

EMPIRICAL MANUSCRIPT

Professionals' Perspectives on Supporting Deaf Multilingual Learners and Their Families

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Abstract

Parents frequently report that advice from professionals is important in making decisions about how their child with hearing loss will communicate. Little is currently known about how professionals support parents raising children with hearing loss in spoken language multilingual environments, children who are described as d/Deaf multilingual learners (DMLs). The purpose of this phenomenological study was to gain insight into professionals' perspectives and experiences working with such families, particularly in relation to supporting parents in decision-making about multilingualism and language choice. Nineteen professionals discussed their experiences working with DMLs and their families, the role of professionals in decision-making about multilingualism and language choice, and the factors that they considered were important when supporting DMLs and their families. Inductive thematic analysis yielded three themes: child characteristics (language, development), negotiating and supporting language (information, parents' language, role of language, timing, leadership, language management), and professional issues (knowledge, resources). This paper provides an important insight into professional considerations in supporting DMLs and their families, such as the role and functioning of evidence-based practice.

The majority of people in the world are multilingual and two-thirds of all children grow up in multilingual environments (Crystal, 2003; Romaine, 2013). It therefore follows that many d/Deaf and hard of hearing (DHH) children are members of multilingual societies. Due to advances in technology, health care, and educational practices, DHH children who grow up in environments where more than one spoken language is used are more likely now than at any time in the past to be multilingual users of spoken languages (Crowe, 2018). A broad view of multilingualism is taken in this paper, and as such people who are multilingual are those who are "able to comprehend and/or produce two or more languages in oral, manual, or written form with at least a basic level of functional proficiency or use, regardless of the age at which the languages were learned" (International Expert Panel on Multilingual Children's Speech, 2012, p. 1). As the focus of this

paper is on DHH children in environments where more than one spoken language is used, the current discussion is limited to spoken language multilingualism (although children may also use signed language/s or signed communication in addition to spoken languages). DHH children in environments where more than one spoken language is used will be referred to as d/Deaf multilingual learners (DMLs) in this paper.

Multilingualism creates both challenges and opportunities for young children. However, research findings related to this vary greatly, especially with regards to the impact of different levels of language proficiency. Multilingual children with emerging English skills in Australia showed vulnerability in educational, physical, social, emotional, and cognitive development as they commenced formal education (Goldfeld et al., 2013). However, multilingual children with proficient English skills at

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the beginning of formal schooling showed vulnerability similar to that of monolingual peers (Goldfeld et al., 2013). Multilingual children have been reported to have smaller vocabularies in the language of education, i.e., the dominant community language, compared to their monolingual peers in a wide range of studies (e.g., Bialystok & Feng, 2011; Lin & Johnson, 2014; McLeod et al., 2016). In some studies, multilingual children were able to close the gap with their monolingual peers (McLeod et al., 2016; Paradis & Jia, 2017), but in other studies, they remained behind (Bialystok et al., 2010). Even so, descriptions of the challenges faced by multilingual children are often tempered by reports of lifelong neurological, cognitive, and linguistic advantages of multilingualism, especially executive control systems (Bialystok, 2009; Kroll et al., 2014). However, reports of cognitive advantages are contentious (Paap et al., 2016).

Multilingualism broadens an individual's opportunities and possibilities. However, this linguistic diversity can also be challenging when children have communication difficulties, especially for professionals responsible for developing these children's language skills (Edwards, 2013; Rhoades et al., 2004). For such children, spoken language multilingualism has, up until recently, been considered an unrealistic goal. Recent evidence indicates that multilingual children with a broad range of communication impairments attain outcomes similar to their monolingual peers. A systematic review of 50 studies describing multilingual children with neurodevelopmental disorders found that few studies reported multilingual children experienced disadvantages in speech, language, and/or communication outcomes relative to their monolingual peers, and that there were even benefits of multilingualism for some groups of participants (Uljarević et al., 2016). Broadening the view beyond communication outcomes, McLeod et al. (2016) compared the performance of monolingual and multilingual children aged 4- to 9 years within a nationally representative cohort of Australian children. Children in this study were divided by whether or not concerns about their speech and/or language development were reported. Multilingualism was not associated with differences in numeracy or literacy outcomes, but multilingualism was associated with reported concerns about speech and language development. This held true regardless of the number of languages children used (e.g., bilingual or multilingual).

Multilingualism presents complex challenges for DHH children, as well as for their families and the professionals who work with them (Cannon et al., 2016; Crowe & Guiberson, in press). One area of challenge is in professionals utilizing evidence-based practice (EBP) in their work with DMLs and their families. EBP consists of three components: (a) use of the best-available research evidence, (b) application of professional expertise, and (c) the perspective of clients, that is DMLs and their families (Roulstone, 2011). With regards to use of the best-available evidence, unlike DHH children, there is currently little research describing the development and communication outcomes of DMLs. Crowe (2018) summarized 22 studies that investigated the outcomes of DMLs. Studies were diverse in terms of their aims, domains of speech and language, age of participants, and the languages examined. Results were also diverse, with DMLs found to have outcomes better than (e.g., speech perception outcomes described by Sininger et al., 2010), similar to (e.g., speech production outcomes described by Bunta et al., 2016), or worse than (e.g., vocabulary skills described by Deriaz et al., 2014) comparison groups. However, the majority of studies showed no effect of multilingualism on the communication outcomes of DMLs compared to monolingual peers. As such, there is little

evidence to guide professionals working with DMLs as to what children's potential communication outcomes may be. Similarly, there are few research-based interventions that have been found to benefit DMLs' speech, language, and literacy skills. A scoping review by Guiberson and Crowe (2018) found just 17 descriptions of interventions that were related to DMLs. A subsequent systematic review of speech, language, and literacy interventions by Crowe and Guiberson (2019) identified just two studies that described a single intervention for DMLs (Cannon et al., 2010; Guardino et al., 2014). The lack of research evidence concerning outcomes and interventions for DMLs presents a challenge for professional's use of the first element of EBP and use of the best-available research evidence.

The perspective of clients, an element of EBP, has received some attention for DMLs and their families in regards to decision-making about multilingualism and language choice. Decision-making on these topics is rooted deeply within families and contexts, as language and culture are entwined and language has a special role in transmitting tradition and fostering belonging (Edwards, 2013). Parents who are multilingual, or who live in multilingual environments, make decisions about the language/s that their children will learn and when and where these language/s will be used. These decisions form a *family language policy*. Spolsky (2004) conceptualized family language policy as consisting of three components: family language beliefs, practices, and management. Little research exists describing family language policy for DMLs, as the majority of literature in this area on DHH children focuses on communication mode not on spoken language multilingualism (Decker et al., 2012; Wheeler et al., 2009). The small number of investigations that has examined decision-making concerning multilingualism and/or spoken language choice by parents of DHH children has shown that many factors are important such as audiological characteristics, children's future opportunities, and the communication skills of the family (Crowe et al., 2014a; Crowe et al., 2014b; Guiberson, 2013). Advice from professionals has also been cited as an important factor in decision-making about multilingualism and language choice. A subset of the data concerning decision-making by parents of DHH children analyzed by Crowe et al. (2014a) related to parents of 22 DMLs making decisions about multilingualism and use of English for their children. Within this study, advice from professionals was most often reported by parents to have been most influential in their decision-making.

