Professionals' Guidance About Spoken Language Multilingualism and Spoken Language Choice for Children With Hearing Loss*

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The purpose of this research was to investigate factors that influence professionals' guidance of parents of children with hearing loss regarding spoken language multilingualism and spoken language choice. Sixteen professionals who provide services to children and young people with hearing loss completed an online survey, rating the importance of a range of potential influences on the guidance they provide to parents. These participants were invited to comment on the importance of these influences. Participants included teachers of the deaf, speech-language pathologists, special education teachers, psychologists, auditory-verbal therapists, Auslan interpreters, and curriculum coordinators. All participants had experience working with multilingual families and reported that they would sometimes or always recommend multilingualism for children with hearing loss, with fewer reporting that they would sometimes recommend monolingualism. Professionals placed greater importance on factors relating to family and community considerations (e.g., family language models, communication within the family, community engagement), and less importance on organisational policy and children's characteristics. This research provides an initial insight into the factors that professionals consider when guiding parents around spoken language and spoken language multilingualism decision-making for their children with hearing loss.

Keywords: hearing loss, deaf, communication, multilingual, language choice, decision-making, professionals, educators, teachers, speech-language pathologists

Review of Literature

Children With Hearing Loss Living in Multilingual Environments

The use of more than one language in everyday life is a necessity of the majority of people in the world, with about two-thirds of all children growing up in multilingual environments (Crystal, 2003; Romaine, 2012). Even in countries where English is the dominant language, there are increasing numbers of children who are linguistically diverse, and these may soon

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represent the majority of children (Bialystok & Feng, 2011). Children with hearing loss grow up reflecting these trends, and in fact more children with hearing loss may grow up in linguistically diverse environments than would be expected in the general population (Leigh & Crowe, 2015). Definitions of multilingualism vary widely. Grech and McLeod's (2012) inclusive definition of *multilingualism* is used here: 'a person who is multilingual is able to comprehend or produce two or more languages in oral, manual, or written form regardless of the level of proficiency, use, and the age at which the languages were learned' (p. 121). The scope of this paper is limited to spoken language multilingualism.

Multilingual language acquisition is a complex area of research that draws on the fields of psychology, linguistics, and sociology (Wei, 2012). The study of the language acquisition and skills of multilingual individuals is complex, considering many variables that may impact on the speech and language outcomes of children. Acquisition variables include whether the acquisition of languages occurs simultaneously (i.e., at the same time and at a young age) or sequentially (i.e., one language is partially/fully learned before a second), and if acquisition is additive (i.e., two languages are maintained) or subtractive (i.e., one language falls into disuse; Edwards, 2012). Usage variables include the domains the languages are used in (e.g., at home, at school, in religion) and the purpose of languages use (e.g., basic interpersonal communication skills [BICS] and cognitive academic language proficiency [CALP]; Cummins, 2008; Paradis, Genesee, & Crago, 2011). Environmental variables include whether the languages are ethnolinguistically majority or minority languages (Paradis et al., 2011), the people who use each language with the child, and the environments within which each language is used (Romaine, 1989). All of these variables impact on the language acquisition of multilingual individuals, making research in this area complex. The emerging picture of multilinguals' languages is that multilinguals have advantages in some areas (e.g., cognitive control in complex tasks) and initial disadvantages in some areas (i.e., initially smaller vocabularies in each language; Bialystok & Feng, 2011; McLeod, Harrison, Whiteford, & Walker, 2016) and that multilingualism does not lead to a decrease or weakness in an individual's capabilities (Edwards, 2012; McLeod et al., 2016). Bhatia and Ritchie (2012) provide a comprehensive discussion of theoretical and practical issues in multilingualism.

A number of studies have examined the spoken language linguistic diversity and multilingualism of children with hearing loss. In the United States, the Annual Survey of Deaf and Hard of Hearing Children and Youth asked teachers to report on their students with hearing loss. For the 2009–2010 cohort of children, most children were reported to use English at home (81%), followed by Spanish (17%), American Sign Language (15%), and other languages (8%; Gallaudet Research Institute, 2011). A survey of school-aged children with hearing loss in Puerto Rico reported that the majority of children were monolingual (73%); however, a significant minority used two or more languages (26%; Albertorio, Holden-Pitt, & Rawlings, 1999). Crowe, McLeod, and Ching (2012) described the language use of 3-year-old Australian children. In their home environment, 94% of children used spoken English, 17% of children used another spoken language (either on its own or in addition to English), and 21% of parents were multilingual compared to just 13% of the children. In these children's early education environments nearly all children (99%) used English only, with 3% using another spoken language, and 2% being multilingual. Mahon et al. (2011) reported that 28% of the children attending one cochlear implant clinic in London used English as an additional language.

Children with hearing loss may experience many challenges in the acquisition of spoken language due to limited access to sound and differences in the quality of sound they perceive as a result of their hearing loss. The spoken language acquisition of children with hearing

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loss has been widely researched (e.g., Ching et al., 2013), and great advances in the spoken language proficiency of children with hearing loss have occurred as a result of innovations such as universal newborn hearing screening for hearing loss (Pimperton & Kennedy, 2012) and improved hearing aid technology and cochlear implantation (Geers, 2004). The difficulties children with hearing loss face in acquiring multiple spoken languages has also been long described, with the principal of the Rhode Island School for the Deaf in 1921 commenting that 'in families of foreign parentage I find the progress in speech and language much retarded – when the pupils are at their homes from the fact that if the parents speak English it is "broken English", hard to interpret by people with all their facilities, and particularly puzzling for a speech or lip reader' (Fischgrund, 1982, p. 57).

