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How do culturally and linguistically diverse families of autistic children experience online parent-led therapy? A reflexive thematic analysis of parent perspectives

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Abstract

Parent-led therapy (PLT) is increasingly recommended to support social communication development in young autistic children. However, evidence remains rooted in Western, Educated, Industrialised, Rich, and Democratic (WEIRD) monolingual contexts, leaving questions about feasibility and effectiveness for culturally and linguistically diverse (CaLD) families largely unexamined. This study explores the experiences and perspectives of parents of young autistic children who completed an online PLT program in CaLD environments. Nineteen parents participated in semi-structured interviews following their involvement in a longitudinal program study. Data were analysed using Reflexive Thematic Analysis. Three themes were generated: (A) the importance of language adaptations depends on parents' linguistic proficiencies and perceptions; (B) sociocultural contextualisation is essential; and (C) PLT programs should be reconceptualised to boost accessibility and usability for CaLD families. Findings indicate that online PLT is broadly acceptable to CaLD families, but that meaningful engagement depends on linguistic proficiency, perceived language prestige, sociocultural proximity to program design and local community of residence, and material access to digital infrastructure. Monolingually designed PLT programs require contextually responsive linguistic and sociocultural adaptations to maximise parent engagement and social communication outcomes for young autistic children in diverse global environments.

Lay Abstract

Many families of autistic children around the world speak more than one language and come from different cultural backgrounds. Supporting autistic children’s social communication in culturally and linguistically diverse (CaLD) environments is critical during the early years of life. Parent-led therapy (PLT) is increasingly recommended as an effective approach and online PLT is a promising mode of service delivery, with the potential to address practical barriers like travel time and clinical cost. However, current research primarily concerns families in the monolingual and WEIRD context (Western, educated, industrialised, rich, democratic). Little is known about how CaLD families experience these programs. This study asked 19 parents of young autistic children, living across several countries in Europe, Asia, and Africa, about their experiences completing an online PLT program. Parents were interviewed individually and shared what helped or hindered their engagement with their programs. Three key findings emerged. Firstly, whether receiving the program in a parent's home language was helpful depended on how confident they already were in the service and societal language. Parents described feeling judged when using their home language in public, which made it harder to practise strategies outside the home. Many parents from low- to middle-income (LMIC) countries viewed English-language services as more prestigious and preferable, even when it was not their strongest language. Secondly, cultural beliefs about parenting, professional authority, and how children should be taught significantly shaped whether strategies felt appropriate or usable. Thirdly, practical issues, such as accessing sessions on smartphones, managing time zones with small groups, or living in non-nuclear households, created additional challenges, particularly for families from LMIC backgrounds. These findings highlight

that online PLT programs designed in monolingual, WEIRD contexts must be tailored, both linguistically and culturally, to be truly accessible and effective for CaLD families and their autistic children.

Main text

Autism is a lifelong neurodevelopmental variation that primarily impacts social communication, patterns of behaviour, and sensory processing (APA, 2022; WHO, 2019). Today, bilingualism is the global norm, including for autistic individuals and their families (Grosjean, 2024; Zeidan et al., 2022). However, traditional autism support models and social communication therapies continue to be built around monolingual environments, leading families to continue to report hesitancy, concerns, and conflicting advice about bilingual development for their autistic children (Hampton et al., 2017; Howard et al., 2024; Yu, 2016). While parent-led therapy (PLT) models are increasingly recommended as effective approaches to specific support for young autistic children, little is known about how culturally and linguistically diverse (CaLD) families engage with and experience PLT programs (Oudet et al., 2024). This gap is notable given that effective participation in PLT depends on parents' sociolinguistic resources, raising questions about how families who speak languages other than the dominant service and/or societal language can meaningfully engage with such models, particularly in unfamiliar sociocultural environments (Oudet et al., 2025).

Parent-child interactions are critically important for autistic children, for whom social communication is often more difficult and limited than for neurotypical peers (WHO, 2019). This is particularly key during the early years, when children are likely to spend more time in their homes and neighbourhoods than in other settings (Hyman et al., 2020; Zwaigenbaum et al., 2019). For this reason, an emerging body of evidence encourages the use of PLT as an effective approach to enhance the development of social communication skills of autistic children in both coached and self-directed formats (Glenn et al., 2022; Nevill et al., 2018; Oono et al., 2013). This is largely due to the role of children's natural daily environments and parent language input (Pecukonis et al., 2024). PLT delivered online (henceforth "online PLT") is particularly relevant to addressing practical challenges faced by many families of young autistic children, such as the time and cost of accessing, travelling to, and paying for clinical support (Li et al., 2022; Tilmont Pittala et al., 2018). However, this evidence remains rooted in the monolingual context.

