside of one’s professional scope of practice. Overall, participants’

challenging experiences were mostly related to larger systemic-level and administrative issues.

### **I’m One Person, I Can’t Be Everywhere: Bilingual Behavior Analysts’ Needs**

All participants ( $N = 14$ ) expressed the need for more support in their bilingual practice. These needs fell into sub-categories of translated materials and resources, access to interpreters, increased recruitment of bilingual providers, and more training and professional development opportunities in general.

#### **Translated Materials and Resources**

The majority of the participants ( $n = 10$ ) said they could be better supported in their work as bilingual behavior analysts if they had access to more translated materials such as assessments, treatment protocols, and parent training materials. Participants shared similar ideas to improve the situation such as the creation of an ABA dictionary with translations across many languages and access to basic clinical protocols (e.g., basics of positive reinforcement or verbal behavior training) in other languages. Bonnie imagined having access to translated protocols to share with caregivers and stated:

[It would] be nice to know that exactly what we’re reading in English, or in Spanish, is being exactly translated over in [another language]. So, as we’re reading English they can read in their language and then we can model. . . . If there was some kind of worldwide document or something that we can use to translate to any language that would be the biggest benefit for sure.

#### **Access to Interpreters**

Nearly half ( $n = 6$ ) of the participants expressed a need for access to more professional interpreters<sup>4</sup> in their work. It should be noted that this need was only expressed by second- and third-generation participants and the non-Hispanic/Latino participant who learned Spanish as a second language. Katie, a BCBA from Florida who is second generation, explained that interpretation would be beneficial for the field, especially when a bilingual behavior analyst is unavailable, but noted the difficulty in finding highly skilled interpreters:

<sup>4</sup> Interpreters mediate languages orally (e.g., in vivo during a meeting) and translators work with written materials (e.g., translating a written document from English into Spanish).



I have never, in all my years . . . I've only seen one quality and effective interpreter at [an individualized education program] meeting. And that's because this individual happened to have already been a teacher, or work as behavior specialist in the school system. So, the language was just flying off the press. That's one in almost 18 years of being in this field.

Brenda, a BCBA from Arizona who is also second generation, highlighted the need for skilled interpreters who are familiar with ABA stating, "I believe, if we had a live person actually looking over and [interpreting] . . . preferably someone with an ABA background so they understand what the sentences mean, I think that would be the best way to be supported." Most participants had never worked with interpreters before and those who had shared that their experiences could have been improved if the interpreters had ABA or behavioral training.

### Increased Recruitment of Bilingual Providers

Many participants ( $n = 6$ ) shared the need for increased recruitment of bilingual behavior analysts and behavior technicians. Stephanie, a BCBA who learned Spanish as a second language, summarized this need when asked how they could be best supported to provide high quality bilingual care stating, "I think it's just a matter of finding more bilingual people. I think that's the only real solution." Participants who worked for national multisite companies shared stories of administrators requesting their translation or interpretation support for other families across the country. Camila described multiple examples of this scenario:

I live in Texas, I practice in Texas, but I would get calls like, "well there's a Spanish speaking family in Missouri. . . . And there's no one over there that speaks Spanish, so you do the intake." So, I did a whole intake and the assessments and all of that with the family over telehealth, with a family that I will never treat or meet. And how does that even make sense? Or, "somebody had a complaint in Florida, so can you call the mom and ease her concern?". . . I don't know her! I don't know if they're gonna actually change anything that she's complaining about!

Sara, who practiced in California, described a near-identical experience saying, "Sometimes our admin tells me, 'Hey, can you call this mom? Because they only speak Spanish.' I'm like . . . guys. . . . You know we have a big clientele in Spanish. Get somebody [in administration] that speaks Spanish." Katie succinctly summarized this challenge of being spread too thin to support families beyond their case-load stating, "I'm one person. I can't be everywhere."