There is a persistent view that multilingualism may disadvantage children with typical hearing, as well as children with hearing loss. For multilingual children with speech and/or language disorders and typical hearing, monolingualism has been suggested as a way to remediate linguistic difficulties. This is based on the incorrect belief that multilingualism may cause or exacerbate speech and language difficulties (Cruz-Ferreira, 2011). It is important to note that true speech and/or language disorders appear in all languages a child uses, whereas difficulties that are isolated to one language used by the child are considered to be *differences* (for detailed discussion see Kohnert, 2010; Paradis et al., 2011). For children with hearing loss, spoken language multilingualism has been suspected to compound difficulties in speech and language acquisition by requiring children to use a degraded auditory system to differentiate sounds from more than one language and to use this degraded information to build lexicons and deduce morpho-syntactic rules for each language. The risk is seen to be that children will not be able to learn either language well (Waltzman, McConkey Robbins, Green, & Cohen, 2003). However, many advantages of multilingualism have been identified in linguistic skills (e.g., De Houwer, Bornstein, & Putnick, 2014), cognitive skills (e.g., Adesope, Lavin, Thompson, & Ungerleider, 2010), social skills (e.g., Park & Sarkar, 2007), cultural identity and wellbeing (e.g., De Houwer, 2015), and school readiness (McLeod et al., 2016). As yet, these areas have not been investigated for children with hearing loss who use more than one spoken language.

To date there has been relatively little research describing the language acquisition and outcomes of children with hearing loss who are multilingual in their use of spoken languages. A review of research describing multilingual children with hearing loss can be found in Crowe and McLeod (2014). Typically, studies examine a cohort of children who use the same language in education (i.e., the national language), but come from vastly different home language environments. Although standardised assessment tools are often available to evaluate children's competence in the national language, there are few comparable measures of competence in children's home language(s), making children's total language skills difficult to evaluate and compare to their monolingual peers. To this end, study results are often conflicting with some findings suggesting that children may achieve proficiency in both languages (Francis & Ho, 2003; Guiberson, 2014; Hodges, Ash, Balkany, Schloffman, & Butts, 1999; McConkey Robbins, Green, & Waltzman, 2004; Thomas, El-Kashlan, & Zwolan, 2008; Waltzman et al., 2003; Yim, 2012). Other studies reported that children's acquisition of one or both languages could be negatively affected by multilingualism (Boons et al., 2012; Deriaz, Pelizzone, & Fornos, 2014; Kiese-Himmel, 2008; Teschendorf, Janeschik, Bagus, Lang, & Arweiler-Harbeck, 2011). Furthermore, one study reported that children from bilingual homes outperformed their monolingual peers (Sininger, Grimes, & Christensen, 2010).

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Parent Decision-Making About Children's Communication

Currently, knowledge of professional guidance of parents about multilingualism and language choice comes from parent report, not directly from professionals. This raises three key questions. First, what do parents report influences their decision-making about how their children with hearing loss will communicate? Second, what information and recommendations are professionals providing to the parents of children with hearing loss about multilingualism and language choice? Third, what knowledge is underpinning the information and recommendations that professionals are providing?

Parents who are multilingual and/or users of minority languages face making decisions about language use, described here in terms of family language policies and practices (Wei, 2012). A family language policy represents a deliberate choice of 'a particular language use pattern and particular literacy practices within home domains and among family members' (Curdt-Christiansen, 2009, p. 352). Parents' decisions about language policy involve much more than the practicalities of using different languages, as language also entwines belonging and cultural identity (Edwards, 2012; Rohani, Choi, Amjad, Burnett, & Colahan, 2006). Many factors may influence family language policies, including caregivers' skills in each language, education, acculturation, family structure and support, and the language environment outside of the home (Clyne, 2005; Schwartz, 2010). Parents of children with a hearing loss make these same decisions regarding their children's language use; however, the decisions are made at very early stages in their child's development (Crowe, Fordham, McLeod, & Ching, 2014; Wheeler, Archbold, Hardie, & Watson, 2009). For parents raising children with hearing loss in multilingual environments, language use decisions are considered carefully and made deliberately (Willoughby, 2009).

There has been some previous research describing influences on parents' decision-making about communication mode but very limited research concerning choices about multilingualism and spoken language use. Decisions about communication mode choice may be influenced by (a) factors relating to children, such as audiological characteristics, the presence of additional disabilities, child communication mode preference, and planning for future success (Crowe, Fordham, et al., 2014; Crowe, McLeod, McKinnon, & Ching, 2014; Decker, Vallotton, & Johnson, 2012; Li, Bain, & Steinberg, 2003; Wheeler et al., 2009); (b) parent and family factors, such as the ability to learn a new means of communication, parents' English proficiency, parent and family preferences, attitudes, and beliefs (Crowe, Fordham, et al., 2014; Crowe, McLeod, et al., 2014; Decker et al., 2012; Li et al., 2003; Meadow-Orlans, Mertens, & Sass-Lehrer, 2003; Willoughby, 2009); and (c) advice from sources, such as professionals, family, friends, and community members (Crowe, Fordham, et al., 2014; Crowe, McLeod, et al., 2014; Decker et al., 2012; Guiberson, 2013b).