Finally, the application of professional expertise is the area of EBP about which least is known in relation to professionals working with DMLs and their families. While advice from professionals has been cited by parents as an important aspect of their decision-making, little is known about what professionals are saying or how they support parents through their decision-making and creation of family language policies. Advice from professionals to parents of DHH children has been reported by parents to be limited, biased, conflicting, complicated, and overwhelming (Christiansen & Leigh, 2004; Decker et al., 2012; Steinberg et al., 1997; Young et al., 2005). Parent accounts of professional advice have been described through incidental comments in previous studies. For example, Guiberson (2005), McConkey Robbins et al. (2004), and Waltzman et al. (2003), all reported that parents of DMLs in the United States were advised by professionals to speak only English with their children following cochlear implantation. Similarly, Steinberg et al. (2003) reported that Spanish-speaking parents in the United States were advised to use English, rather than Spanish. Contrary to this, half of the parents in Guiberson's (2013) study, which was conducted in

Spain, were encouraged to raise their child as multilingual. However, multiple sources of advice were aggregated in this study including family, friends, and professionals. Only one study has considered professionals' perspectives on working with DMLs. Crowe and McLeod (2016) investigated the perspectives of 17 professionals who worked with DHH children in Australia on the factors that they considered to be more and less important when supporting parents making decisions about multilingualism and language choice. The professionals in this study placed the most importance on factors related to the child's family and community, such as the presence of good language modes, intra-family communication preferences, and engagement with wider communities.

In considering the practice of professionals who work with DMLs, it is clear that knowledge is currently lacking in all three pillars of EBP: research evidence, professional expertise, and client perspectives. There is also a growing need for knowledge to support EBP with DMLs, especially given the fact that the numbers of DMLs is increasing (Ayantoye & Luckner, 2016; Baker & Scott, 2016). Given the importance that parents placed on advice from professionals and the little that is known about professional practice in supporting DMLs, this study used a phenomenological perspective (Rossman & Rallis, 2011) to understand the lived experiences of professionals. This study aimed to better understand professionals' perspectives, experiences, and practices in their work with families who are raising DMLs, particularly in regards to decision-making about multilingualism and language choice.

Method

Research Approval

Ethical approval for data collection and use was obtained through The University of Newcastle Human Research Ethics Committees. Ethical standards were met in the collection of these data.

Participants

Nineteen professionals participated in this study (see Table 1). Most ($n = 17$, 89.5%) reported they had experience working with DHH children who were multilingual and all reported experience working with DHH children from families where a language other than English was used. All but two participants were female ($n = 17$, 89.5%) and participants had 4–37 years' experience working with DHH children ($M = 14.8$, $SD = 8.7$). Participantsⁱ reported currently or having previously worked with: newborns, toddlers (under 3 years), preschoolers (3 to 5 years), primary school students (5 to 12 years), and/or secondary school students (13 to 18 years). Participantsⁱ worked as speech-language pathologists, teachers of the deaf, auditory-verbal therapists, special education teachers, teachers, educational interpreters, psychologists, and tutors. Participants had a range of professional tertiary qualifications, with a total of 46 qualifications between the 19 participants. Participants held between one and four qualifications, which included postgraduate degrees, bachelor degrees, graduate diplomas/certificates, diplomas, and certificates. Participants worked in five of the eight Australian states/territories.

Participants self-reported the languages they used and their proficiency in each, using the labels *fluent*, *functional*, or *minimal*. They reported skills in between one and four languages. Participants also reported using the following spoken languages:

English (fluent: $n = 18$, 94.7%; functional: $n = 1$, 5.3%), Russian (fluent: $n = 1$, 5.3%), Cantonese (functional: $n = 2$, 10.5%), French (functional: $n = 1$, 5.3%), Korean (minimal: $n = 1$, 5.3%), and Malay (functional: $n = 1$, 5.3%). Australian Sign Language (Auslan) was used by 11 participants (fluent: $n = 3$, 15.8%; functional: $n = 8$, 42.1%). Participants' language status was classified as monolingual, bimodal multilingual, spoken language multilingual, and bimodal and spoken language multilingual.

Procedure

Health or education professionals who work with DHH children were invited to participate in this study through emails distributed by professional organizations, emails forwarded by colleagues, and social media notices. Consistent with the phenomenological intent of this study, recruitment was not limited to professionals with a confined set of characteristics (e.g., only those with many years of experience), but designed to capture the perspectives of professionals with a diverse range of experiences. All respondents were health and education professionals working with DHH children, and therefore all were invited to participate in this study. Participants completed a brief online questionnaire that collected background information, their attitudes towards multilingualism, their availability to participate in focus group discussions, and their preference to participate in the focus group using Auslan or English. Participants' attitudes about multilingualism were observed through their of agreement or disagreement to 18 statements using a 4-point Likert scale with no neutral mid-point (see Table 2). This is an author-designed set of statements designed to elicit participants' knowledge of multilingual language acquisition and attitudes towards multilingualism and people who are multilingual. Statements were based around beliefs and attitudes to multilingualism that are commonly reported as present in predominantly monolingual societies as well as evidence-based statements from literature on multilingual language acquisition. These questions have not been standardized, but have previously been used with professionals working with DHH children (Crowe & McLeod, 2016) and early childhood educators (Runólfssdóttir, 2020).