### Family Training and Professional Development Opportunities for Providers

Nearly all participants ( $n = 13$ ) expressed the desire for additional training to support families and caregivers ( $n = 5$ ) and/or access to professional development for themselves ( $n = 12$ ). When asked what training would be most beneficial, Brenda said: "I would love parents to know the benefits of being bilingual and raising their children bilingual so that they're open to it and that we can work on it . . . to me it feels like you would limit someone by not offering that opportunity." Participants also said general professional development related to bilingualism and cultural competency would be beneficial for them in their work, but they highlighted how they have struggled to find professional development or mentorship in bilingualism in particular. For example, Maria, a BCBA in Texas who is first generation, shared they would "be more comfortable getting supervision from someone that's providing [bilingual] services as well . . . having a mentor that also is in the same situation [would be beneficial]."

In addition to the desire for self-growth and learning, participants also recognize that challenges related to bilingualism often stem from a broader lack of information and understanding. Participants believe information about the benefits of bilingualism is also needed for monolingual English-speaking behavior analysts and other allied professionals. For example, Isabel stated:

There's not much research out there. And I think, not just for us bilingual practitioners, but I think it's also important for those English-only speakers to know. Because at the end of the day, there's not enough of us [bilinguals] to go around for the need. So, if we can at least get those English-only speakers to understand that there's more than the language that is impacted when they're providing services. I think all of that is important.

Other participants shared similar stories of monolingual allied health-care providers erroneously advising parents against maintaining their heritage language. Clara described a situation where an occupational therapist who was part of a multidisciplinary team said, "I'm unable to work with your child because they're not conducive to learning," and Alex likewise shared witnessing how a speech therapist advised caregivers to "stick with one language." Participants recognized that the bilingual families will not only have bilingual service providers, and they expressed the need for bilingual education to be accessed by anyone who may be supporting bilingual learners.

Overall, participants discussed a wide range of needs that would help them provide the best bilingual ABA services for Spanish-speaking families. Participants requested more

access to qualified interpreters and translators, increased recruitment of bilingual behavior analysts, and participants shared opinions that training opportunities related to bilingualism and heritage languages would be beneficial for monolingual and multilingual behavior analysts, allied professionals, and caregivers and families.

## Discussion

The purpose of the present study was to explore ethical challenges and needs of bilingual behavior analysts who practiced in-home with autistic children from predominantly Spanish-speaking families. Fourteen behavior analysts participated in this study and included first-, second-, and third-generation Americans, as well as one individual who learned Spanish as a second language as an adult.

The findings are in alignment with current literature and provide some novel takeaways. Participants in this study across generations expressed positive experiences such as improved relationships with families and clinical outcomes for children, but also shared challenging experiences such as feeling overworked and underappreciated and also had difficulty with multiple relationships in the workplace. These challenging experiences are echoed by allied providers who are also members of marginalized groups, and report feeling stretched thin playing multiple roles of teacher, counselor, and translator (Amanti, 2019; Amos, 2018; Verdinelli & Biever, 2009). Similar to reports from Spanish-speaking mental health providers (Diaz-LePage et al., 2023; Verdinelli & Biever, 2009), participants in the present study reported a range of potential ethical challenges that implicated *Ethics Code* Standards 1.04: Practicing within a Defined Role, and Standard 1.11: Multiple Relationships. Although participants were aware of their personal biases and challenges (Standard 1.10), they sometimes struggled to maintain clear boundaries with clients in their efforts to provide them with adequate support. In addition, participants in this study reported needs such as additional mentorship, translated resources, and training. These needs are in alignment with the experiences of the bilingual mental-health counselors who desired bilingual mentorship and training to improve their practice (Pope et al., 2022; Vaquero & Williams, 2018; Verdinelli & Biever, 2009). Lastly, participants' accounts of other professionals giving false information about bilingualism to families is an unfortunate experience that has been reported in many other studies from the United States and internationally (Hay et al., 2021; Howard et al., 2020, 2021; Papoudi et al., 2021; Sher et al., 2022).