Less information is available about parent decision-making for multilingualism and spoken language choice. Guiberson (2013b) reported that 38% of families chose spoken language multilingualism in his investigation of Spanish parents of children with hearing loss. Parents had positive attitudes towards spoken language multilingualism and half of the parents had been encouraged to raise their child multilingually, with only a third discouraged from doing so. Crowe, McLeod, et al. (2014) surveyed Australian parents about the importance of a range of influences on their decision-making about multilingualism and language choice. Factors that were most frequently rated as being important related to the need to communicate effectively with immediate and extended family, cultural participation, access to education in English, and planning for future success for their children. Although McConkey Robbins et al. (2004) and Waltzman et al. (2003) did not

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directly investigate parent decision-making, some of the multilingual parents in their studies mentioned that professionals had recommended that they only speak English with their children following cochlear implantation. Similarly, Spanish-speaking parents in the Steinberg, Bain, Delgado, and Ruperto (2003) study of American children with hearing loss reported being advised to use English with their children. Despite these reports, little is currently known about what professionals consider important when providing guidance to parents about multilingualism and language choice for children with hearing loss. Understanding the knowledge and biases that professionals bring when providing information and guidance is important for parents trying to make informed choices for their children and their families.

Professional guidance of parents. The parents of children with hearing loss are often involved with a multitude of professionals (Australian Hearing, 2005), but there is a scarcity of literature discussing professional guidance about multilingualism and language choice. A recent international consensus statement by Moeller, Carr, Seaver, Stredler-Brown, and Holzinger (2013), describing best practice in family-centred early intervention for children with hearing loss, stated that programs should 'promote linguistic accessibility and home languages' (p. 437) and 'actively support family choices regarding communicative approach' (p. 439). Guiberson (2013b) suggested that

> *professional practices in a multilingual country, in which multilingualism is both common and valued, may shape professionals' attitudes about bilingualism, and this will likely influence professionals' support of spoken-language bilingual options for children who are DHH [deaf and hard of hearing]. (p. 107)*

For example, in India, where multilingualism is common, Jeyaraman (2013) reported that 27.2% of clinics preferred to conduct multilingual habilitation following cochlear implantation in either the local language and the parent's home language (9.1%), English and the local language (13.6%), or English and the parent's home language (4.5%). However, the majority of clinics (45.5%) reported conducting habilitation in only the caregiver's language.

There is a popular misconception that multilingualism in childhood can cause delayed development of both languages and that children may be confused by input from multiple languages (Genesee, 2007). In terms of children with hearing loss, there is little research knowledge to inform professional practice. Guiberson (2005) described the field of multilingualism and hearing loss saying, 'Although laden with presumptions, there remains a scarcity of research, recommendations, and guidelines for working with children who are deaf or hard of hearing and from linguistically diverse backgrounds' (p. 30). There is a need for more explicit knowledge about factors informing current professional practice and guidance to parents. An understanding of the factors professionals consider to be important will facilitate more informed and reasoned decisions about multilingualism and language use to be made in collaboration with parents.

Research Questions

The current investigation examines the factors that professionals consider when providing guidance to parents about (a) spoken language monolingualism or multilingualism for children with hearing loss, and (b) which spoken language(s) to use with children with hearing loss.

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Method

Participants

An electronic questionnaire was distributed to 115 professionals who worked within a single organisation that supports children and young people with hearing loss in Sydney, Australia. All professionals worked directly with children with hearing loss. This organisation offers education, habilitation, and therapy services to children and families from birth to 18 years and provides opportunities for children with hearing loss to develop spoken and/or signed and/or augmentative and/or alternative communication.

The questionnaire was completed by 20 (17.4%) professionals. Data were excluded for four participants who discontinued the questionnaire after Part A. Therefore, data for 16 participants are analysed here. All participants were female and aged between 26 and 60+ years with 3–27 years of experience working with children with hearing loss ($M = 14.3$, $SD = 8.2$). Half of the participants were monolingual users of English ($n = 7$, 43.8%), with the other participants speaking two ($n = 5$, 31.3%), three ($n = 3$, 18.8%), or five ($n = 1$, 6.3%) languages. All participants were fluent users of English. Other languages reported were Arabic (one minimal fluency), Auslan (Australian Sign Language; three functional fluency, one minimal fluency), Cantonese (one minimal fluency), French (one functional fluency, one minimal fluency), German (one functional fluency), Greek (one minimal fluency), Japanese (one minimal fluency), Korean (one minimal fluency), Malay (one functional fluency), Spanish (two minimal fluency), and Russian (one fluent).

Participants worked with children with hearing loss in a variety of professional roles, with four participants holding two roles and one participant holding four roles. Roles included teachers of the deaf ($n = 5$), speech-language pathologists ($n = 5$), special education teachers ($n = 3$), psychologists ($n = 3$), auditory-verbal therapists ($n = 2$), teachers ($n = 2$), Auslan interpreter ($n = 1$), and curriculum coordinator ($n = 1$). Participants were highly qualified, holding one ($n = 1$, 6.3%), two ($n = 5$, 31.3%), three ($n = 2$, 12.5%), or four ($n = 8$, 50.0%) qualifications, with a total of 49 qualifications between the 16 participants. This total included 12 postgraduate degrees, 14 graduate diplomas or certificates, 18 bachelor degrees, two diplomas, and three certificates. Participants worked with children and youth in more than one of the following age groups[1] : newborns ($n = 8$, 50.0%), toddlers (under 3 years; $n = 15$, 93.8%), preschoolers (3–5 years; $n = 15$, 93.8%), primary school (5–12 years; $n = 13$, 81.3%), and secondary school (13–18 years; $n = 8$, 50.0%).

Research Design

Ethical approval for data collection and use was obtained through the University of Newcastle Human Research Ethics Committees. An online questionnaire design was used to allow the remote collection of quantitative and qualitative data. An information statement formed the first page of the questionnaire describing the purpose, requirements, and risks and benefits of participating in this project. Participants were informed on this page that the completion and submission of the online questionnaire would be taken as implied consent to participate in the research.

