



**Journal of Clinical Practice in
Speech-Language Pathology**

Volume **17**, Number **1** 2015

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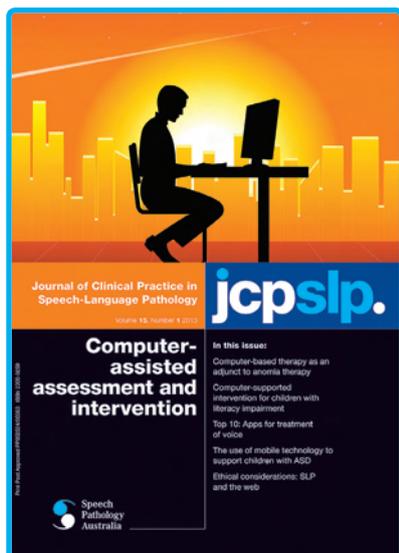
Diversity in practice

In this issue:

- Enhancing practice with CALD families
- Intelligibility in Context Scale
- Managing aphasia in bilingual and CALD clients
- SLP practice in CALD aphasia rehabilitation
- Diversity in speech pathology
- Diversifying student placements
- Living out diversity in practice



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Contribution deadlines

Number 3, 2015

13 April 2015 (peer review)

29 June 2015 (non peer review)

Number 1, 2016

1 August 2015 (peer review)

14 October 2015 (non peer review)

Number 2, 2016

1 December 2015 (peer review)

9 February 2016 (non peer review)

Advertising

Booking deadlines

Number 2, 2015

6 April 2015

Number 3, 2015

17 August 2015

Number 1, 2015

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Reference

This issue of *Journal of Clinical Practice in Speech-Language Pathology* is cited as Volume 17, Number 1, 2015.

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From the editor

David Trembath

As speech pathologists, we work in a large, diverse, and dynamic field of practice. We have the privilege of working with clients and colleagues with different views and experiences, cultural and linguistic backgrounds, social and economic resources, and clinical goals and needs. We are energised and inspired by this diversity, but also challenged at times. This issue of the *Journal of Clinical Practice in Speech-Language Pathology* is aimed at sharing, better understanding, embracing, and ultimately celebrating this “Diversity in practice”.

We are fortunate as speech pathologists to be able to draw upon a growing body of research literature and a rich accumulation of practice-wisdom to guide our clinical practice. Verdon opens the issue with an insightful review identifying six key principles of practice when working with families from culturally and linguistically diverse backgrounds. McLeod illustrates that where gaps in our knowledge exist, speech pathologists are leading international multidisciplinary teams to devise innovative solutions, such as through the development of the Intelligibility in Context Scale. Yet there is clearly much more work to be done. Siyambalapitiya and Davidson offer a timely review of the complexities speech pathologists face in managing aphasia in bilingual and culturally and linguistically diverse (CALD) individuals in an Australian context. Pang, Mok, and Rose suggest that common barriers to providing aphasia assessment and intervention to CALD populations appear to have changed little over the past decade, and argue for urgent action to address the barriers.

Byrne in her article, and Williams in the “What’s the evidence” column, remind us that it is not just diversity among our clients that shapes our work, but also diversity in our ranks. Byrne draws on the findings of the recent Health Workforce Australia report examining the speech pathology profession in noting that despite some progress in the past 15 years, speech pathologists are still far from being representative of the Australian population with respect to gender ratio, participation of Aboriginal and Torres Strait Islander people, or cultural and linguistic diversity. Williams reviews the evidence for diversity in both clients and clinicians, and reminds us that diversification in the practice of speech pathology is an international phenomenon that presents both challenges and opportunities.

Sokkar and McAllister turn our attention to the preparation of our next generation of speech pathologists to work effectively in diverse practice settings. They highlight the fact that although the private practice sector plays a critical role in meeting the needs of Australians with communication and swallowing problems, few Australian university programs offer clinical placements in private practice settings. Sokkar and McAllister’s qualitative study sheds light on benefits and barriers associated with supervising students in private practice. Golding and Leitão reflect on the ethical decision-making in supervising students working with CALD clients. McKinley and colleagues present an example of an innovative approach to service delivery for adults with acquired communication disorders resulting from stroke that typifies the creative and diverse clinical approaches to practice that both current and future speech pathologists will likely embrace.

This is my first issue as editor of *JCPSLP*, and I look forward to working together with contributors and the Editorial Committee to sharing timely, innovative, rigorous, and at all times clinically relevant, findings and practices from all areas of our diverse profession. I warmly thank Jane McCormack and Anna Copley for their excellent stewardship of the journal and ongoing and important contribution to the profession.