Participants were grouped by their availability to form focus groups and participated in an interview if they were not able to be placed in a group. Participants received a copy of the questions prior to their session (Supplementary Data: Focus group questions). Questions were generated based on reviews of relevant literature and were used to ensure that key topics related to decision-making with families of DMLs were discussed. All focus groups and interviews were facilitated by the first author, who is a fluent user of English and a qualified Auslan interpreter. Data were collected in nine sessions: two in-person groups (Group A: $n = 3$, Group B: $n = 4$), four web-based groups (Group C: $n = 3$, Group D, E, F: $n = 2$), two web-based interviews (Group G, H: $n = 1$). Two participants had indicated a preference for participating in Auslan. One participant was placed in a group with those who preferred to participate using English, and an accredited interpreter was booked to facilitate easy communication in this group (Group D). The second participant who preferred Auslan was unable to attend any groups and declined participating in an interview, offering to provide responses to the focus group questions in written English instead (Group I: $n = 1$). The online focus groups and interviews were conducted using Zoom video-conferencing software, in which all participants' videos were enabled. All sessions were audio recorded and online sessions were video and audio recorded, although only audio recordings

Table 1. Participant characteristics (n = 19)

Characteristic	Category	n (%)
Professional experiences ^a	Newborns	13 (68.4)
	Toddlers (under 3 years)	18 (94.7)
	Preschoolers (3–5 years)	18 (94.7)
	Primary school students (5–12 years)	15 (78.9)
	Secondary school students (13–18 years)	11 (57.9)
Professional roles ^a	Auditory-verbal therapists	2 (10.5)
	Educational interpreters	2 (10.5)
	Psychologists	1 (5.3)
	Special education teachers	3 (15.8)
	Speech-language pathologists	7 (36.8)
	Teachers	2 (10.5)
	Teachers of the deaf	6 (31.6)
	Tutors	1 (5.3)
Number of qualifications	One	3 (15.8)
	Two	7 (36.8)
	Three	7 (36.8)
	Four	2 (10.5)
Level of qualification ^a	Postgraduate degree	8 (42.1)
	Graduate diploma/certificate	10 (52.6)
	Bachelor degree	18 ^b (94.7)
	Diploma	3 (15.8)
	Certificate	7 (36.8)
Place of work	Australian Capital Territory	1 (5.3)
	New South Wales	11 (57.9)
	Queensland	3 (15.8)
	South Australia	2 (10.5)
	Victoria	2 (10.5)
Number of languages used	One	6 (31.5)
	Two	10 (52.6)
	Three	2 (10.5)
	Four	1 (5.3)
Language status	Monolingual	6 (31.6)
	Bimodal multilingual	11 (57.9)
	Spoken language multilingual	3 (15.8)
	Bimodal and spoken language multilingual	1 (5.3)

^aPercentages total more than 100% as participants were able to provide more than one response.

^b17 of the 19 participants reported holding a bachelor degree, with one participant reporting a Master's degree as their lowest degree; thus, the presence of a bachelor degree was assumed. The remaining participant was an Auslan interpreter for which accreditation required a diploma with no bachelor qualification offered in Australia.

were used for transcription of the sessions. Discussions lasted an average of 43 minutes (range 20–67 minutes). One participant from Group C provided an additional written document after the focus group with responses she had not discussed during the focus group.

Data Analysis

Online questionnaire responses were analyzed using Statistical Program for the Social Sciences v26 (SPSS). Response proportions were calculated for items describing attitudes to multilingualism. A number of qualitative approaches were considered for analysis of these data, including deductive thematic analysis using frameworks such as the International Classification of Disability, Health, and Functioning: Children and Youth (World Health Organization, 2007) and Family Language Policy (Spolsky, 2004). A qualitative design employing a phenomenology approach and inductive thematic analysis was determined to be the best approach. This was due to the study's aim of examining the lived experiences and the

meaning that the individuals themselves drew from these experiences (Rossman & Rallis, 2011).

A data analysis spiral was employed, which is described below (Creswell & Poth, 2016) (Supplementary Data: Data summary). First, all focus groups and interviews were transcribed by a professional transcription contractor in an electronic format and words and phrases which were unable to be transcribed were checked, and where possible transcribed, by the first author. For participants who used Auslan, the English translation of the interpreter was transcribed and the accuracy of translation was checked by the first author (who is a qualified Auslan interpreter) checking the meanings rendered in the English transcription against the Auslan production of these participants. Second, the electronic data were organized by focus group/interview. The first author replaced labels for speakers used in transcription (e.g., Female Speaker 1) with participant identification codes. Third, all transcripts were read through several times by the first author. While reading, the author made annotations on the transcripts and made memos of comments and ideas that occurred to her during the readings. Fourth, based on knowledge from reading of the transcripts, preliminary

Table 2. Professionals' agreement with statements about attitudes to multilingualism (n = 19)

	Strongly disagree		Mildly disagree		Mildly agree		Strongly agree	
	n	%	n	%	n	%	n	%
A. Everyone should try to learn more than one language	0	0.0	1	5.3	6	31.6	12	63.2
B. Multilingualism is important for Australia	0	0.0	1	5.3	5	26.3	13	68.4
C. It is possible for someone to speak more than one language fluently	1	5.3	0	0.0	1	5.3	17	89.5
D. Exposure to two languages may mean neither language is learnt properly	14	73.7	2	10.5	3	15.8	0	0.0
E. Learning a second language is harder for adults than children	0	0.0	1	5.3	4	21.1	14	73.7
F. Multilingualism provides cognitive advantages	1	5.3	0	0.0	4	21.1	14	73.7
G. English must be acquired first to ensure success at school	11	57.9	7	36.8	0	0.0	1	5.3
H. Exposure to more than one language is confusing for hearing children	16	84.2	1	5.3	1	5.3	1	5.3
I. Multilingual people are a minority within Australia	5	26.3	6	31.6	6	31.6	2	10.5
J. Everyone living in Australia should learn to speak English	0	0.0	7	36.8	6	31.6	6	31.6
K. Exposure to two languages leads to language acquisition delays*	11	57.9	6	31.6	0	0.0	1	5.3
L. There are many advantages to being multilingual	0	0.0	1	5.3	2	10.5	16	84.2
M. Exposure to more than one languages is confusing for children with hearing loss	7	36.8	8	42.1	4	21.1	0	0.0
N. Multilingual people are a minority globally	16	84.2	2	10.5	1	5.3	0	0.0
O. Children raised multilingually will always get these languages confused	18	94.7	1	5.3	0	0.0	0	0.0
P. Multilingualism is a disadvantage to children in Australia	17	89.5	1	5.3	0	0.0	1	5.3
Q. Children should learn one language well before learning a second language	9	47.4	5	26.3	2	10.5	2	10.5
S. Multilingual children have more difficulties at school than monolingual children	14	73.7	4	21.1	1	5.3	0	0.0

*One participant did not respond to this question.

codes, sub-themes, and themes were developed. Codes were applied to the transcript in a dynamic way that allowed for changes in the content and structure of coding, sub-themes, and themes. Successive passes through the transcripts were made in an iterative process. Fifth, transcripts were reviewed another time to ensure that codes had been applied consistently throughout. Sixth, feedback on codes, sub-themes, themes, and data interpretation was sought from the second author, who was familiar with the transcripts, as peer feedback. Adjustments to codes, sub-themes, themes, and interpretation were made and applied consistently to all transcripts. Codes, terms, and sub-themes were defined. Finally, a visual summary of the data was built ([Supplementary Data: Summary of themes](#)) and codes, sub-themes, themes were tabulated (see [Table 3](#)).