Procedure

A questionnaire was designed to investigate factors that professionals may consider when supporting parents of children with hearing loss in decision-making about

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multilingualism and language choice. The questionnaire was adapted from Crowe, McLeod, et al. (2014), who addressed influences on parent decision-making about communication mode and language choice. Potential factors included in the original parent questionnaire were identified via a literature review (see Crowe, McLeod, et al., 2014) and reviewed and refined by teachers of the deaf and speech-language pathologists experienced in working with children with hearing loss. A pilot questionnaire was completed by teachers of the deaf and speech-language pathologists experienced with working with multilingual children with hearing loss outside of this organisation to minimise the chance that potentially important factors had been missed. Feedback from this pilot was incorporated into the final questionnaire but data were not included in this analysis.

An invitation to participate in this research and link to the questionnaire was emailed to the 115 potential participants by administrators at the organisation in November 2014 and March 2015. Two follow-up reminder emails were also sent. The questionnaire was electronic and contained four parts. Part A collected information about participants' personal and professional characteristics and attitudes to multilingualism, the latter examined by 18 statements with which participants rated their agreement or disagreement on a 4-point Likert scale (*strongly agree*, *mildly agree*, *mildly disagree*, *strongly disagree*; see Table 1). Parts B and C asked participants to rate the importance of factors in their guidance of families about multilingualism and language choice, and provided opportunities for participants to explain the factors that they consider in their own words. Within each part, factors were grouped into child, family, community, and professional themes. Participants rated each factor as being *not important*, *somewhat important*, or *very important*. Part B described guidance about spoken language multilingualism (53 factors: 17 child, 17 family, 5 community, 14 professional; see Appendix). Part C1 described monolingual language choice to use English (48 factors: 17 child, 16 family, 3 community, 12 professional) and Part C2 described the use of a language other than English (48 factors: 17 child, 16 family, 3 community, 12 professional). Part D provided an opportunity for participants to make additional comments. As factors were repeated across sections and only required a box to be ticked for each, the questionnaire took approximately 10–15 minutes to complete.

Data Analysis

Questionnaire responses were downloaded from SurveyMonkey into SPSS Version 20. Quantitative data were coded and frequencies, cross-tabs, and measures of central tendency were calculated. Frequencies were calculated for participants' responses to each of the 18 items describing attitudes to multilingualism in Part A, where they rated their agreement or disagreement with statements *strongly agree*, *mildly agree*, *mildly disagree*, and *strongly disagree*. Responses were not normally distributed and Spearman's rho was used to calculate correlations and their significance. The analysis of influences on professional recommendations was conducted through comparing the frequency of participants' responses of importance to each item. The percentage response for the five items most frequently rated as being *very important* and *not important* were calculated by dividing the number of participants who selected this rating by the total number of participants. The small number of responses precluded the use of other statistical methods of interrogating these data and relating personal and professional characteristics to participants' responses. Qualitative thematic analysis of free-text responses was not undertaken due to the small number of free-text responses and their brevity.

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TABLE 1

Professionals' Agreement With Statements About Beliefs About Multilingualism ($N = 16$)

	Strongly agree		Mildly agree		Mildly disagree		Strongly disagree	
	n	%	*n*	%	*n*	%	*n*	%
A. Everyone should try to learn more than one language	8	50.0%	8	50.0%	–	–	–	–
B. Multilingualism is important for Australia	13	81.3%	3	18.8%	–	–	–	–
C. It is possible for someone to speak more than one language fluently	15	93.8%	1	6.3%	–	–	–	–
D. Exposure to 2 languages may mean neither language is learnt properly	–	–	1	6.3%	2	12.5%	13	81.3%
E. Learning a second language is harder for adults than children	7	43.8%	8	50.0%	1	6.3%	–	–
F. Multilingualism provides cognitive advantages	12	75.0%	3	18.8%	1	6.3%	–	–
G. English must be acquired first to ensure success at school	–	–	2	12.5%	4	25.0%	10	62.5%
H. Exposure to more than one language is confusing for hearing children	–	–	–	–	2	12.5%	14	87.5%
I. Multilingual people are a minority within Australia	1	6.3%	6	37.5%	5	31.3%	4	25.0%
J. Everyone living in Australia should learn to speak English	5	31.3%	7	43.8%	4	25.0%	–	–
K. Exposure to 2 languages leads to language acquisition delays	–	–	1	6.3%	5	31.3%	10	62.5%
L. There are many advantages to being multilingual	14	87.5%	2	12.5%	–	–	–	–
M. Exposure to more than one language is confusing for children with hearing loss	–	–	1	6.3%	7	43.8%	8	50.0%
N. Multilingual people are a minority globally	–	–	1	6.3%	1	6.3%	14	87.5%
O. Children raised multilingually will always get these languages confused	–	–	–	–	–	–	16	100%
P. Multilingualism is a disadvantage to children in Australia	–	–	–	–	1	6.3%	15	93.8%
Q. Children should learn one language well before learning a second language	1	6.3%	1	6.3%	5	31.3%	9	56.3%
R. Multilingual children have more difficulties at school than monolingual children	–	–	2	12.5%	4	25.0%	10	62.5%

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Results

Questionnaires were completed by 16 participants with experience working with children with hearing loss. All participants reported that they had worked with children from monolingual English speaking families and families who used more than one spoken language. Just under half ($n = 7$, 43.8%) reported having worked with families who only used a spoken language other than English. The majority of participants had worked with children who were monolingual English users ($n = 15$, 93.8%) and children who used more than one spoken language ($n = 15$, 93.8%) but fewer had worked with children who only used a spoken language other than English ($n = 7$, 43.8%).