While emerging findings indicate that online service delivery can enable learning and skill acquisition, and are acceptable to parents of autistic children (Blackman et al., 2020; Glenn et al., 2022; Qu et al., 2022), families in CaLD contexts have distinct needs and challenges (Davis et al., 2021; Digard et al., 2023; Howard et al., 2020). Additional barriers to accessing appropriate support include family proficiency in the societal/service language, availability of bilingual practitioners, access to public infrastructure, acculturation, and tangible and intangible resources related to relocation. Such barriers might lead families in CaLD contexts to consider online service delivery models (Dubay et al., 2024; Oudet et al., 2022). However, online PLT requires families to have access to stable internet connections,

connected devices, and appropriate meeting space, which raises a resource barrier likely to disproportionately impact families in low- and middle-income environments.

While PLT and telehealth in the monolingual WEIRD context are increasingly examined, questions of feasibility, acceptability, and efficacy in the CaLD context are warranted. Regarding autistic communication skills in an increasingly globally mobile world, questions about the role of parents' sociolinguistic proficiency and sociocultural integration are crucial for the potentially vulnerable and under-represented CaLD autism community. Examination of the factors that influence engagement with online PLT in this context is critical to maximise social communication outcomes for young autistic children.

Context of the current study

This study is part of a broader mixed-methods research project exploring the impact of online PLT on social communication skills of young autistic children in bilingual contexts. Using a range of involvement methods (coached vs self-directed online PLT formats, with and without language adaptations) this project flexibly catered to a highly heterogenous and diverse population (members of the CaLD autism community) (Carruthers et al., 2023; Tritter & McCallum, 2006). The longitudinal study of social communication outcomes (henceforth "program study": https://osf.io/8qngx/overview) used *More Than Words® - The Hanen Program® for Parents of Children on the Autism Spectrum or who have Social Communication Difficulties* (The Hanen Centre, 2016) for the coached program. The self-directed program was based on the *More Than Words®* guidebook (Sussman, 2012). Programs were offered to participants in either English or French, which were the languages spoken by the clinical researcher. This current study focuses on participants who completed the program study. The different group conditions are displayed in Fig. 1.

Aim

This study examines the experiences and perspectives of parents of young autistic children in CaLD environments about the online PLT program they completed. Research questions were:

1. How did parents in CaLD environments experience their online PLT programs?
2. What are parents' views regarding online PLT in their first language (L1)?
3. What factors contributed to higher levels of therapy engagement in online PLT programs among CaLD families?

Methods

Ethical considerations

Ethical approval

was granted by the Canton Research Ethics Committee (Commission cantonale (VD) d'éthique de la recherche sur l'être humain) (CER-VD): 2023 – 00562. This study adhered to guidelines set out by the British Educational Research Association (British Educational Research Association, 2018) and the British Psychological Society (British Psychological Society, 2021) to enhance ethical rigour. Reflexivity in ethical considerations was essential to minimise the risk of misunderstanding, harm, and misrepresentation, as well as actively ensure cultural competence, fairness, and participant protection.

Participants and procedure

Participants were recruited through Swiss-based clinical and parent support organisations. Inclusion criteria for the program study were: 1) parent/key caregiver of an autistic child; 2) child was ≤ 8;00 years; 3) child live in a bilingual environment; 4) ability to participate independently in written and verbal activities in English or French; 5) connected device and stable internet connection. Geographic location was neither an inclusion nor exclusion criterion. Participants reported residence in multiple countries across Europe, Asia, and Africa.

Participants who completed the program study were invited to participate in this qualitative study. Written informed consent was provided. Demographic information was provided using an adapted version of the questionnaire for Parents of Bilingual Children (PaBIQ)(COST Action IS0804, 2011) (Appendix A). Nineteen respondents (*n* = 19) took part from the larger group of participants who completed the program study (*n* = 23). A summary of participant background information is presented in Table 1, and program study involvement in Table 2.

Individual semi-structured interviews were conducted via Microsoft Teams. Participants were offered interviews in either English or French. All chose to be interviewed in English. An interview guide (Appendix B) was used flexibly to ensure basic consistency of questions and topics probed, while allowing the researcher to follow participants' lead in sharing their experiences. Audio recordings via Microsoft Teams were manually transcribed verbatim to Microsoft Word based on Conversation Analysis conventions (Wilkinson, 1999). Personal identifying information was pseudonymised for participant anonymity. All audio and written data were stored on two-step authentication password protected University servers.

Data analysis

Reflexive Thematic Analysis (RTA) (Braun & Clarke, 2022) was used to identify, analyse, and interpret patterns of meaning across data. This approach was deemed appropriate to recognise the researchers' active involvement in developing patterns of meaning, reflecting on how their own position, assumptions, and context shaped their analysis of the data. Analysis cycled through the six phases of RTA methodology.

After the familiarisation analysis (phase 1), data were transferred to Nvivo15 (Lumivero, 2024) for coding (phase 2) and generation of initial themes (phase 3) by the first author. Interview data and Nvivo15 codebooks were shared amongst researchers, and two review meetings were held to review, develop, and refine generated themes and subthemes (phases 4). The second and fifth authors provided feedback via email during coding. Coding and theme development were discussed, with multiple perspectives contributing to the interpretation and refinement of themes (phase 5). All authors reviewed the final interpretations, discussion, and write-up (phase 6).

Positionality of the researchers

Reflexivity was actively engaged throughout data collection and analysis. Each author was actively aware of how their identity, experiences, and specific areas of expertise may have impacted their approach to the data. A summary of researchers' positionality is presented in Appendix C.