Situating the Researchers

The authors are both speech-language pathologists with clinical and research experience working with DMLs and both have expertise in collecting and analyzing qualitative data. The authors recognize the benefits of clinical and educational support for DMLs and the important role that parents and professionals play in family-centered early intervention. The impetus of this study came from previous work by the authors related to DMLs ([Crowe et al., 2012](#); [Crowe & McLeod, 2014](#); [Crowe, 2018, in press](#); [Crowe & Guiberson, 2019](#); [Crowe & Cupples, 2020](#);

[Guiberson, 2005, 2014](#); [Guiberson & Crowe, 2018](#)), their parents ([Crowe et al., 2013](#); [Crowe et al., 2014a](#); [Crowe et al., 2014b](#); [Guiberson, 2013](#)), and the professionals working with DMLs ([Crowe & McLeod, 2016](#)). The authors approach to this study grew from wanting to understand the perspectives of professionals working with DMLs and their families for the purpose of better supporting children, families, and professionals needs in the future.

Results

Attitudes to Multilingualism

Participants displayed a range of agreement to statements about multilingualism ([Table 2](#)). Participants generally displayed positive attitudes towards multilingualism, the role of multilingualism in Australian society, and individual and societal benefits of multilingualism. Participants were also knowledgeable about research related to multilingualism, for example, the majority of participants agreed that multilingualism did not mean that children would learn neither language well. Three items elicited the full spectrum of responses (items H, I, and Q) and five items elicited responses that included both *strongly agree* and *strongly disagree* (items C, F, G, K, and P). In all cases, one extreme rating was given by a single participant, but the participant who gave this rating varied across questions.

Table 3. Themes, sub-themes, and codes identified within the data with the number of occurrences

Theme	Sub-theme	Codes	n	
Child characteristics	Language	Language skills	11	
		Metalinguistic skills	5	
Negotiating and supporting language	Development	Hearing	10	
		Additional needs	14	
	Information	Parents' preconceptions	13	
		Input from professionals	49	
		Other people	6	
	Parents' language	Parents' language skills	33	
		Parents' language preferences	8	
	Role of language	Communication with family and community	Identity	16
			Education	12
			Language in society	23
		Timing	Initial decisions	12
			Reviewing decisions	5
		Leadership	Shared	4
	Family-led		25	
	Professional-led		21	
	Language management	Strategies involving quantity	6	
Strategies involving people		31		
Strategies involving place		17		
Professional issues	Knowledge about multilingualism	Research	15	
		Knowledge from self	19	
		Knowledge of others	34	
	Resources for multilingualism	Multilingual materials	10	
		Other people	21	

Qualitative Analysis

Three themes that captured the essence of the phenomenon being investigated were identified through the inductive thematic analysis. These themes were *child characteristics*, *negotiating and supporting language*, and *professional issues*. Themes and sub-themes are presented in Table 3 and will be discussed in turn.

Child Characteristics

The theme *child characteristics* described ways in which children themselves differ from each other and the impact this has on issues surrounding language development. Participants' descriptions of child characteristic focused around two sub-themes: language (codes: language skills, metalinguistic skills) and development (codes: hearing, additional needs).

Language

Language Skills Participants described children's current language skills and their potential for language development. Current monolingual language skills were described to impact on the expectations for future multilingualism: "his overall language skills [are] improving, then they've felt that confidence of, yes, he just might be able to learn to speak Arabic as well" (P1). Another participant commented that her approach with parents of DMLs was informed by children's current language skills: "If you want your child to learn two languages then I'm prepared to support that until the child shows us that they can't do it" (P12). The opposite was also true, with poor current language skills discouraging hopes of multilingualism, indicating that parents were desperate for their child to have *any kind of language*.

(P1). General difficulties that all DHH children may experience with language acquisition were also mentioned. One participant stated: "there's all those issues within the child and the hearing loss and the type of learning abilities; all those factors" (P5).

Metalinguistic Skills Code-switching is an important metalinguistic skill for multilinguals, and one in which participants described young DMLs to be adept. One participant described the skills that a 2-year-old DML had in switching between her three spoken languages, dependent on her communication partner: "[She] knows she speaks English at childcare. The boy next door, [she] know he speaks Shanghainese, like [her]. But then this other boy across the road, he speaks Mandarin, and Mum and Dad do Shanghainese and Mandarin" (P6). Another participant described a DML's code-switching being contingent on his perception of others' comprehension, and reported that the child knew when to switch to another language to aid in others' comprehension. The code-switching skills of DMLs with additional developmental challenges were also described: "she signed to Dad, she talked English to me, she talked Telugu to Mum. Autistic. She just knew how to code-switch" (P5).

Development

Hearing Audiological management and age of diagnosis were mentioned as being important factors when working with DMLs. One participant described the role of good audiological management in success and how this leads to DMLs being on equal footing with hearing bilingual children. Other participants pointed to advances in audiology practice, such as early identification and age of diagnosis, that factored into children getting access

to cochlear implants and ultimately learning two or more spoken languages. Conversely, late diagnosis and later access to intervention were mentioned in the context of DMLs with poor outcomes. In such cases, professionals felt that adding another language, a signed language, supported DMLs who struggle with acquisition of spoken languages: “So there were two spoken languages, sequentially, and then Auslan. Not surprisingly, Auslan has blossomed, and she’s really picked that up beautifully. And it’s now flowed onto, impacting on the spoken languages, they’re starting to develop” (P18).

Additional Needs Challenges related to having additional areas of need, on top of a hearing loss, were described as having a negative influence on the possibility for DHH children to become DMLs. One participant described the difficulties faced by one DML and her family when weighing language options along with considering the complex genetic disorder the child had that included multiple areas of additional health and learning needs. The family and the professional believed that spoken language multilingualism was unlikely for this child. The absence of additional needs was described as beneficial to DMLs: “my experience has been that if children are just deaf, if we’re not dealing with cognitive delays or other issues, then learning two languages at the same time is not necessarily a deal breaker by any stretch of the imagination” (P12).

Negotiating and Supporting Language

The theme negotiating and supporting language described parents’ and professionals’ discussions about language planning, language use, and language management. Six sub-themes were identified: information (codes: parents’ preconceptions, input from professionals, other people), parents’ language (codes: parents’ language skills, parent’s language preferences), role of language (codes: communication with family and community, identity, education, language in society), timing (codes: early decisions, reviewing decisions), leadership (codes: shared, family-led, professional-led), and language management (codes: strategies involving quantity, people, and place).