Beliefs About Multilingualism and Language Use

In Part A of the questionnaire, participants responded to 18 items describing their agreement or disagreement with statements describing attitudes to spoken language multilingualism. Overall, participants had positive attitudes to multilingualism (see Table 1). One item that showed a unanimous response was that all participants strongly disagreed with the statement 'Children raised multilingually will always get these languages confused'. Two items elicited the full range of responses: 'multilingual people are a minority within Australia' and 'children should learn one spoken language well before learning a second language'. Significant moderate correlations were found between 12 statements (see Table 2). Two correlations were of particular interest. First, there was a correlation between disagreements with the statements that 'exposure to more than one spoken language is confusing for children with hearing loss' and 'exposure to more than one spoken language is confusing for hearing children' (Spearman's rho $[N = 16] = 0.506$). Second, there was a correlation with disagreement for the statements 'exposure to more than one spoken language is confusing for children with hearing loss' and 'children should learn one spoken language well before learning a second language' (Spearman's rho $[N = 16] = 0.500$).

Recommendations About Multilingualism

In Part B of the questionnaire, participants stated that they would *always* ($n = 6$, 37.5%) or *sometimes* ($n = 10$, 62.5%) recommend spoken language multilingualism to the parents of children with hearing loss. Participants rated the importance of 53 items describing child, family, community, and professional influences on their guidance to parents. The items that were most frequently rated as being *very important* were the availability of good spoken language models within the family (100.0%), that the family is multilingual (93.8%), the spoken language(s) used by the parents (93.8%), that the family wants their child to be able to speak with his or her siblings (92.9%), and that the family wants their child to be able to speak with his or her friends (93.8%). The items that were most frequently rated as being *not important* were the participants' own language skills (50.0%), views about deafness as a disability (43.8%), and colleagues' philosophies about children with hearing loss being multilingual (43.8%).

All 16 participants briefly described the two most influential factors on their guidance of families, with the majority of comments focused on two issues: evidence and family considerations. Comments about evidence related to professional practice ('adherence to evidence-based practice', 'as a professional, having the knowledge to support a family to deliver multilingual experiences'), research findings ('research and evidence related to speech and language development in multilingual children'), and assessment of children's development and capacity ('the child's progress to date', 'child's ability to learn language

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TABLE 2

Correlation (Spearman's Rho) Between Professional Responses to Statements About Beliefs About Multilingualism ($N = 16$)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
A	–																	
B	0.16	–																
C	0.258	.537*	–															
D	0.12	–0.153	0.123	–														
E	0.046	0.058	0.189	–.513*	–													
F	0.233	.505*	0.407	–0.133	0.173	–												
G	0.22	0.081	0.195	0.482	–.673**	–0.205	–											
H	0.378	0.182	0.098	0.271	-0.483	0.217	.524*	–										
I	0.128	0.128	0.088	0.249	0.036	0.12	–0.305	–0.323	–									
J	0.247	–0.167	0.03	0.402	0.151	0.066	0.079	0.219	0.068	–								
K	0.286	0.366	0.197	–0.08	–0.383	0.181	0.444	0.432	–.527*	–0.227	–							
L	0.378	–0.182	–0.098	–0.361	0.276	–0.217	–0.048	0.143	–0.345	0.022	–0.072	–						
M	0.061	0.175	0.251	0.407	–0.419	0.247	0.309	.506*	–0.057	–0.232	0.331	–0.322	–					
N	–0.024	0.181	0.097	0.242	–0.469	0.216	0.027	0.392	0.122	–0.053	0.431	–0.463	0.321	–				
O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	–			
P	0.258	0.124	0.067	–0.123	0.283	0.148	–0.195	–0.098	–0.353	–0.03	0.492	0.098	0.22	–0.097	.	–		
Q	0.122	–0.136	–0.22	0.102	–.544*	–0.259	0.422	.506*	–0.357	–0.145	0.36	0.322	.500*	–0.02	.	0.22	–	
R	0	0.081	0.195	0.166	–0.184	–0.341	0.492	.524*	–0.395	–0.135	0.144	0.286	0.395	0.027	.	–0.195	0.341	–

Note. See Table 1 for the statements of belief that are depicted by the letters within this table. Dots = Correlation could not be computed as responses to O were constant.
*$p < .05$. **$p < .01$.

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and the benefits gained from hearing aids or CI [cochlear implant]'). Comments about family considerations described family-centred practice ('adherence to family-centred practice'), consideration of families' perspectives ('supporting the parents' passion about wanting their child to speak the family language', 'if parents only want their child to speak English, explore with them impact of child only speaking English on family and culture'), and families' skills ('the family's proficiency in the different languages').