Our findings highlight the importance of using guiding critical theoretical frameworks. With this intersectional lens, additional findings were illuminated, such as how participants' generation in the United States affected their needs

(e.g., second-generation behavior analysts reported wanting more support with translations) within their work. These distinctions are important and serve as a reminder that no group is a monolith and that bilingualism is a spectrum. An individual may be bilingual and able to forge strong connections with Spanish-speaking families and make excellent clinical progress, but they may or may not be able to translate clinical documents or interpret effectively during meetings. They are still bilingual. In addition, the participants also noted the importance of intersectionality within their own work and how they relate to the families they serve. The behavior analysts in this study recognized and empathized with the challenges these intersections create for the families they serve and are a testament to the call for a more diverse workforce that is reflective of their communities (Rosales et al., 2023).

## Limitations and Implications

This study has a few limitations. First, this study is limited due to the lack of perspective from additional roles within ABA care, including family members, autistic self-advocates, administrators, and behavior technicians. The experiences of behavior technicians in particular are rarely included in ABA research despite them providing most of the one-to-one support within the tiered ABA model of care. Including the perspectives of both monolingual and bilingual behavior technicians could help inform a more nuanced account of the current landscape of care provided to Spanish-speaking children who receive ABA services. Another limitation is the focus on Spanish-speaking behavior analysts only. Although Spanish is the most common language in the United States besides English, the experiences of speakers of other languages are also important. Other identities were not examined such as gender, sexual orientation, or disability status of family members or providers, which could highlight additional areas of need.

Using Catrone et al.'s (2022) recommendations to apply DisCrit tenets within ABA practice, we will put forth recommendations across three levels: organizational, provider, and within research and higher education.

### Organizational

Leadership within ABA organizations (e.g., BACB board members and private businesses owners) are encouraged to learn more about bilingualism (e.g., recognizing that bilingualism is a spectrum of ability) and closely examine their current practices and guidelines related to bilingualism and bilingual staff. The BACB may consider requesting additional demographic data from all certificants, such as languages spoken, because understanding the true scope of the workforce remains incomplete without these data. Business owners and clinical directors might explore

making investments in translated resources and check in with employees about their actual time worked compared to reported time worked. This will ensure organizations are not unfairly evaluating employees who may be going above and beyond to support families even though it may not be reflected in billable hours. Leadership should also be aware that failure to provide employees with adequate support may contribute to behavior analysts practicing outside of their defined role, implicating *Ethics Code* Standard 1.04 (BACB, 2020). Developing systems-level support for ABA staff is important and may also prevent burnout and improve employee satisfaction (Slowiak & DeLongchamp, 2022; Slowiak & Jay, 2023). In addition, we recommend organizational leaders make efforts to ensure their staff is reflective of the community they serve. See Rosales et al.'s (2023) article for detailed examples of actions leadership can take to recruit and retain a more diverse workforce in ABA, such as recruiting from within and tuition reimbursement, suggestions that are echoed by Catrone et al. (2022).

### Provider

Bilingual behavior analysts are encouraged to seek support and mentorship from other bilingual behavior analysts, through formal or informal pathways, to build community and provide support to handle some of the ethical challenges described in the findings; namely, multiple relationships (Standard 1.11) and practicing outside of one's defined role (Standard 1.04; BACB, 2020). Setting boundaries in a culturally aware and respectful manner can be a challenge, but is important for maintaining professionalism and self-care, which has been shown to reduce feelings of burnout in behavior analysts (Slowiak & DeLongchamp, 2022). Bilingual behavior analysts who may struggle with this are encouraged to lean on each other for support and guidance. In addition, advocating within one's place of work may alert administrators to the realities of providing bilingual care and the benefits linguistically tailored care can provide to families and children. Monolingual behavior analysts who support multilingual populations are also encouraged to engage in self-learning about the impact and benefits of bilingualism and ensure they are not inadvertently placing undue burdens on their bilingual colleagues and helping to create a positive environment for their peers (LeBlanc et al., 2020). All behavior analysts are responsible for advocating for appropriate services (Standard 3.12) and collaborating with colleagues (Standard 2.10) to promote the best outcomes for those we serve (BACB, 2020).