Information

Information was often mentioned as important for supporting and negotiating language for families raising DHH children in multilingual environments. Information centered around parents’ preconceptions of language, input from professionals, and the role of other people.

Parents’ Preconceptions Participants reported that parents brought many beliefs about language and the views of professionals with them to intervention settings, which influenced their decision-making about language choice, multilingualism, and the support professionals provided. Many participants reported that parents’ held preconceptions related to use of the majority language (English): “I think often they come in thinking we’re going to say to them, ‘No, no, you have to just use English’” (P13). Parents were also reported to hold preconceptions related to monolingualism and multilingualism: “I think a lot of the families come in with the notion that they need to just focus on one language” (P2). Participants’ comments indicated that they discouraged parents from making decisions based on inaccurate preconceptions. One participant

stated that she directly addresses such preconceptions early in her engagement with parents and supports the family in considering all communication options, including spoken language multilingualism. Another commented that families often need support in realizing that learning more than one spoken language is an option: “Sometimes they need to be convinced about that. ‘But he’s got a cochlear implant. He can’t be bilingual’. Why not?” (P5).

Input From Professionals Participants described professional input with families being an important part of their role. For example, providing parents with information about normal aspects of multilingualism, such as code-mixing or using two languages within a given utterance or turn, was important in discussions: “Parents tend to get really stressed about [code mixing] and think that, ‘No, no, that’s all wrong’. So addressing those things as well, and making them understand that that’s just a normal part of learning” (P2). According to participants, these discussions also served as reassurance to parents about their choices, and reassurance that their child will learn to communicate, and can do so in more than one spoken language. When parents’ and professionals’ views were not in agreement or conflicted with one another, professionals described their role as being an educator or coach to the parents: “I have had a number of families who there’s needed to be a lot of work with the families done beforehand about why you would use Mandarin or why you would use Urdu” (P12). One participant stated that her role was to change the views of parents: “We said ... we’ll let you do that for a couple of weeks and then we’re going to change your mind.” (P17). Participants also reported that they referred to research evidence to justify their advice to parents, and that they shared this research with the families. The importance of professional experience in building trusting relationships with parents was also mentioned. In particular, parents appear to appreciate it when professionals have had prior experiences with DMLs that they can draw upon. One participant also cautioned that input from professional could be biased: “Professionals seem to want what is best for the family, but in reality just want to steer the family to use what is familiar to them – often monolingual English” (P9).

Other People Participants mentioned information provided by other people was important in their work with DMLs and their families. Participants stated that some parents of DMLs arrive at intervention having already made decisions about language choices based on the demands for languages in given contexts or environments. For example, one professional reported that a family had decided prior to initiating intervention that the child would speak the language that the grandmother spoke, and that they would be able to communicate orally. Advice from other professionals was also mentioned, with advice parents receive from medical professionals often viewed as problematic: “there have been families that have come in and said, ‘Doctor Such and Such said he’ll never learn our home language’. And I’m like, ‘Who’s he to say that? That’s not his field. Pipe down Dr. Such and Such’” (P12). Professionals also viewed information and advice provided to parents of DMLs by parents in similar situations to be helpful in their work: “within our playgroups you have families from similar cultural linguistic backgrounds that get a chance to meet each other and talk about their experiences ... So often those real-life lived experiences are the most valuable for people” (P13).

Parents' Language

Parents' Language Skills

Parents' language skills were viewed by participants as an important aspect of professionals' work with DMLs. Challenges were noted when parents of DMLs needed to develop skills in a particular language. Challenges mentioned included time constraints: "often times those mothers they don't have time to go out and learn English, their job is considered to be at home" (P16) and multiple language acquisition: "They were all trying to learn Auslan, but they were also trying to use their own first language from home, and then trying to learn English as well" (P10). The complexities of providing intervention sessions in English to parents who were acquiring English themselves was also mentioned, but whether this was viewed as an advantage or a hindrance varied. One participant presented arguments for both points of view. First, as a hindrance in providing intervention to a DML: "we've had to have discussions [with parents] around the fact that my therapy session and my intervention with your child is not actually your English lesson" (P12). Second, as a means of developing trust with the parent: "They seem to put a huge amount of stock in my skills as a native English speaker, and therefore take on board the things that I say" (P12). Participants also described the importance of utilizing the language strengths of families. Many participants stated that they guide parents to choose a language to use in which they could provide a rich language environment: "I think for a number of the families we work, with the parents' strongest language is actually not English, so we've been saying, 'That's your best language, use that one the most.'" (P18). Another participant stated that language quality, not quantity, was important: "[they] have quite a lot of English at home. But it's not necessarily tier two and tier three vocabulary" (P5).

Parent's Language Preferences

A number of participants described parents' comfort with the language used with their child, rather than proficiency, as their paramount concern: "I'll say, 'What's your joke language and what are your love words in?'" (P7). Another commented: "It's good to see the joy that the parents feel, that they are able to use their native tongue and let the child enjoy their culture" (P4).

Role of Language

The different roles that language plays in the lives of families, and the way languages are viewed in these different roles, were raised by participants as important in negotiating and supporting language for DMLs. Four sub-themes emerged from participants' discussion: communication, identity, education, and language in society.

Communication With Family and Community

Communication between the child, the family, and the wider community were described by participants. Many participants commented on the language skills of all family members, including grandparents and other relatives, as factors that are considered in decisions about which language/s a DML will learn. The need for DMLs to use the language of the wider community was also described. This was often related to immigrant parents wanting a good life for their child: "often times they have moved here to this country because they want their children to have a better life, and so they want them to be able to communicate

in the language of the country" (P16). Communication outside of Australia was also important, with some participants mentioning trips back to the parents' country of origin as an important factor in deciding to support the use of that language.

Identity

Participants' discussion about the role of language in identity centered around three ideas: belonging, culture, and bonding. Language was described as an important aspect of how DMLs developed a sense of belonging and identity with important consequences. One participant stated: "those relationships that those little ones are building with their parents, their grandparents, their wider community, that is so important for their social and emotional wellbeing (and) that's a big factor in decisions around languages and what's going to be used" (P13). Similarly, the importance of language as a tool for conveying culture was highlighted, with several participants explicitly describing how language is an important link to family and culture. Within this space, the role of language in early bonding for DMLs and their families was also important. A participant described a common occurrence in her work with DMLs who used only English, when their parents did not use English: "I know when I had a preschool deaf class the kids would often call me *Mum* ... parents have even said to me now, I remember when my kid was three before they called me *Mum* 'cause they called you *Mum*. You just have that connection with them" (P16).