Results

Three final themes were generated from the data. These are displayed in Fig. 2. The first two themes consider the linguistic and cultural accessibility of PLT, while the third focuses on the need for tailored contextualisation in program design and implementation.

THEME A: *Importance of language adaptations depends on parents' linguistic proficiencies and perceptions*.

The shared common language across participant groups in this study was English. Parents agreed that they felt greater connection with their children when speaking their L1. However, the benefit of completing the online program with language adaptations depended on their level of English and their societal language proficiency, which they believed had varying impact on their autistic child's social communication development.

A.1 L1 service delivery matters more for families with low societal language proficiency.

Parents with low societal and English language proficiency reported that the language adaptations in their L1 were essential to help transfer strategies for implementation. For example, P10: "It's very important because my French and English is not native speaker." P16 agreed, adding that her child did not accept her use of the societal language: "[My child] doesn't like that we use French words."

Parents who reported high English proficiency indicated that the language adaptations they received in their L1s were of little use. For example, P23: "I don't think getting the same program in Spanish would make a difference for me." P34 agreed, saying, "For me, there's no difference… English language, you know, it's easy." This demonstrates that high proficiency in the service language made the option of language adaptations and service delivery in these participants' L1s seem redundant to them within the program study.

Regardless of the service delivery language, many parents expressed that they observed their children progress across all languages. For example, P17: “I think there’s been changes across all of them because I think it’s been more of a change in… the evolution in terms of having a real two direction communication regardless of the language.” This indicates that interactional strategies learnt in English and implemented in the parent’s L1 can result in generalised improvement of autistic children’s social communication skills in all environmental languages.

For some parents, translations were unhelpful because they did not adequately reflect their diverse linguistic landscape, including language dynamics between household members. P22 shared: “It means that every little thing, silly thing I tell [my child’s sibling], [my child] can’t understand… or if I translate it, it changes the dynamics of it.” While not an issue of language proficiency per se, language adaptations must account for and support the diverse relational linguistic dynamics of the autistic child’s social communication environment, including sibling language preferences.

A.2. Perceived societal judgement as a CaLD minority impacts confidence implementing support in L1. Participants from high-income countries and within the WEIRD context engaged easily with their online programs. P1 reported that, “… certain things were so natural.” P8 agreed that it was, “… a lot of common sense.” Parents with low societal language proficiency expressed difficulty implementing and generalising strategies outside their home.

Many CaLD minority parents reported that it was more challenging for them to apply strategies in their unfamiliar sociolinguistic communities. Feelings of judgement were also anticipated even if parents were not currently facing it. For example, P17, who felt confident in his current ability to implement strategies, acknowledged that, “… it could be maybe different if we were somewhere else where maybe it’s not as internationally influenced.”

Many parents agreed that they felt self-conscious when speaking their minority L1 in their societal community. For example, P10: “… they look at us and they don’t know what we are talking… [my child] feel they are outsider, they are different than other people, so, when they enter a place they want to protect themselves.” Feelings of adverse judgement conveyed suggest it may be more difficult for parents to implement social communication support strategies within unfamiliar sociolinguistic contexts. P19 underscored this sense of sociolinguistic isolation from the dominant community by reporting more acceptance from other CaLD parents: “Either because they’re expats too or bearded whatever it is, you know they are definitely more, welcoming to say hi to my kid. To let them play a little bit outside the school.” This highlights the sentiment of exclusion that minority CaLD parents can feel, which impacts their ability to confidently implement social communication specific support strategies for their autistic children, particularly at the peer-to-peer level.

Parents acknowledged their own social communication challenges, which were a consequence of low societal language proficiency and feeling social judgement when speaking their L1s. This made implementing strategies for their autistic children, in either language, difficult in unfamiliar sociolinguistic communities.

A.3. Perceived language prestige influences parent language choices. Most parents agreed on the importance of maintaining their L1s in communication with their autistic children. However, levels of perceived prestige within participants' communities, particularly from non-WEIRD families from LMIC, influenced parents' language choices for their autistic children, and thus the usefulness they took from language adaptations provided within their online programs. Many parents expressed high value placed on English-language services, regardless of their own reported proficiency or whether it was a family language.

For example, P1 shared a perception of English as more prestigious within her community environment: "… on the complexity of languages about um, *la classe dans la société* [social class]. And so if I speak Portuguese in a street with [my child], it's not the same as if I speak English… the language has triggers into the community. If you speak English, you are much more seen as educated." P27 agreed, stating that his L1, "Mewari is uh, not an authentic language. We just use it in our houses, in our community." This perception of high prestige directly influenced many parents' decision to speak English to their autistic children and seek services, including online programs, in English, instead of their L1s.

All parents from LMIC backgrounds expressed the perception of English as "a great advantage" (P19) and necessary to "compete with the world" (P27). This is often reinforced by community education systems. For example, P27 asserted that in India, "English medium schools, those are the quality schools." P24 agreed: "I preferred English language and it would be good for [my child] in his schooling." This portrays parents' belief in the importance for their autistic children to receive instruction and specific support services in English. This perception of English as globally necessary was agreed by many participants, including P30, who reasoned that, "Everything is global", and P43: "English is a global language and we need to communicate with other, those who don't know our language."