### Research and Higher Education

Faculty in ABA graduate programs that focus on autism are encouraged to incorporate literature regarding bilingualism

from outside the field (e.g., special education and disability studies) into coursework and supervision practices to support students studying for their graduate degree and/or certification as a behavior analyst. Leaders in ABA also are encouraged to consider additional pathways or licensure such as a bilingual endorsement. Allied organizations such as the ASHA have a bilingual certification option as well as the opportunity for providers to self-identify as bilingual in their member directory (ASHA, n.d.). The field of behavior analysis may benefit from additional considerations and investment in this area. Researchers are also encouraged to explore bilingualism and its impact within ABA practice at the child, family, and provider levels, and across languages, geographic regions (e.g., within the state of California), and work settings and modalities (e.g., clinic-based, telehealth, or within schools).

Researchers should reflect and ensure they are adequately trained or experienced to conduct research in this area, and if they do not have personal or professional experience, seek the expertise of those who do (i.e., bilingual behavior analysts or other bilingual experts) and provide them adequate compensation (e.g., financial and/or authorship) for their time, efforts, and knowledge (see Pritchett et al., 2022, for a description of paradigm shifts in research practices within ABA).

### Conclusion

In summary, bilingual behavior analysts reported positive and challenging experiences supporting Spanish-speaking autistic children and their families. Participants report the need for more administrative support to provide the best care. The challenges facing bilingual behavior analysts cannot be solved in a piecemeal fashion. Efforts must happen across time and environments to generate sustainable and effective change so bilingual behavior analysts can thrive and provide the highest quality support for some of our most marginalized and vulnerable recipients of ABA services.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1007/s40617-024-00916-2>.

**Acknowledgments** The authors thank Christy Yoon for her assistance with data analysis.

**Author Contributions** The first author contributed to the study conception, design, material preparation, data collection, data analysis, and writing the initial draft. The second author contributed to the study conception, design, data analysis, and editing. All authors approved the final manuscript.

**Funding** This study was supported in part by funding from the Office of Special Education Programs, U.S. Department of Education, Project Co-LEAD (H325D190064). The views or opinions presented in this article are solely those of the authors and do not necessarily represent those of the funding agency.

**Data availability** The data that support the findings of this study are not openly available due to reasons of sensitivity.

## Declarations

**Consent to Participate** Informed consent was obtained from all individual participants included in the study.

**Disclosure of Potential Conflicts of Interest** All authors are Board Certified Behavior Analysts who stand to gain from favorable public perception of ABA. The authors certify that they have no current affiliations with or involvement in any organization or entity with any financial interest in the subject matter or materials discussed in this article.