Education

The role that English language skills have in education in Australia was described by participants. This was sometimes expressed as an urgent need to change the language focused on in intervention: "when they tend to go off to school or to preschool, and all that they use there is English. That's when [parents] start to panic and say, 'I think we need to add English into the sessions'" (P2). Parents' focus on English because of its value in education was also described, one participant describing this as a family's "yearning for academic success" (P1). This was also reflected in participants commenting that decisions about English use in early intervention were informed by parents' thoughts about the child's pathway to higher education and obtaining a college degree.

Language in Society

The role that language plays in society was discussed by participants related to supporting DMLs and negotiating language use. The omnipresence of English in Australia was described by one participant who pointed out that exposure to English is unavoidable: "What I like to tell parents is, English is everywhere. So, you step outside and there's English in signs, there's English on the telly" (P2). Interestingly, participants described both monolingualism and multilingualism as being viewed as *the norm* within Australian society. With regards to the monolingual outlook of Australia, one participant stated: "There's not a culture of multilingualism in Australia. It's a very monolingual country" (P1), and continued "multilingualism isn't something that's really highly valued, and sometimes there's a bit of suspicion attached to it" (P1). In contrast to this monolingual outlook, the shift towards increasing multilingualism in Australia was noted. One participant contextualizing this within her own professional practice with DHH children: "When I first started in the field, it [linguistic diversity] was fairly uncommon. Whereas,

it's more like the norm to have more families on your caseload that are bilingual than not." (P6).

Timing

Timing was an important aspect of negotiating and supporting language for DMLs and their families, particularly in relation to decision-making surrounding language. Two sub-themes were identified: initial decisions and reviewing decisions.

Initial Decisions

Participants described working with parents who were making decisions about language use and multilingualism with their DHH child for the first time, usually early in their child's life. Decisions about which language/s to use typically first occurred when children were very young or shortly after the diagnosis of hearing loss. However, another participant cautioned that early decision-making should not stifle a DML's potential: "let's not limit our children and say, 'Oh no, I think this six-week-old is only going to ever develop one language, so let's pick one'" (P12). Other participants described that decision-making about language choice were not at the forefront of her mind early in her relationship with the families of DMLs. For her, there were more pressing issues to attend to, such as wearing and using hearing aids. Participants also described the importance of families being committed to early decisions about language use in order for parents' intentions of raising a DHH child to be multilingual to be realized: "families sometimes start off with good intentions for a second spoken language in the household but don't always keep it up and go with whatever is easiest" (P9).

Reviewing Decisions

While early decisions were discussed, so was the need to review decisions at later times. Participants said it was important that parents understood that initial decisions could be revised in the future: "So it might be that they're sitting there going, 'Oh, well there are options, and let's try this one for a while, and there are options in terms of changing. We're not signing ourselves up to the next 12 years' worth of my child only ever going to speak Mandarin at home" (P12).

Leadership

Participants discussed the role different stakeholders have in making decisions about language for DMLs and their families. Three sub-themes emerged which described leadership in this process as being shared, family-led, and professional-led.

Shared Leadership

Shared leadership was described as acknowledging that parents and professionals hold different areas of expertise. One participant reported saying to a parent: "I don't speak a word of Hindi, so you're going to have to be the expert on this child's Hindi development, and I'll be the expert on the English development" (P12). Another participant echoed this idea in a different context: "we hold the knowledge of language development whereas they hold like their competence and their expertise in [their] language" (P14).

Family-Led

Leadership by the family was described in terms of autonomous decision-making, leadership being placed on the family, supporting parent leadership, and conflict. As described previously, participants described parents arriving at early intervention with their mind already set about the language/s their child would use. When parents were making decisions, professional support for parent decision-making was important: "those discussions are very much family led for me and I basically am scaffolding the parent to talk through what they're really looking for and they're wanting" (P13). Where conflict occurred between parents' and professionals' perspectives, participants described actively engaging with families to change their choices: "sometimes it's actually encouraging them to stick with their most fluent language, which is only one language, but it might not be English and they've decided they want their child to speak English" (P15). However, the power to make decisions ultimately rested with families, which meant that in some instances professionals supported family decisions to focus on English with their child, even though the family was not proficient in English.

Professional-Led

Leadership by professionals in decision-making and supporting DMLs was described in terms of leadership being placed on professionals by parents, supporting the process, and power and conflict. A number of participants described parents explicitly placing them in charge of decision-making because the family viewed the professional as the *experts*. Participants also described themselves as leading the decision-making process in terms of providing a scaffold for parents to make decisions within. One participant stated that she tells parents: "Okay, well to achieve that when they're five, before that we need to have this process of steps or of skills in place, and the easiest way for you and your family might be route A, B or C. What do you think about that?" (P12). Even in collaborative relationships with families, participants felt that they were still leading the process by asking families to state their larger goals for their child and basing decisions and plans on parents stated hopes and dreams for their children.

Language Management

The logistics of language use with the child, amongst the family, and outside of the home were described by participants as being part of negotiating and supporting language for DMLs. Sub-themes for these strategies fell into three categories: quantity, people, and place.

Strategies Involving Quantity

Participants described the success and failure of language management strategies in increasing the quantity/amount of language to which DMLs were exposed. For example, one participant described parents' intentional increase in the use of English within the home. Many participants described childcare as an important factor that increased children's exposure to English. Although there was discussion about childcare settings often providing a poor source of language exposure due to their tendency to be poor acoustic environments for DHH children and to many people employed in these settings having poor proficiency in English. Another described how a family increased the quantity of Mandarin their children were exposed to: "They

wanted their child to learn Mandarin . . . all the Chinese TV shows that you can get in Australia are in Mandarin . . . so they would put their child in front of the TV to learn Mandarin" (P18).

Strategies Involving People

Language management strategies involving people were most often related to immediate family members. One frequently mentioned strategy was the separation of languages by person: "I think language development needs to be compartmentalized so that different members of the family are allocated sole responsibility of developing a language" (P19). This strategy was complex when multiple languages were used by parents: "the dad speaks Bengali, Mum speaks Moroccan Arabic, but they speak to each other in English. So, when the child is alone with Mum, Mum will speak to the child in Moroccan Arabic. But when Dad is around, everybody speaks English" (P2). Non-separation of languages was also described, often as being problematic. In the following quote, a participant responds to the parent's code mixing of Lebanese Arabic and English (i.e., *Lebbish*): "One of my parents said: 'okay, so I can choose to speak Arabic or I can choose to speak English?' I said: 'correct' [she said] 'No *Lebbish*?' I said: 'No!'" (P4). Siblings' were also used to manage language exposure. Parents were reported to direct siblings of DMLs to speak English to develop DMLs' English skills, particularly prior to the DML commencing formal education.