While the perceived prestige of English did not always lead to the loss of the parents' L1, the high value of English-language services was consistently reported by those who maintained their heritage languages. For example, P46: "For speech therapy that we started… We gave both primary importance for Marathi to bring him up to the speech and then also develop the English."

THEME B: *Sociocultural contextualisation is essential.*

Effective implementation of strategies varied depending on participants' perceptions of legitimacy, cultural values surrounding parenting styles, and each family's unique sociocultural context. Many parents emphasised the need for both language adaptations and cultural considerations, especially as CaLD minorities in unfamiliar sociocultural environments. Beyond bilingualism and language learning, implementing social communication support for young autistic children requires biculturalism.

B.1. Families are the main conduit for maintaining bilingualism. When prioritising communicative connection, parents shared different reasons for why languages need to be supported within the home to maintain bilingualism for their autistic children.

Most parents agreed that speaking their L1s to their autistic children was preferable and important for their social communication development. For example, P1: "… the schools are not truly bilingual so the world is bilingual by the family"; and P37: "… when [my child] practices Thai, he practices with us, but then he never practises it with other children.". This indicates that languages must be supported within the family to maintain bilingualism.

This view extends to larger family units. For example, P24 spoke about feeling liberated when allowing her family members to speak their L1s with her child: "… the language barrier is completely out of the box… And now… So he is about to make social connection with other on his own and that has given him confidence. And in turn it is affecting the whole family environment." This shows the positive impact that bilingualism can have on family connections, including increased communicative opportunities, when people speak their L1s with autistic children. This feeling of freedom was echoed by P22: "… there's more receptivity from [my child]. Because none of us is struggling."

P8 concurred on the importance of speaking naturally to his autistic child: "When you talk together, fine we talk in English so everybody can understand… then there is individual language between people who's native and, and the children." This demonstrates a belief in the contextual nature of language as a tool for connection, highlighting that language use should remain flexible to the social situation. Extending this view to close local neighbourhoods, many parents agreed that their children benefited from natural community language exposure, even if it is not spoken in their home. For example, "We only learn from friend or woman, actually, from neighbours" (P44), and, "The more [my child] hears, the more he improves," (P33)

This indicates that online PLT can enhance autistic children's social communication skills by supporting natural L1 exposure within their CaLD environments.

B.2. Perceptions of professional authority and parental legitimacy impact engagement. Regardless of language adaptations provided, parents' engagement with the online programs and the social communication support strategies were impacted by their perceptions of their own legitimacy as parents versus the roles of professionals.

For example, many parents with LMIC backgrounds agreed that parent-led specific support is less valued than traditional clinician-led support in her home culture, "Because… mostly the thing of superiority comes in the picture" (P24). External support was described as most effective because of sociocultural value that is placed on professionals' roles in educating children and culturally-influenced understandings of how children learn: "I would actually say, you send the information to teachers" (P22). This indicates that the efficacy of online PLT amongst parents with non-WEIRD backgrounds may be impacted by parents' culturally-informed beliefs in their own legitimacy as implementors of specific support for their autistic children.

Parents from WEIRD contexts reported greater ease in implementing strategies within and beyond their homes, regardless of language adaptations. This is likely because there were fewer sociocultural barriers

to implementation of the provided WEIRD-designed programs. For example, P9 shared that, "… between the way we're interacting with our son, the therapy, and also explaining to the schools… It really changed the way that everyone communicated with him. And his social skills just completely bloomed from it." This suggests that parent-led specific support in non-WEIRD and LMIC contexts, may require more culturally responsive adaptations to overcome sociocultural barriers.

B.3. *Culturally informed autism awareness and adult-child interaction styles impact confidence*. The ability for parents to implement effective specific support as learnt through their online programs was impacted by the level of agreement or discord that the presented strategies had with their own culturally informed understanding of autism and their own adult-child styles. Many parents reported difficulties implementing strategies because of mismatched individual and prevailing sociocultural community values.

For example, P11 shared that the social communication strategies benefitted her son particularly when she consistently adapted her interaction style within and beyond the home: "So with this program, it's like, this is our environment, and we're going to adjust it." This suggests a certain harmony between this family's values and approach to supporting their autistic child with those of their wider community, boosting parents' confidence when effecting strategies.

However, P17 expressed difficulty navigating sociocultural conventions as a CaLD minority and feeling judgment when trying to adapt his interaction style for his autistic child: "I think the type of parenting is different… the teacher was saying, yeah, because you know at home you still need to ensure that you put rules, and stuff like that, assuming that we are not doing it." P23 agreed that she struggled to implement strategies outside her home because they did not match the social conventions of her community environment: "… it must be cultural. So for example, [my child] he doesn't take orders to be a thing… we didn't raise him like that."