**Ethics Approval** The Institutional Review Board approved the methods and procedures of this project.

## References

- Aguilar, J. M., Chan, J. M., White, P. J., & Fragale, C. (2017). Assessment of the language preferences of five children with autism from Spanish-speaking homes. *Journal of Behavioral Education, 26*(4), 334–347. <https://doi.org/10.1007/s10864-017-9280-9>
- Amanti, C. (2019). The (invisible) work of dual language bilingual education teachers. *Bilingual Research Journal, 42*(4), 455–470. <https://doi.org/10.1080/15235882.2019.1687111>
- American Speech-Language-Hearing Association. (n.d.). *Bilingual service delivery practice portal*. <https://www.asha.org/practice-portal/professional-issues/bilingual-service-delivery/>. Accessed 29 Sept 2023.
- Amos, Y. T. (2018). *Latina bilingual education teachers examining structural racism in schools*. Routledge.
- Annamma, S. A., Ferri, B. A., & Connor, D. J. (2018). Disability critical race theory: Exploring the intersectional lineage, emergence, and potential futures of DisCrit in education. *Review of Research in Education, 42*(1), 46–71. <https://doi.org/10.3102/0091732X18759041>
- Baires, N. A., Cañón, L. F., García-Zambrano, S., Guerrero-Wickham, P., & Castro-Hostetler, M. (2023). A contextual behavioral framework for enhancing cultural responsiveness in behavioral service delivery for Latino families. *Behavior Analysis in Practice, 16*, 938–962. <https://doi.org/10.1007/s40617-023-00788-y>
- Behavior Analyst Certification Board. (n.d.). *BACB certificant data*. <https://www.bacb.com/bacb-certificant-data/>. Accessed 4 Jan 2024.
- Behavior Analyst Certification Board. (2020). *Ethics code for behavior analysts*. <https://www.bacb.com/wp-content/uploads/2020/11/Ethics-Code-for-Behavior-Analysts-210902.pdf>
- Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children, 71*(2), 195–207. <https://doi.org/10.1177/001440290507100205>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brodhead, M. T., Durán, L., & Bloom, S. E. (2014). Cultural and linguistic diversity in recent verbal behavior research on individuals with disabilities: A review and implications for research and practice. *Analysis of Verbal Behavior, 30*(1), 75–86. <https://doi.org/10.1007/s40616-014-0009-8>
- Catrone, R. G., Baires, N. A., Martin Loya, M. R., & Brown-Hollie, J. P. (2023). An intersectional examination of disability and race models in behavior-analytic practice. *Behavior & Social Issues, 32*, 152–181. <https://doi.org/10.1007/s42822-022-00116-z>
- Conner, C., Baker, D. L., & Allor, J. H. (2020). Multiple language exposure for children with autism spectrum disorder from culturally and linguistically diverse communities. *Bilingual Research Journal, 43*(3), 286–303. <https://doi.org/10.1080/15235882.2020.1799885>
- Council of Autism Service Providers. (2020). *Applied behavior analysis treatment of autism spectrum disorder: Practice guidelines for healthcare funders and managers* (2nd edn.). <https://casproviders.org/asd-guidelines/>
- Davis, R., Hampton, S. C., & Fletcher-Watson, S. (2022). Why study bilingualism in autistic people? *Autism, 26*(7), 1601–1605. <https://doi.org/10.1177/13623613221126115>
- Dedoose. (2022). *Version 9.2.004, cloud application for managing, analyzing, and presenting qualitative and mixed method research data*. Los Angeles, CA: SocioCultural Research Consultants, LLC. <https://www.dedoose.com>
- Dennison, A., Lund, E. M., Brodhead, M. T., Mejia, L., Armenta, A., & Leal, J. (2019). Delivering home-supported applied behavior analysis therapies to culturally and linguistically diverse families. *Behavior Analysis in Practice, 12*(4), 887–898. <https://doi.org/10.1007/s40617-019-00374-1>
- Diaz-LePage, A., Lauer, M., Santa-Sosa, E., Abdul-Chani, M., Garcia, A., Hoet, A., Senior, C., Carroll, I., Hatchimonji, D., & Marchante-Hoffman, A. (2023). *En sus propias palabras* (in their own words): Reflections of Spanish-English bilingual psychologists and trainees in the United States. *Training & Education in Professional Psychology, 18*(1), 78–86. <https://doi.org/10.1037/tep0000455>
- Digard, B. G., Sorace, A., Stanfield, A., & Fletcher-Watson, S. (2020). Bilingualism in autism: Language learning profiles and social experiences. *Autism, 24*(8), 2166–2177. <https://doi.org/10.1177/1362361320937845>
- Digard, B. G., Davis, R., Stanfield, A., Sorace, A., & Fletcher-Watson, S. (2022). “The languages that you know draw the boundary of your world”: A thematic analysis of the experiences of autistic bilingual adults living in the United Kingdom. *Autism in Adulthood, 4*(4), 328–339. <https://doi.org/10.1089/aut.2021.0077>
- Durán, L., Cycyk, L. M., & Batz, R. (2022). *Voces de la gente*: Spanish-Speaking families’ perspectives on early childhood special education. *Journal of Early Intervention, 45*(3), 285–305. <https://doi.org/10.1177/10538151221131514>
- Federal Register. (2023). *Applications for new awards: Personnel development to improve services and results for children with disabilities-preparation of special education, early intervention, and related services leadership personnel*. U.S Department of Education. Retrieved September 29, 2023, <https://www.federalregister.gov/d/2023-09688>
- Gilhuber, C. S., Raulston, T. J., & Galley, K. (2023). Language and communication skills in multilingual children on the autism spectrum: A systematic review. *Autism, 27*(6), 1516–1531. <https://doi.org/10.1177/13623613221147780>
- Graber, A., & Graber, J. (2023). Applied behavior analysis and the abolitionist neurodiversity critique: An ethical analysis. *Behavior Analysis in Practice, 16*, 921–937. <https://doi.org/10.1007/s40617-023-00780-6>
- Hay, I., Tsourtos, G., & Bickford, J. (2021). A qualitative inquiry of professionals’ perceptions of bilingualism for children with language delay. *International Journal of Speech-Language Pathology, 23*(5), 497–507. <https://doi.org/10.1080/17549507.2020.1869306>
- Howard, K., Gibson, J., & Katsos, N. (2020). Parental perceptions and decisions regarding maintaining bilingualism in autism. *Journal of Autism & Developmental Disorders, 51*(1), 179–192. <https://doi.org/10.1007/s10803-020-04528-x>
- Howard, K., Katsos, N., & Gibson, J. (2021). Practitioners’ perspectives and experiences of supporting bilingual pupils on the autism