Strategies Involving Place

Participants described language management strategies based around places such as home, education settings, and in the community. One participant described the importance of separating languages by place: "Metacognition and metalanguage can be best developed when languages are used separately with each used alternatively at different times and places" (P19). Place-based divisions of languages were most often between home and education, although this could lead to competing language priorities: "she was starting to drop off a little bit of her Korean by the time she was heading off into preschool, just because everyone else speaks English" (P2). The wider community was also described as a place that families could seek English: "whether it's a childcare, some sort of formal situation, or whether it's story time at the library or a playgroup, or a music group, or whatever it is that the English is coming in somewhere else, but from a better language model" (P12).

Professional Issues

This theme described knowledge and resources necessary to work effectively with DMLs and their families. Professional issues that were raised centered around two sub-themes: knowledge of multilingualism (codes: research, knowledge of self, knowledge of others) and resources that were available for supporting multilingual language development in languages other than English (codes: multilingual materials, other people).

Knowledge About Multilingualism

Professionals' knowledge-base and practice related to working with DMLs and their families was described as coming from three main sources: research, knowledge that they themselves brought to their practice, and knowledge that they gained from others.

Research

Knowledge of research related to language acquisition was key to working with DMLs. Participants used research as a tool for self-education and changing their own practices: "I've read that really mixing languages is very normal for bilingual people, so I'm now thinking that next time round I would actually approach it quite differently" (P18). Participants also commented on the satisfaction of their personal views and experiences being echoed in research findings: "this new research has come out and it has re-affirmed [my view] . . . because growing up in a multilingual environment myself, I never found that there was a big difference in terms of the language delay for me" (P2). Lack of research in some areas was also noted by participants: "When we started getting kids from families that were using English as a second language, the learning curve was vertical, and so there just wasn't a lot of literature around" (P7). A lack of research was also associated with frustration: "I often find, when I'm looking for something, trying to follow a question, what there is literature on doesn't really fit. I just get frustrated with that" (P5) and a need to look at research outside of DHH children: "I just went to the hearing literature a lot, particularly in early education and all the ESL (English as a second language) literature - the L1 (first language), L2 (second language)" (P7).

Knowledge From Self

Participants reported that their own experiences of multilingualism informed their work with DMLs and their families. A number of participants were multilingual themselves and described how their personal experiences related to their professional work. One participant described her experiences of being multilingual: "[I] had stronger beliefs about encouraging that [multilingualism] rather than some of the professionals who are monolingual" (P8). Another participant described the benefit of being bilingual in English and Cantonese when working with DMLs: "I can recognize certain things that the kids say in Cantonese that may not be a real word, but it could be a sound that sounds like something—and I can recognize that and feedback on that" (P14). One participant had been a DML herself. She arrived in Australia and needed to learn English and to sign, while her parents spoke two other languages. She described her negative experiences with professionals as a child: "the teacher [said] . . . if I was to learn Chinese language and signed English at the same time, then I would be spoiled. . . do not speak Cantonese to your [child], you are only allowed to speak English at home full time, and so it was quite disrespectful to our culture" (P10). Monolingual participants also drew on their observations of multilingualism to inform their practice: "being raised in Melbourne, which as I said is incredibly multicultural, I never questioned it, it never occurred to me to say either a deaf child can't have more than one language" (P12). Professionals also drew on previous experiences working with DMLs to inform their practice: "A lot of my experience is with cultures who were indigenous . . . an indigenous dialect was the background language, and they're coming in to English as a second language" (P7).

Knowledge From Others

Participants also commented on the knowledge of multilingualism held by others and the professional issues that this raised for working with DMLs. Participants described colleagues who held views on multilingualism that were different to their own as being inflexible: "this is the way it has always been, so that's

the way it will always be” (P3). Despite this, the possibility of changing the views of those with negative or outdated views on DMLs was discussed: “professional development to help them change their views, and to get them to slowly see that it is okay to be bilingual, it is okay to be multilingual, it’s not going to affect or cause a delay in [a child’s] development” (P2). The difficulties in working with professionals without specialist knowledge of multilingual language acquisition were also described: “you’ve got general pediatricians who may have no idea ... different people have conflicting information” (P14). One participant also commented that being multilingual does not necessarily equip a professional with the skills they need to work with multilingual families: “how much we perhaps assume that they’re just going to be able to do—They can do it, she speaks Arabic and Greek, fantastic, you work with this family’. But it’s not. It’s made me question now, is it actually easy for that person to figure out what to do necessarily?” (P5).

Resources for Multilingualism

Participants discussed resources for supporting multilingualism as an issue of professional practice. Resources were described as being both materials and other professionals.

Multilingual Materials

Participants shared information and clinical materials that they considered were hard to find, which had helped them in their work supporting DMLs: “there’s a book in [library name] that talks about the structure of different languages as well, so you can ask very specific questions about the structure of the language that the child is speaking” (P3). Others cautioned that resources, which may appear appropriate for working with DMLs, may not be as helpful as they seem. The difficulties with finding resources that are both linguistically and culturally appropriate was described by one participant: “we’ve ordered in, I think, the PLS (Preschool Language Scale) but in Chinese. But culturally, it’s not appropriate, just the words that are in that tool are not the words that we would use here” (P2). Another participant described a resource that had been professionally translated from English to Spanish, but where the translation had missed the point of the resource: “we were looking for ‘hop, hop, hop’ for the rabbit ... their [Spanish] rabbit does ‘salto, salto, salto’. So I said, ‘Well we’re looking for that h-h-h’, and she [the mother] said, ‘You’re not getting h-h-h in salto-salto!’” (P17).

Other People

Parents and interpreters were described as resources professionals could use to access specialist knowledge that they lacked, particularly language and culture specific information. For example, one participant said: “you can ask Mum to say it and you can transcribe it and then listen to what the child is saying, and then compare it that way” (P2). Interpreters provided a resource in terms of culture as well as language: “It was also comforting to have her [interpreter’s name] on board to say ‘this is culturally appropriate, this is not culturally appropriate’” (P4). Colleagues were also described as a resource: “I turn to other people who have experience in it as well ... They’ve got a unique perspective with a fair amount of experience” (P3). Another participant described the kind of people she would like to have as a resource: “How wonderful would that be to have staff that are bilingual, multilingual, that could actually,

whatever language the child had their therapist could speak that language” (P13).

Discussion

This is the first known investigation of the perspectives of professionals supporting DMLs and their families. As such, this research has provided new insights into the ways that professionals engage with DMLs and their families, particularly around language choice and language acquisition strategies, which have not been described previously. Overall, participants demonstrated positive views towards multilingualism and had much knowledge about multilingualism, multilingual language acquisition, and had experience working with DMLs and their families. All participants in this study encouraged and supported multilingualism and the use of languages other than English for DMLs and their families. Three themes were drawn from the discussion of professionals’ experiences of working with DMLs and their families: child characteristics, supporting and negotiating language, and professional issues. These themes and their implications of these findings for EBP will be discussed.