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Enhancing practice with culturally and linguistically diverse families

6 key principles from the field

Sarah Verdon

KEYWORDS

CHILDREN

CULTURAL DIVERSITY

MULTILINGUAL

PRACTICE

THIS ARTICLE HAS BEEN PEER-REVIEWED



Sarah Verdon

Australia is a highly culturally and linguistically diverse nation. In order to support all Australians to develop their speech, language, and communication skills for positive lifelong outcomes, SLPs need to engage in culturally competent practice. This article draws upon an international study investigating practice with culturally and linguistically diverse families in 14 sites across four continents and five countries. The findings of this research have identified six key principles from the field that are useful for enhancing the current practices of SLPs working with families from culturally and linguistically diverse backgrounds. These six principles are: 1) getting to know yourself; 2) knowing and forming relationships with families and communities; 3) setting mutually motivating goals; 4) using appropriate tools and resources; 5) collaborating with other key people, and 6) being flexible: one size does not fit all.

Australia, like many other English dominant countries, is highly culturally and linguistically diverse. What makes Australia unique is that there is no dominant second language or culture, but rather Australia is made up of people from many different backgrounds. According to the 2011 census, 27% of the population are first generation Australians, meaning that they were born overseas and have migrated to Australia, while 23.2% of Australians report that English is not the first language spoken in their home (Australian Bureau of Statistics [ABS], 2012a). In addition to diversity arising from migrant cultures and languages, the Aboriginal and Torres Strait Islander people of Australia make up approximately 3% of the Australian population (ABS, 2013). As a result of the high degree of cultural and linguistic diversity in Australia, speech-language pathologists (SLPs) are likely to engage in practice with families who speak various different languages and are from different cultural backgrounds.

Working across cultures

Every person has a culture, defined as the sum of beliefs, rituals, customs, and practices that guide thinking,

decisions, and actions (Spector, 1985). Culture is not rigid and unchanging among distinct groups but varies among individuals (Gray & Thomas, 2005). Culture is an essential component of how explanatory models for illness, difficulties, and disabilities are formed. An explanatory model is a belief system by which a person or people from a cultural group explain, diagnose, and identify possible treatments for an illness or disability (Kleinman, Eisenberg & Good, 1978). From a western cultural standpoint, often the cause of illness or disability is deemed to be of an anatomical or physiological nature and therefore medical or professional intervention is needed to remediate the issue. Other cultural standpoints may identify the cause of illness or disability as being related to spirituality, religion, or family history, and therefore may identify other means of overcoming the issue (Nuckolls, 1991; Vukic, Gregory, Martin-Misener & Etowa, 2011). Differences in the cultural background of SLPs and the families they serve means that each party may approach the same situation from a very different viewpoint. A lack of cultural understanding can result in a communication breakdown between SLPs and families leading to ineffective and culturally inappropriate practice. To avoid such communication breakdowns, SLPs are encouraged to engage in culturally safe practice, a philosophy of practice that originated in nursing and is defined as practice with “a person or family from another culture, and is determined by that person or family” (Nursing Council of New Zealand, 2005, p.4).

The challenges of cross-cultural practice have been well documented in the literature (Caesar & Kohler, 2007; Jordaan, 2008; Kritikos, 2003; Stow & Dodd, 2003; Williams & McLeod, 2012), with the major ones identified as a lack of culturally appropriate tools for assessment; limited developmental norms for linguistically diverse populations upon which to make a differential diagnosis; and insufficient professional support and training for working with families from different cultural backgrounds. The mismatch between the cultural diversity of Australian SLPs and the cultural diversity of the Australian population means that it is essential that all SLPs develop cultural competence in order to engage in culturally safe and competent practice (Verdon, McLeod & McDonald, 2014).

Cultural competence

Culturally competent practice is defined as practice that “acknowledges and incorporates, at all levels, the importance of culture, assessment of cross-cultural relations, vigilance toward the dynamics that result from cultural differences, expansion of cultural knowledge, and

adaptation of services to meet culturally unique needs” (Betancourt, Green, Carrillo & Ananeh-Firempong, 2003, p. 294). Culturally competent practice demonstrates an understanding of, and respect for, cultural and linguistic differences among individuals and responds to these differences in a culturally sensitive and appropriate manner. Developing cultural competence is an ongoing process that requires SLPs to actively seek new knowledge about the families they work with and to reflect upon their own practice to ensure it is respectful and inclusive so that services are effective, useful, and relevant to the needs of the families they serve (International Expert Panel on Multilingual Children’s Speech, 2012; Verdon, McLeod & Wong, 2014).