- spectrum in two linguistically different educational settings. *British Educational Research Journal*, 47(2), 427–449. <https://doi.org/10.1002/berj.3662>
- Jones, S. H., Peter, C. C., & Ruckle, M. M. (2020). Reporting of demographic variables in the Journal of Applied Behavior Analysis. *Journal of Applied Behavior Analysis*, 53(3), 1304–1315. <https://doi.org/10.1002/jaba.722>
- Kelleher, A. (2010). What is a heritage language? (Heritage Briefs). *Center for Applied Linguistics*. Retrieved September 29, 2023, <https://www.cal.org/heritage/pdfs/briefs/What-is-a-Heritage-Language.pdf>
- Kornack, J., Cernius, A., & Persicke, A. (2019). The diversity is in the details: Unintentional language discrimination in the practice of Applied Behavior Analysis. *Behavior Analysis in Practice*, 12(4), 879–886. <https://doi.org/10.1007/s40617-019-00377-y>
- Kroll, J. F., & Dussias, P. E. (2017). The benefits of multilingualism to the personal and professional development of residents of the US. *Foreign Language Annals*, 50(2), 248–259. <https://doi.org/10.1111/flan.12271>
- Lang, R., Rispoli, M., Sigafos, J., Lancioni, G., Andrews, A., & Ortega, L. (2011). Effects of language of instruction on response accuracy and challenging behavior in a child with autism. *Journal of Behavioral Education*, 20(4), 252–259. <https://doi.org/10.1007/s10864-011-9130-0>
- LeBlanc, L. A., Sellers, T. P., & Ala'i, S. (2020). Interpersonal and therapeutic relationship skills. In L. A. LeBlanc, T. P. Sellers, & S. Ala'i (Eds.), *Building and sustaining meaningful and effective relationships as a supervisor and mentor*. UK: Sloan.
- Li, A., Wallace, L., Ehrhardt, K. E., & Poling, A. (2017). Reporting participant characteristics in intervention articles published in five behavior-analytic journals, 2013–2015. *Behavior Analysis: Research & Practice*, 17(1), 84–91. <https://doi.org/10.1037/bar000071>
- Lim, N., & Charlop, M. H. (2018). Effects of English versus heritage language on play in bilingually exposed children with autism spectrum disorder. *Behavioral Interventions*, 33(4), 339–351. <https://doi.org/10.1002/bin.1644>
- Lim, N., O'Reilly, M., Sigafos, J., Lancioni, G. E., & Sanchez, N. J. (2021). A review of barriers to services for immigrant parents of children with autism when accessing services. *Review Journal of Autism & Developmental Disorders*, 8(3), 366–372. <https://doi.org/10.1007/s40489-020-00216-9>
- Love, H. R., & Beneke, M. R. (2021). Pursuing justice-driven inclusive education research: Disability critical race theory (DisCrit) in early childhood. *Topics in Early Childhood Special Education*, 41(1), 31–44. <https://doi.org/10.1177/0271121421990833>
- Meek, S., Smith, L., Allen, R., Catherine, E., Edyburn, K., Williams, C., Fabes, R., McIntosh, K., Garcia, E., Takamishi, R., Gordon, L., Jimenez-Castellanos, O., Hemmeter, M. L., Gilliam, W., & Pontier, R. (2020). Start with equity: From the early years to the early grades. *The Children's Equity Project*. <https://childandfamily.milysuccess.asu.edu/cep>
- Montgomery, L., Chondrogianni, V., Fletcher-Watson, S., Rabagliati, H., Sorace, A., & Davis, R. (2022). Measuring the impact of bilingualism on executive functioning via inhibitory control abilities in autistic children. *Journal of Autism & Developmental Disorders*, 52(8), 3560–3573. <https://doi.org/10.1007/s10803-021-05234-y>
- Nolte, K., Fletcher-Watson, S., Sorace, A., Stanfield, A., & Digard, B. G. (2021). Perspectives and experiences of autistic multilingual adults: A qualitative analysis. *Autism in adulthood: Challenges & management*, 3(4), 310–319. <https://doi.org/10.1089/aut.2020.0067>
- Papoudi, D., Jørgensen, C. R., Guldberg, K., & Meadan, H. (2021). Perceptions, experiences, and needs of parents of culturally and linguistically diverse children with autism: A scoping review. *Review Journal of Autism & Developmental Disorders*, 8(2), 195–212. <https://doi.org/10.1007/s40489-020-00210-1>