The role of the professional in supporting families of DMLs to make informed decisions, engaging in family-centered practice, and in providing EBP underlaid many participants’ comments. EBP consists of: (a) use of the best available research evidence, (b) application of professional expertise, and (c) the perspective of clients (Roulstone, 2011). Participants often commented on their use of research, or reference to research, in educating parents about multilingualism, multilingual language acquisition, and the possibilities for DMLs. Participants’ comments in the sub-theme knowledge of multilingualism also revealed that the best available research evidence, or in fact any research evidence, was lacking, making this aspect of EBP hard to enact. The reasons for this lack of research evidence concerning the development, outcomes, and effective interventions to use with DMLs are many. Partly, this is due to DMLs being an extremely heterogeneous population (Crowe, 2018). As such, participants in research studies will have characteristics that differ in important ways from any individual DMLs that a professional encounters in their practice. In part, this is also due to DMLs being a relatively new phenomenon in the world of d/Deaf education, and research is yet to catch-up with the needs of practitioners working with this population. While research evidence related to DMLs is lacking, participants looked further afield to seek research evidence from populations with potentially overlapping characteristics, an appropriate EBP strategy (Dollaghan, 2007; Justice, 2010). Research from adjacent populations that could inform practices with DMLs include multilingual learners without hearing loss, learners with speech and language difficulties, and multilingual learners at risk of poor language and education outcomes.

The second component of EBP, application of professional expertise, was described by participants as applying to a wide range of situations in their practice with DMLs and their families. Threaded through many themes, participants mentioned that they referred to their own expertise, in drawing on previous situations they had encountered which had similar characteristics. Further, participants reported drawing on the professional expertise of colleagues and other professionals when they needed expertise that was outside their own scope of experience. Participants also described accessing resources on assessment and intervention in languages other than English as a means of increasing their expertise in working with DMLs.

The final component of EBP, the perspective of clients, was extensively discussed by participants through many of the themes. The perspective of clients was particularly evident when participants described working to support parents in making informed decisions and when engaging in family-centered practice. Within this study, many participants described the importance of supporting the families of DMLs to make informed decisions about language choice and multilingualism. As well as being a provider of unbiased information to families, many participants described situations in which they felt that the perspectives of some parents were sometimes based on incorrect information or assumptions. In such cases, participants described actively trying to change the perspective of the family and/or the decisions that a family had made. When change was not possible, participants described having to support choices which they felt were less than ideal and sometimes inappropriate. It seems that a delicate balance exists between coaching parents so that they can make informed choices and respecting the choices of parents which are not aligned with the views held by a professional. Such an approach, which may seem outwardly problematic, is in line with the best practice principles of family-centered early intervention. These principles state that professionals must “recognize that ultimately, decision-making authority rests with the family; collaborate with families to support their abilities to exercise this authority” (Moeller et al., 2013, p. 434).

Limitations and Future Research

The present study has a number of limitations that also present opportunities for future research. The professionals who participated in this research were homogenous for several reasons, and this presents a limitation to this study. All participants worked in Australia, so may hold different perspectives and experience from professionals in other countries. Reasons for this may relate to the monolingual culture of Australia (Clyne, 2005), widespread access to newborn hearing screening (Leigh, 2010), and audiological and education services being accessible to all Australian children (Australian Hearing, 2005). Participants also held positive attitudes towards multilingualism and were knowledgeable about multilingualism, which the participants themselves considered to be not typical of many of their colleagues. Participants were also homogenous in being predominantly female and predominantly hearing, which reduces the range of experiences that might be presented in these findings. Future research should examine a more diverse range of participants, including those in different countries, those working with different age groups (e.g., college-aged student), and those with a range of attitudes towards multilingualism. Beyond this, considering the perspectives of those who are not yet directly engaged with working with DMLs could also be informative. These perspectives could include those of students training to be teachers of the deaf and speech-language pathologists and teachers working in settings that do not specialize in serving DHH children. The perspectives of these groups are important as the increase in mainstream education of DHH children means that professionals without specialist knowledge of DMLs are now more likely than ever to be responsible for providing services to these children. These different perspectives would be helpful in moving forward professional practice in with DMLs.

This investigation relied on participant report rather than observation and can lead to bias in several ways. First, participants' comments may be colored by knowing the outcomes of

their previous actions, and therefore important information may not be reported or reporting could be biased. Second, collection of data in group discussion, as opposed to individual interviews may have biased participant reports. The use of a group discussion format encouraged debate and lengthy discussions. However, when interacting with peers participants may have shared different information to what they may have disclosed in a confidential one-to-one interview. Third, member checking of data were not completed as part of this study, which may have introduced researcher bias in interpretation of findings. Future research should consider ways to examine this topic while limiting bias. This could involve different data collection strategies, analysis methods, and direct observation of professionals and families of DMLs engaging.

Finally, many professionals in this study described a lack of research evidence for how to assess and support DMLs and their families. Such gaps in research evidence limit professionals ability to engage in EBP (McCurtin & Roddam, 2012; Roulstone, 2015). In addressing this shortfall in research evidence, the role of practice-based evidence should be considered. Practice-based evidence (Green & Latchford, 2012) in this context means that professionals engage directly in research of strategies that they use in their own practice. Evidence about the effectiveness of these strategies is then shared, with this research contributing to available research evidence that can be used as part of EBP. In addition to this, the development of effective tools to for parents and educators of DMLs to engage in discussion of family language policy (family language beliefs, practices, and management) is a priority. Such tools would offer professionals strategies and structures to support these difficult discussions and pave the way for intervention and education plans for DMLs based on deliberate and conscious decisions about language use.

Conclusion

The aim of the current paper was to better understand the experiences and perspectives of professionals working with DMLs and their families, particularly in regard to decision-making about multilingualism and language choice. The professionals who participated in this research provide insights into the way that parents and professionals engage in discussing, planning, and supporting language development in DMLs. A broad range of topics and issues were discussed by professionals, centering around consideration of child characteristics, negotiating and supporting language, and professional issues. The findings of the study contribute to the sparse body of existing literature concerning DMLs. This study highlights the need for more research into the development and outcomes of DMLs, better dissemination of research evidence to time poor professionals, and development of resources to support professionals working with DMLs.

Supplementary Data

Supplementary data is available at Journal of Deaf Studies and Deaf Education.

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Conflicts of Interest

No conflict of interests was reported.

Endnotes

¹Participants were able to provide more than one response and many worked in more than one professional area.

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