Ten participants made additional comments. Participants mentioned the role of the professional, the influence of hearing characteristics, and the balance between desires and capabilities. With regard to the role of professionals, one participant commented, 'parents require considerable support and guidance about how to foster the development of multiple languages'. Another participant identified a need for greater professional education in this area saying, 'this [is] an area that hearing professionals need more exposure to, to curb the myths surrounding multilingualism and language delay'. Two participants referred to the impact that a child's hearing loss may have on professional guidance about multilingualism. The first participant minimised the role of the child's hearing loss: 'a child's hearing loss does not come into the equation when advising parents on spoken language multilingualism. A child's disability should not dictate their inclusion and participation in their family, culture and community'. However, the second participant described conditions that needed to be met:

> *if the child is well-aided [with a hearing aid or cochlear implant] and making the progress we would hope to see for a young child with a hearing impairment, there is no reason we should have different expectation regarding that child's ability to learn additional languages than we would for a normally-hearing child.*

One participant worked with older children with hearing loss and described the interplay between language skills and children's desires to acquire an additional language at school:

> *If they [the children] have good communication then they should be encouraged to learn another language if that is what they and their family want. If they don't have good communication skills then the child is often not as interested in another language but may still pick up a little if the family speaks languages other than English.*

Recommendations About Monolingual English Use

In Part C1 of the questionnaire, participants stated that they would *sometimes* (n = 6, 37.5%) or *never* (n = 10, 62.5%) recommend the monolingual use of English for children with hearing loss from multilingual families. The 10 participants who stated they would never make this recommendation provided an explanation as to why, with their responses focused on being family-driven practitioners, encouraging belonging, and the availability of good language models. One participant stated this was the family's choice: 'I wouldn't start the process with a recommendation that they use only spoken English. If they themselves come to that decision after considering multilingualism vs. English only, I would support them in that'. On the same topic, another participant said, 'telling a family to not use their home language is insulting and disrespectful to the child and their family'. Another participant focused on the role of language in developing a sense of belonging: 'the child must have sense of "belonging" to his/her own family, their culture, their beliefs. Teachers are only in a child's life for the short term ... families are forever!' Regarding the availability of language models one participant stated, 'evidence shows that children need a good language model, not an English model'.

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The six participants who stated that they would sometimes recommend monolingual English use rated the importance of 47 items describing child, family, community, and professional influences on their guidance to parents. Participants rated 11 factors as being *very important* by participants ($n = 4$, 66.7%). These items related to children's language skills (spoken language not developing appropriately, child is frustrated when communicating, child can choose which language they will use themselves), parents' language skills (languages used by the parents), parents' preference for language outcomes (parents want child to be able to communicate with siblings/extended family/friends), cultural considerations (participating in Australian culture and the family's religion), and professional practice standards (adherence to family-centred practice and evidence-based practice). The items that were most frequently rated as being *not important* were 'my own English competence' (83.3%), 'my colleagues' philosophies about children with hearing loss using English' (50.0%), 'my professional association's philosophy about children with hearing loss using English' (50.0%), and 'my professional preparation institution's philosophy about children with hearing loss using English' (50.0%). All six participants commented on the two most influential factors on their guidance, describing evidence ('my own adherence to evidence-based practice'), child and family circumstance ('capabilities of the child', 'families' attitudes to monolingualism'), and professional judgment ('whether or not I think the child has the ability and means to learn another language').

Recommendations About Monolingual Use of a Language Other Than English

In Part C2 of the questionnaire, participants stated they would *sometimes* ($n = 8$, 50.0%) or *never* ($n = 8$, 50.0%) recommend the monolingual use of a language other than English. The eight participants who said they would never make such a recommendation reasoned that English competence in necessary to thrive in the Australian community ('the child would be disadvantaged in the community if they were unable to use English') and educational ('education is conducted (mainly) in spoken English (or Auslan) so it is disadvantageous for a child to not have exposure to spoken English') contexts.

Seven of the participants who would sometimes recommend monolingualism in a language other than English rated the importance of 48 factors describing child, family, community, and professional influences on their guidance. The items most frequently rated as being *very important* related to children's future lives (participating in future friendships and relationships), parents' language skills (languages used by the parents, presence of good language models in the family), parents' preference for language outcomes (parents want child to be able to communicate with siblings/extended family/friends, family want the child to decide on the languages he/she will use), cultural considerations (participating in Australian culture, and the family's culture and religion), and professional practice standards (adherence to family-centred practice and evidence-based practice). The items that were most frequently rated as being *not important* ($n = 5$, 71.4%) were 'my own competence in the family's preferred language', 'my own views about children with hearing loss using English' and 'the philosophies of professionals' colleagues, professional associations, and professional preparation institutions'.

Six participants briefly commented on the factors that were most influential on their guidance about monolingualism in a language other than English. Participants reported being most influenced by professional practice models ('EBP [evidence-based practice]') and family factors ('familial situation', 'strong language model at home').

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The Role of Professionals in Providing Guidance About Language Choices

In Part D of the questionnaire, participants were invited to provide additional comments. Ten participants provided comments. A number of participants articulated their perspectives on the role of professionals in language choice for children with hearing loss. One participant stated:

> *It is not my decision, it is the family's decision, or in the case of a teenager, the child + family. I would only offer guidance if there was some additional reason/concern such as the child was really not making good progress in any language and/or there were additional complications such as ANSD [auditory neuropathy spectrum disorder].*

Another participant stated:

> *It is important that the professional's role is one of support and guiding families in different areas that they need to consider and to learn about, but the professional MUST NOT make decisions for the families . . . If parents can't make the decision, the challenge for the professional is to ensure that the parents are respected and continue to support parents until they are in a place to make an informed decision.*

Discussion

Parents of children with hearing loss report that professionals are an important influence on their decision-making about communication (Crowe, Fordham, et al., 2014; Crowe, McLeod, et al., 2014; Decker et al., 2012). However, little is known about the guidance that professionals give or factors they consider when they provide guidance to parents. The insights of the professionals who participated in this study provide a new perspective on what professionals consider to be of greater and lesser importance in decision-making about multilingualism and language choice for children with hearing loss. Participants' responses demonstrated that multilingualism is a current clinical and educational concern for professionals working with children with hearing loss, reflecting the advances in understanding about multilingualism that have occurred in recent years (Genesee, 2007) and the technological advances that make multilingualism a viable option for many children with hearing loss (Geers, 2004).