- Pew Research Center. (2020). *About one-in-four U.S. Hispanics have heard of Latinx, but just 3% use it*. [https://www.pewresearch.org/hispanic/wp-content/uploads/sites/5/2020/08/PHGMD\\_2020.08.11\\_Latinx\\_FINAL.pdf](https://www.pewresearch.org/hispanic/wp-content/uploads/sites/5/2020/08/PHGMD_2020.08.11_Latinx_FINAL.pdf)
- Pope, A. L., Sunal, Z., Gantt, A. C., Zimmerman, B., Corey, A. K., Nuosce, M., & Araujo, L. (2022). A qualitative examination of bi/multilingual counselor training and experiences. *Journal of Counseling & Development*, 100(1), 27–38. <https://doi.org/10.1002/jcad.12407>
- Pritchett, M., Ala'i-Rosales, S., Cruz, A. R., & Cihon, T. M. (2022). Social justice is the spirit and aim of an applied science of human behavior: Moving from colonial to participatory research practices. *Behavior Analysis in Practice*, 15, 1074–1092. <https://doi.org/10.1007/s40617-021-00591-7>
- QR Collective. (2023). Reflexive quality criteria: Questions and indicators for purpose-driven special education qualitative research. *Exceptional Children*, 89(4), 449–466. <https://doi.org/10.1177/00144029231168106>
- Ratto, A. B., Reimann, G., & Nadwodny, N. (2022). Dual language learning predicts improved executive functioning in youth with autism. *Journal of Autism & Developmental Disorders*, 52(11), 5007–5017. <https://doi.org/10.1007/s10803-021-05356-3>
- Rosales, R., León, I. A., & León-Fuentes, A. L. (2023). Recommendations for recruitment and retention of a diverse workforce: A report from the field. *Behavior Analysis in Practice*, 16, 346–361. <https://doi.org/10.1007/s40617-022-00747-z>
- Saldaña, J. (2021). *The coding manual for qualitative researchers* (4th ed.). Sage.
- Schuck, R. K., Tagavi, D. M., Baiden, K. M. P., Dwyer, P., Williams, Z. J., Osuna, A., Ferguson, E. F., Jimenez Muñoz, M., Poyser, S. K., Johnson, J. F., & Vernon, T. W. (2022). Neurodiversity and autism intervention: Reconciling perspectives through a naturalistic developmental behavioral intervention framework. *Journal of Autism & Developmental Disorders*, 52(10), 4625–4645. <https://doi.org/10.1007/s10803-021-05316-x>
- Sher, D. A., Gibson, J. L., & Browne, W. V. (2022). It's like stealing what should be theirs. An exploration of the experiences and perspectives of parents and educational practitioners on Hebrew-English bilingualism for Jewish autistic children. *Journal of Autism & Developmental Disorders*, 52(10), 4440–4473. <https://doi.org/10.1007/s10803-021-05314-z>
- Siyambalapatiya, S., Paynter, J., Nair, V. K. K., Reuterskiöld, C., Tucker, M., & Trembath, D. (2022). Longitudinal social and communication outcomes in children with autism raised in bi/multilingual environments. *Journal of Autism & Developmental Disorders*, 52(1), 339–348. <https://doi.org/10.1007/s10803-021-04940-x>
- Slowiak, J. M., & DeLongchamp, A. C. (2022). Self-care strategies and job-crafting practices among behavior analysts: Do they predict perceptions of work–life balance, work engagement, and burnout? *Behavior Analysis in Practice*, 15(2), 414–432. <https://doi.org/10.1007/s40617-021-00570-y>
- Slowiak, J. M., & Jay, G. M. (2023). Burnout among behavior analysts in times of crisis: The roles of work demands, professional social support, and psychological flexibility. *Research in Autism Spectrum Disorders*, 105(May), 102185. <https://doi.org/10.1016/j.rasd.2023.102185>
- Soto-Boykin, X. T., Larson, A. L., Olszewski, A., Velury, V., & Feldberg, A. (2021). Who is centered? A systematic review of early childhood researchers' descriptions of children and caregivers from linguistically minoritized communities. *Topics in Early Childhood Special Education*, 41(1), 18–30. <https://doi.org/10.1177/0271121421991222>