This sentiment of divergence with current sociocultural expectations of autism and parenting was shared, conversely, by P10 who reported that strategies were not strict enough for what she valued within her parenting role: "They don't learn discipline… there's one thing culture shock… this kind of basic thing I trying to teach my son." This indicates that social communication parent-led programs and specific support strategies must be culturally customised to parents' unique sociocultural contexts to maximise effective implementation.

THEME C: *PLT programs should be reconceptualised to boost accessibility and usability for CaLD families.*

Although the online service delivery reduced geographic barriers, accessing online sessions and implementing strategies remained a barrier for many participants, especially those with LMIC backgrounds. Redesigning program schedules was indicated as beneficial.

C.1. Online feasibility hinges on digital accessibility. Most participants suggested that the online sessions were convenient. For example, P8: "… it's already a mess, to be a parent, and to have to deal with so

much therapy needs for a child… so if on top of that you have to go to, god know where, and spend 45 minutes driving or taking the public transportation with the child…that's counterproductive." P37 agreed, stating that: "… most [expatriate] families, we have some kind of unconventional, you know, lifestyle and maybe the unconventional timetable… So being online… would means more convenient."

While many parents appreciated the ability to connect cross-culturally where they might not have been able in-person, scheduling across time zones remained challenging. For example, P33 : "… three fathers we tried to come together. And as parents, also as fathers, we have different experience as mothers… I only found a time zone of challenge." Groups composed of individuals from varying countries proved tiring for parents who were attending at less convenient, often late evening, hours. Making online PLT more accessible to more parents within the same geolocations could help overcome this challenge. However, scheduling difficulties could remain for expatriate families who may move between time zones during a program.

However, the use of email and Teams as online service delivery platforms were challenging for some participants to access, notably, those from LMIC, who were less likely to have access to large screen devices. Many participants connected to sessions on their mobile phones, with some requesting the use of a more smartphone-friendly platform. It is possible that unfamiliarity with and/or inaccessibility of online sessions created an additional burden for vulnerable CaLD families, contributing to participant attrition in the program study.

C.2. Current standard programs need contextually responsive redesign. All parents agreed on the benefit of PLT in principle, with some parents differing on how online sessions would be most effective for their CaLD context. Many participants reported that greater diversity offered by online sessions within their groups was beneficial. For example, P24: "… as the program is multilingual, so the group was ought to be diverse."

However, some parents believed that individual sessions would have been more beneficial. For example, P11: "I personally would have liked it more… the two of us, the two parents and you. I mean, of course, it's nice to hear other people's stories, but, like, sometimes, you know, it also takes so much and it's so hard to listen and you, you are so tired…" This suggests that online group sessions could contribute to social fatigue, making individual sessions less engaging for certain parents. It is possible that this compassion fatigue may be heavier for minority CaLD families who are already managing more sociolinguistic complexities than their monolingual counterparts.

Additional "digital fatigue" that may be felt by parents accessing online services may require that programs be reenvisioned to include shorter sessions within a longer program period, as suggested by P11: "… even if it's shorter… could be shorter, half hour, but you get your personal feedback." This thought was echoed by P17: "I think it's more about maybe having more [sessions]." Such redesigns may be critical for minority CaLD families who are more likely to have additional challenges than parents from the dominant sociolinguisitic and socio-cultural community.

C.3. Non-nuclear family structures impact implementation. All parents agreed that effective implementation of strategies depended on regular and consistent adult-child interactions of the whole family, which was impacted within non-nuclear living arrangements of many parents.

For example, sharing physical custody of her child between two countries, P1 struggled to maintain consistency, “Because the father is not following…” Similarly, P27, who lived away from his child during the working week, agreed that the separation made it complicated to implement strategies regularly, and was unable successfully share those strategies with his child’s key caregivers: “… the most difficult thing was I only go on weekends to him. Everything was on his mum and other um, people of our home. Like grandparents. So grandparents do not pay attention on these things. They do not actually, take seriously.”

In contrast, homeschooling her child allowed P22 to steadily implement strategies and she reported great benefit: “I only have maybe, two hours in a day away from my daughter. It will be a glow.” Encouraging regularity of strategy implementation, parents within more WEIRD traditional nuclear family structures, such as P8, expressed that working as partners was helpful when adapting their interaction styles for their autistic child: “… you do some things and you see the action of the other and like hold on, wait, remember. We gotta do it like this.”

Consistency of strategy implementation between key caregivers is likely to be a greater challenge for CaLD families with LMIC backgrounds for whom separated and/or multigenerational households may be more common.

Discussion

The aim of this study was to understand CaLD parents’ experiences following their engagement with an online PLT program to support the social communication skills of their young autistic children. Using RTA (Braun & Clarke, 2022), this study also sought to explore the perspectives of these parents regarding bilingualism for their autistic children, and how language adaptations impacted confidence and implementation of social communication support strategies. The findings and implications of this study are relevant to families of young (≤ 8;00 years) autistic children in CaLD environments and the practitioners who support them.