Participants worked for an organisation based in the most linguistically diverse city in Australia (Capuano, 2012), and all reported that they had experience working with families who used more than one spoken language. All participants said that they would recommend spoken language multilingualism for children with hearing loss (*always* = 37.5%; *sometimes* = 62.5%). This is in contrast to a small number of anecdotal or incidental information provided by parents about professional guidance in the literature. McConkey Robbins et al. (2004) and Waltzman et al. (2003) reported that multilingual parents of children with cochlear implants in their studies were advised to only speak English, and Steinberg et al. (2003) reported that American Spanish-speaking parents were advised to only use English with their children. Guiberson (2014) said that professionals may recommend monolingualism due to fears that multilingualism may 'splinter linguistic resources or result in linguistic confusion' (p. 87).

The willingness of the professionals in the current study to recommend spoken language multilingualism must be considered in light of our knowledge about the use of spoken languages by Australian children with hearing loss. Examination of a population-based sample of 406 Australian 3-year-old children with hearing loss by Crowe et al. (2012) found that 12.7% of children were multilingual at home (compared to 20.5% of their parents) and only 2% were multilingual in their early education environment. The interpretation of the disparity between professional guidance and children's language

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status is difficult. First, it could be that there has been a shift in the guidance provided by professionals between when this cohort of children entered early intervention (between 2002 and 2007) and 2015. For example, there is an increasing focus on multilingualism and linguistic diversity within the literature on children with hearing loss (Leigh & Crowe, 2015). Second, it could be that the professionals participating in this study represent a special subset of professionals working with children with hearing loss in terms of their knowledge about multilingualism and their experience working with multilingual families. With half of the participants in the current study reporting they were themselves multilingual, it is possible that their own experiences of multilingualism impact on their professional practice in ways different to their monolingual colleagues. This is in line with Guiberson's (2013b) suggestion that more positive societal views towards multilingualism influence professionals' attitudes towards multilingualism. Finally, it could also be the case that something is happening between initial guidance about language choice when children begin early intervention and their language use at 3 years of age. The latter is described as a *communication journey* by Wheeler et al. (2009) where shifts between signed and oral communication occur during the course of a child's development.

Of particular interest was the diversity of professionals' responses as to what language should be used if a child was to use only one spoken language. The majority (62.5%) of the professionals said that they would never recommend English monolingualism for children with hearing loss from multilingual families. The reasons given against English monolingualism related to responding to family preferences, encouraging belonging, and the availability of good language models in languages other than English (i.e., the absence of good English language models). These are essentially family and community factors. Although this is contrary to previous references to professional advice found in the literature (McConkey Robbins et al., 2004; Steinberg et al., 2003; Waltzman et al., 2003), it is in concordance with an understanding that good language models are essential in language acquisition, the place of language in a child's social and cultural belonging (Schwartz, Moin, Leikin, & Breitkopf, 2010), and the importance parents place on both of these areas (Crowe, Fordham, et al., 2014). In contrast to this, professionals were equally divided concerning whether they would recommend monolingual use of a language other than English (*sometimes* = 50.0%; *never* = 50.0%), which logically would involve the same consideration of family preferences, encouraging belonging, and the availability of language models. Participants were only asked to comment on why they would never recommend this, if they had indicated that this was their preference. Reasons as to why monolingualism in a language other than English would not be recommended related to the necessity of children to speak English in Australia, especially for formal education. This contrast in professional opinions about multilingualism and monolingual language choice highlights the diversity of opinions and needs in this area.

In terms of the factors that professionals considered important in their guidance of parent decision-making, family and community factors were most frequently rated as being important. Professionals frequently made reference to the need for parents to be good language models, regardless of the language chosen, to understand the communicative partners that parents wanted their children to be able to interact with (e.g., siblings, extended family, friends), and the language that was required for these interactions. The idea that the role of professionals is to support families in making their own decisions about language, in an informed way, was also expressed by a number of professionals in line with this organisation's policy of family-centred practice. Community factors were also often cited as being important to professionals, especially in terms of children's ability to engage in the culture and activities of their family and the wider Australian community.

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Although English was not prioritised by professionals, it was made clear that English skills were considered necessary for educational success and participation in many other facets of life within Australia. Child and professional factors were rarely rated as important. The exception to this was professionals' reference to the importance of evidence-based practice and family-centred practice. Research into the development and outcomes of children with hearing loss who use more than one spoken language is scant, and very little evidence currently exists on which to build professional practice (Crowe & McLeod, 2014). In the present study, professionals referenced evidence-based practice as support for multilingualism, contrary to previously published literature on professional guidance (McConkey Robbins et al., 2004; Steinberg et al., 2003; Waltzman et al., 2003).

Clinical Implications

The data presented in this paper are an initial view of the factors that professionals consider important when providing guidance to parents of children with hearing loss about multilingualism and language choice. The views expressed by the professionals in this study, in their willingness to support spoken language multilingualism for children with hearing loss, are at odds with previous descriptions in the literature and may highlight changes that are occurring within the field. One professional stated, 'This [is] an area that hearing professionals need more exposure to, to curb the myths surrounding multilingualism and language delay'. This comment highlights the need for professional development about multilingualism in general within the field. Guiberson (2013a) clearly reinforces this point saying, 'It is the professional's responsibility to be knowledgeable about normal bilingual development, disorders in bilingual populations, myths associated with linguistically diverse populations, and best practices to employ with these populations' (p. 10). The need for professional development related to multilingualism for children with hearing loss is also clear, with participants stating the importance of evidence in their practice. With the scarcity of research evidence on the outcomes of multilingual children with hearing loss, case presentations and the examination of practice-based evidence within organisations and educators' and clinicians' own practice may be of benefit. In addition to this, greater understanding and resourcing of professionals in the skills and knowledge required to work with children who are culturally and linguistically diverse would be of benefit (Verdon, McLeod, & Wong, 2015).