- Soto-Boykin, X., Brea-Spahn, M. R., Perez, S., & McKenna, M. (2023). A critical analysis of state-level policies impacting racialized emergent bilinguals suspected or labeled as dis/abled. *Language, Speech, & Hearing Services in Schools, 54*(3), 729–745. [https://doi.org/10.1044/2023\\_LSHSS-22-00137](https://doi.org/10.1044/2023_LSHSS-22-00137)
- Trelles, M. P., & Castro, K. (2019). Bilingualism in Autism Spectrum Disorder: Finding meaning in translation. *Journal of the American Academy of Child & Adolescent Psychiatry, 58*(11), 1035–1037. <https://doi.org/10.1016/j.jaac.2019.05.027>
- U.S. Census Bureau. (n.d.). *American community survey demographic and housing estimates*. Retrieved June 13, 2023, <https://data.census.gov/cedsci/profile?g=0100000US>
- Vaquero, J., & Williams, M. E. (2018). Experiences of Spanish-English bilingual early childhood psychotherapists providing services to bilingual caregiver-child dyads: An exploratory qualitative study. *Journal of Latina/o Psychology, 7*(3), 195–211. <https://doi.org/10.1037/lat0000115>
- Verdinelli, S., & Biever, J. L. (2009). Experiences of Spanish/English bilingual supervisees. *Psychotherapy, 46*(2), 158–170. <https://doi.org/10.1037/a0016024>
- Vespa, J., Medina, L., & Armstrong, D. M. (2020). *Demographic turning points for the United States: Population projections for 2020 to 2060*. Current Population Reports (pp. 25-1144). Washington, DC: U.S. Census Bureau.
- Wang, Y., Kang, S., Ramirez, J., & Tarbox, J. (2019). Multilingual diversity in the field of applied behavior analysis and autism: A brief review and discussion of future directions. *Behavior Analysis in Practice, 12*(4), 795–804. <https://doi.org/10.1007/s40617-019-00382-1>
- Ware, A. T., Kirkovski, M., & Lum, J. A. G. (2020). Meta-analysis reveals a bilingual advantage that is dependent on task and age. *Frontiers in Psychology, 11*, 1458. <https://doi.org/10.3389/fpsyg.2020.01458>
- Zhou, V., Munson, J. A., Greenson, J., Hou, Y., Rogers, S., & Estes, A. M. (2019). An exploratory longitudinal study of social and language outcomes in children with autism in bilingual home environments. *Autism, 23*(2), 394–404. <https://doi.org/10.1177/1362361317743251>

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.