In principle, all parents in this study agreed that online PLT sessions, in both coached and self-directed formats, were acceptable in their CaLD environments, aligning with monolingually rooted findings that online service delivery can overcome logistical constraints for parents of autistic children (Blackman et al., 2020; Glenn et al., 2022; Qu et al., 2022). Parents from WEIRD and high-income country backgrounds (France, Ireland, Portugal, Spain, Switzerland, US) indicated that the standard program structure they engaged with was highly satisfactory and accessible.

However, a range of barriers were experienced by parents who were CaLD minorities, particularly those from non-WEIRD, LMIC contexts (India, Colombia), including challenges with appropriate device availability and ease of platform use. While telehealth may overcome many practical barriers to specific

services for families of young autistic children (Davis et al., 2021; Dubay et al., 2024; Li et al., 2022), it must be acknowledged that feasibility of online PLT for families with LMIC backgrounds depended on many material and intangible factors, including available resources, societal language proficiency, and additional socio-emotional burdens related to CaLD minority residence may exacerbate challenges (Oudet et al., 2026). This study underscores the need for culturally responsive and family specific considerations when recommending and delivering online PLT programs, extending calls to consider contextually specific feasibility factors to overcome disproportionate impact to those in vulnerable CaLD contexts.

Parents' linguistic proficiency (level of comprehension, expression, confidence) within the service delivery context, as well as the societal language environments of each family, influenced whether they considered the provided L1 language adaptations as useful. Linguistic adaptations were often not helpful for CaLD minority families who faced challenges in providing social communication support to their autistic children when also facing unfamiliar sociolinguistic challenges themselves (Oudet et al., 2026). The value of English-language services was reported by many parents from a globally-mobile mindset and prestige ideology perspective (Ibarra-Gambrill, 2021; Khoirin Nida Qurrota et al., 2026; Oudet et al., 2022). In line with contemporary, monolingually based research indicating that parents' language input plays a large role in children's natural daily environments (Pecukonis et al., 2024), these findings emphasise that supporting parental L1 confidence can support young autistic children's social communication development.

This study provides novel evidence that linguistic adaptations offered to CaLD participants must accommodate parents' societal language proficiency and perceived language prestige, especially within unfamiliar sociolinguistic environments. In line with recent research (Howard et al., 2020; Oudet et al., 2022), this study underlines the call for greater attention, including practitioner guidance and training, to be paid to the complex linguistic needs of families in diverse societies beyond WEIRD situations, including the perceived prestige of each language within each family's environment.

Findings show that the interactions of low service and/or societal linguistic proficiency and sociocultural unfamiliarity were most challenging for parents when implementing social communication support for their young autistic children. Ease of engagement was related to parents' proximity to the WEIRD culture in which the program was designed. As also shown in Oudet et al., (2026), complex real-world dynamics impacted strategy implementation, regardless of language adaptations provided. The perception of legitimacy as parents versus professionals (teachers, therapists) when delivering specific support was expressed by parents from LMIC contexts (Kenya, India). Specific social communication support strategies must be socioculturally responsive to families' specific CaLD context.

In keeping with contemporary research (Davis et al., 2021; Digard et al., 2023), this study highlights the need for greater awareness of distinct sociolinguistic challenges and sociocultural complexities faced by families of autistic children in CaLD environments. Adaptations to WEIRD monolingually designed programs must be contextualised; this includes considering culturally informed perceptions of

professional authority, parent legitimacy, and broader social expectations in delivering specific support to young autistic children, as well as parenting and adult-child interaction styles within both nuclear and non-nuclear household structures. It is important that practitioners supporting CaLD families of young autistic children recognise the interplay between bilingualism and biculturalism within the family and immediate community and how this effects engagement with support. This study extends the call for greater awareness of the diverse and dynamic contexts in which parents engage with online services and implement strategies, including the need for culturally responsive adjustments from traditionally monolingual systems of care and education.

Reflections and limitations

A key limitation of this study is that most participants who remained in the program study were from WEIRD backgrounds (tertiary educated, residing in industrialised/democratic countries). This sample may under-represent families who disengaged or experienced greater barriers to participation that were not addressed in this study. This may have influenced findings that do not necessarily reflect the challenges faced by under-represented non-WEIRD populations. Participants who lived abroad as CaLD minorities were highly educated and well-resourced families who may not represent the CaLD populations having the most difficulty accessing support generally or online PLT engagement specifically. Non-WEIRD populations may have faced different challenges. Nevertheless, given the LMIC background of many participants in this study, findings present important evidence about under-represented populations in autism research. Additionally, the relative balance of women and men in this study fills a perspective gap in presenting fathers' experiences, which are typically under-represented in qualitative research regarding children and childcare (Davies & Hanna, 2021).

All participants chose to be interviewed in English, which could have shaped the data and the expression of experiences within the CaLD context. While most participants demonstrated strong English language proficiency, it was not the L1 for many, which may have been constraining for some parents when trying to best articulate their thoughts. This constraint may exist when parents communicate with their autistic children in languages other than their L1, which is an issue this study sought to explore. This was possibly a manifestation of the value accorded to English-language services explored in this study.