Limitations of the Present Study

The present study has limitations related to the participant sample. The sample size was small with a low response rate (17.4%). It is likely that the professionals who did respond already had greater interest in and/or experience with multilingualism than their non-responding colleagues, which may have led to bias in the sample. This is evidenced by the participants all being highly qualified, with positive attitudes towards multilingualism and all having had experience working with multilingual families. Therefore, participants may not be representative of Australian professionals working with children with hearing loss.

Future Research

Collecting the responses of a larger, more representative group of professionals would be of benefit to understanding this topic in future research. Researchers may also consider the use of different methodologies to delve into the complexities and subtleties of professionals' guidance. Such rich investigations may be able to shed light on differences between

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the guidance that parents report they receive from professionals and the guidance that professionals report that they give (as described here).

Conclusion

This research provides an initial insight into the factors that professionals consider when guiding parents through decision-making on spoken language multilingualism for their children with hearing loss. Professionals placed greater importance on factors relating to family and community considerations, and less importance on the policy of their professional organisations and children's characteristics.

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Conflicts of Interest

None

Endnote

1 Percentages total more than 100% as all participants worked with children from multiple age groups.

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APPENDIX

Extract From Professional Questionnaire Part B

Gathering information is an important part of making informed choices and parent often cite advice from professionals as being an important factor in their decision-making about how their child with hearing loss will communicate. Please indicate the importance of each of these factors when you

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advise families about spoken language multilingualism for children with hearing loss. If you feel that a factor is not relevant to you, please select 'Not important' as your response.

B13. Child-related factors influencing my decision	Not important	Somewhat important	Very important
The severity of the child's hearing loss	☐	☐	☐
The age the child's hearing loss was diagnosed	☐	☐	☐
The age the child first received hearing aids	☐	☐	☐
The age the child received a cochlear implant	☐	☐	☐
The age the child first attended early intervention	☐	☐	☐
The child's hearing loss has deteriorated	☐	☐	☐
The child has additional disabilities	☐	☐	☐
The child doesn't like to wear hearings aids and/or cochlear implant	☐	☐	☐
The child's spoken language is not developing appropriately	☐	☐	☐
The child is frustrated about communicating	☐	☐	☐
The child's behaviour is inappropriate for his/her age	☐	☐	☐
The child's future literacy success	☐	☐	☐
The child's future academic success	☐	☐	☐
The child's future access to university education	☐	☐	☐
The child's future access to rewarding employment	☐	☐	☐
The child's ability to form friendships and future relationships	☐	☐	☐
The possibility that the child will live in a country other than Australia	☐	☐	☐

B14. Family-related factors influencing my decision	Not important	Somewhat important	Very important
The family is multilingual	☐	☐	☐
The family preference for multilingualism or monolingualism	☐	☐	☐
The availability of good language models within the family	☐	☐	☐
The language/s used by the parents	☐	☐	☐
The language/s used by the child's siblings	☐	☐	☐
The language/s used by the extended family	☐	☐	☐
The family wants their child to be able to speak with his/her siblings	☐	☐	☐
The family wants their child to be able to speak with his/her extended family	☐	☐	☐
The family wants their child to be able to speak with his/her friends	☐	☐	☐
The family feels their child can learn English later on if he/she wants to	☐	☐	☐
The family feels the child can learn their other language later on if he/she wants to	☐	☐	☐
The family's participation in early intervention	☐	☐	☐
The family don't want people to treat the child differently from other children	☐	☐	☐
The family wants their child to choose how he/she communicates for him/herself	☐	☐	☐
The family wants their child to participate in mainstream Australian culture	☐	☐	☐
The family wants their child to participate in the family's culture	☐	☐	☐
The family wants their child to be able to participate in their religion	☐	☐	☐

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B15. Community-related factors influencing my decision	Not important	Somewhat important	Very important
Access to early intervention for children who use languages other than English	☐	☐	☐
Access to early intervention for children who use English	☐	☐	☐
Access to school education for children who use language other than English	☐	☐	☐
Access to school education for children who use English	☐	☐	☐
The family's local community's attitudes to multilingualism	☐	☐	☐

B16. Professional factors influencing my decision	Not important	Somewhat important	Very important
My own language skills	☐	☐	☐
My own knowledge of multilingual language development	☐	☐	☐
My own knowledge of typical speech and language development in other languages	☐	☐	☐
My own beliefs about children being multilingual	☐	☐	☐
My own beliefs about children with hearing loss being multilingual	☐	☐	☐
My views about deafness as a disability	☐	☐	☐
My own adherence to family-centred practice	☐	☐	☐
My own adherence to evidence-based practice	☐	☐	☐
My own reading, research and professional development	☐	☐	☐
The advice I receive from other professionals	☐	☐	☐
My employer/organisational philosophy about children with hearing loss being multilingual	☐	☐	☐
My colleagues' philosophies about children with hearing loss being multilingual	☐	☐	☐
My professional association's philosophy about children with hearing loss being multilingual	☐	☐	☐
My professional preparation institution's philosophy about children with hearing loss being multilingual (e.g., university, A-V International)	☐	☐	☐

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