Implications

These findings align with current monolingually based evidence recommending telehealth for parents of young autistic children (Glenn et al., 2022; Li et al., 2022; Nevill et al., 2018). By extending the research base for families of young autistic children, this study provides novel evidence for the recommendation of online PLT for bilingual families. However, monolingually designed programs must be contextually adapted to families' linguistic and sociocultural landscape to support parent engagement and effective service delivery. Attention must be paid to ensure nuanced adaptations are feasible and acceptable when delivering traditional online PLT programs to families with non-WEIRD and LMIC backgrounds.

Specific considerations for practitioners designing and delivering such services include parent access to online program schedules and usability structures (e.g., time zone planning, reconceptualising for different device and platform usage, session length and frequency), individual parent factors (e.g. group preferences, language proficiencies, perceptions of language prestige), and contextually responsive adaptations (e.g. culturally informed interaction styles, perceptions of PLT legitimacy). Regardless of perceived status, fostering the value of the L1 to boost parental confidence and naturalness of parent-child communication will be vital. Usable platforms and structures must be accompanied by facilitated linguistic adaptations (e.g. translations), which hinge on sociocultural adaptations (e.g. community-level integration support). Such CaLD adjustments may boost parent engagement with and effective implementation of online PLT, ultimately improving social communication outcomes for young autistic children in diverse environments.

This study provides fresh evidence to support the need for contextually responsive service delivery practices, including relevant cultural competency, in the online context to enhance feasibility and effectiveness of online PLT for CaLD families in their unique environments. Aligning with Oudet et al (2026), this study calls for further empirical examination of the nuanced needs and implementation factors of online PLT for CaLD families within more specific subgroups to better understand how to maximise outcomes of online PLT supporting young autistic children's social communication skills. This will be especially important where CaLD subgroups are minorities within unfamiliar sociocultural environments.

Future research should examine reconceptualised online PLT within CaLD subgroups (including non-WEIRD, LMIC, and minority populations). Adaptations should be co-designed and delivered with local stakeholders (including autistic individuals, their families, practitioners, and cultural intermediaries) and cultural intermediaries, measuring both child-level developmental outcomes and parent engagement and well-being. Culturally-informed attitudes towards online PLT should be explored within CaLD subgroups to address optimal clinical responses and alternatives.

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Footnotes

1. The term *bilingual* is used to mean, the use of, receptively or expressively, two or more languages in their everyday life (Grosjean, 2024). When examining social-communication skills, it is deemed most appropriate to focus on functional use rather than levels of proficiency, particularly when exploring such skills among young children.
2. The terms *autistic*, *on the autism spectrum*, and *specific support* are used in this study to align with preferences expressed by the autism community in various countries (Bury et al., 2020; Kenny et al.,

2016; Monk et al., 2022).

3. This study uses the term PLT to refer to clinically delivered structured specific support program that teaches parents therapeutic strategies they can implement with their children. PLT may be alternatively known as *parent-led specific* support, *parent-mediated therapy* or *indirect therapy*. This study acknowledges preferences articulated by the autism community and neurodiversity-affirming terms related to specific support (see footnote 3). The word “therapy” is only used within the widely used term and acronym of *parent-led therapy/PLT*.
4. The term *culturally and linguistically diverse (CaLD)* is used to reflect the global nature of bilingualism relating to identity and experience, particularly in a minority context (Australian Public Service Commission, n.d.).

Tables

Tables are available in the Supplementary Files section.

Figures

ABPLT-RTA Tables and Figures

Figure 1. Program study group conditions.

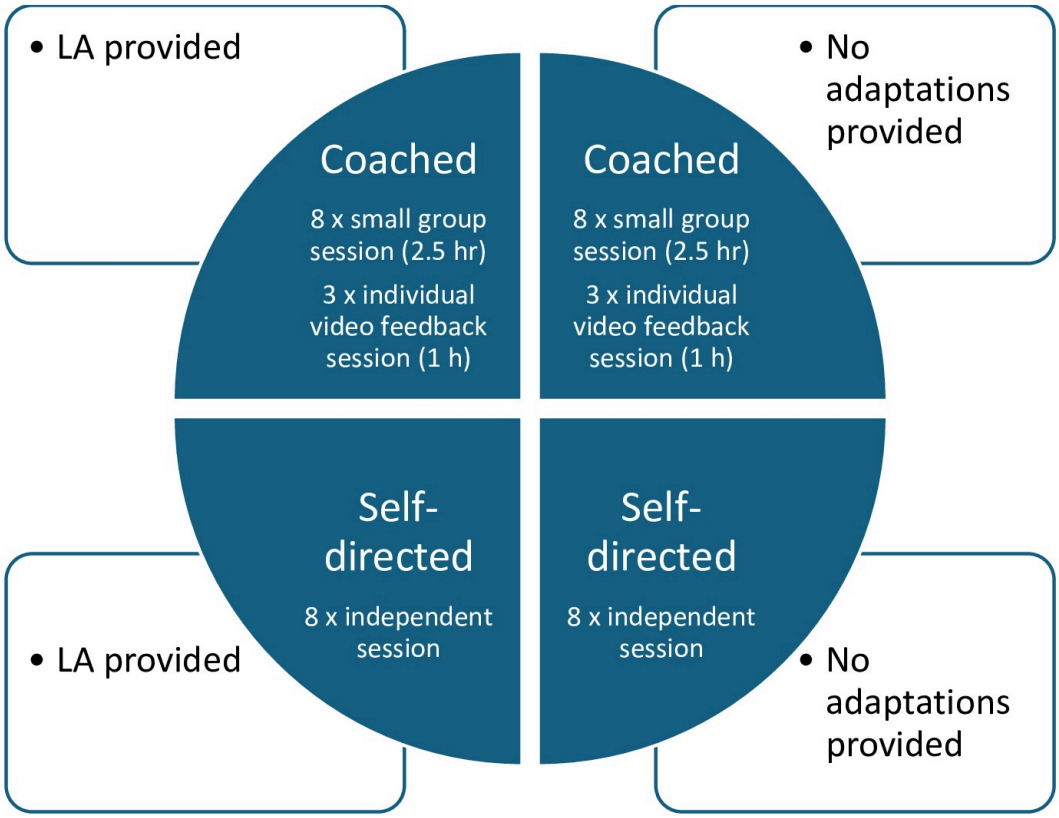


Figure 1

See image above for figure legend.

ABPLT-RTA Tables and Figures

Figure 2. Generated themes.

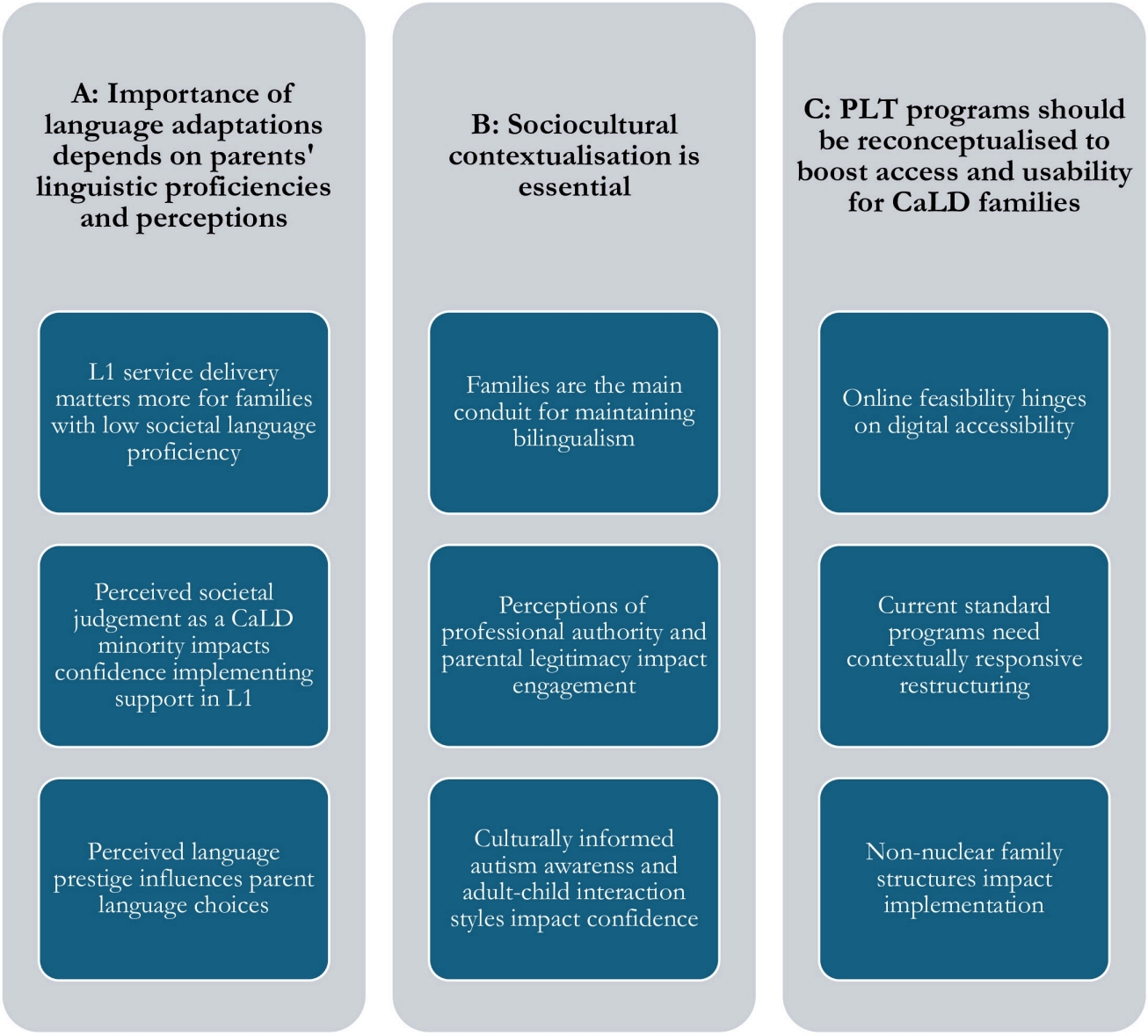


Figure 2

See image above for figure legend.

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