SLPs need strategies to support their practice with culturally and linguistically diverse families to ensure the effective communication of purpose, ideas, beliefs, and desired outcomes. To identify practical pathways for supporting culturally and linguistically diverse families, this article draws upon research undertaken in the Embracing Diversity, Creating Equality study (see Verdon, 2014 for more information). The Embracing Diversity, Creating Equality study investigated international practices with culturally and linguistically diverse children in 14 sites on four continents in five countries including Brazil, Italy, Hong Kong, Canada, and the USA. The sites were based in many different settings including private practice, preschools, schools, hospitals, universities, and community-based settings, representing the diversity of SLPs’ practice around the world. From the vast amount of data collected and analysed regarding practice with culturally and linguistically diverse families, six key principles for SLPs to translate these findings into practice were identified. These were: 1) getting to know yourself; 2) knowing and forming relationships with families and communities; 3) setting mutually motivating goals; 4) using appropriate tools and resources; 5) collaborating with other key people, and 6) being flexible: one size does not fit all (see Figure 1). As every individual has their own unique culture, these six principles are useful in guiding practice with all families. The importance of each of these key principles, their application in individual contexts and resources to support enactment of these principles (where appropriate) are explored below.



Figure 1. Six key principles for culturally competent practice

Getting to know yourself

The important starting point for culturally competent practice is for SLPs to engage in self-reflection (Tervalon & Murray-Garcia, 1998). It is necessary that SLPs know who they are, what they believe, and how this impacts upon the way they view the world and engage in practice. To facilitate self-reflection, SLPs can ask themselves some key questions such as:

- What is *my* culture?
- What are my beliefs, values, and attitudes?
- Why do I have these beliefs, values, and attitudes?
- What are my attitudes towards people of different gender, race, language background, sexual orientation, and level of ability?
- What biases do I bring to my practice?

Through self-reflection comes self-awareness. Such awareness can help SLPs to understand when a barrier between themselves and a family is present and what may be the cause of this barrier. An important part of overcoming barriers is cultural humility, whereby all cultures, belief systems and explanatory models are valued in clinical decision-making, rather than simply adopting the cultural approach to practice valued by the professional or dominant society (Tervalon & Murray-Garcia, 1998).

Resources: The American Speech-Language-Hearing Association website provides resources to facilitate reflection on professional practice, service delivery, and policies and procedures. These can be accessed at <http://www.asha.org/practice/multicultural/> and include:

Personal reflection activity for professionals: <http://www.asha.org/uploadedFiles/Cultural-Competence-Checklist-Personal-Reflection.pdf>

Activity for reflecting on organisational policies and procedures: <http://www.asha.org/uploadedFiles/Cultural-Competence-Checklist-Policies-Procedures.pdf>

Activity for reflecting on service delivery with culturally and linguistically diverse clients: <http://www.asha.org/uploadedFiles/Cultural-Competence-Checklist-Service-Delivery.pdf>

Knowing and forming relationships with families and communities

Taking time to get to know and build trusting relationships with families is key to engaging in culturally competent practice. By taking time to get to know families, SLPs are better informed to make decisions about diagnosis and appropriate ways to proceed with intervention if necessary. It is important that SLPs gain an understanding of the home environment; for example, what the main language used in the home is, what other languages are spoken, when and where these languages are used, and what languages the family wants to work in (De Houwer, 2007). This will help with understanding the linguistic influences upon speech and language when planning assessment. A complete case history of the family’s cultural and linguistic diversity will assist in making an accurate and well-informed diagnosis. Knowledge of the languages spoken is also important for planning intervention as multilingual speakers have been found to benefit most from intervention provided in their primary language, with the potential for positive generalisation of effects to occur in their additional language(s) depending on the nature of the communication need (Gutiérrez-Clellen, 1999; Kohnert, Yim, Nett, Kan, & Duran, 2005).

Engaging in western health practices may be an unfamiliar concept for culturally and linguistically diverse

families so it is important that SLPs explain the purpose of their service to ensure families have a clear understanding of what the service can do and what their participation in the service will involve. Some cultures may have different approaches to speaking with people in authority, and SLPs need to be aware of potential cultural differences and provide sufficient opportunity for dialogue and questioning so that families feel their voice is being heard and valued. One way that SLPs can strengthen relationships between themselves and the families they work with is to demonstrate that the family's language and culture are valued and respected. Greeting families in their home language and making an effort to learn some words and concepts demonstrate that SLPs are willing to work outside of the comfort of their own language and culture and are respectful of the other linguistic and cultural influences in the lives of diverse families. It has also been found that when SLPs are willing to trying speaking in another language, regardless of how accurate their use is, families feel more comfortable to speak in English with less fear of failure and embarrassment about imperfect command of the language.

Resources: SLPs can take opportunities to learn more about the languages and cultures of people on their caseload by accessing online resources available at the Multilingual children's speech website: <http://www.csu.edu.au/research/multilingual-speech/languages> The website includes information about many different languages.

Setting mutually motivating goals

In order for a service to be useful, relevant, functional and culturally appropriate, it is important that SLPs engage in discussion with families to gain an understanding of their priorities and needs and set mutually motivating goals. SLPs need to establish why the family has accessed a service and whether they believe there is a problem. It is possible that the family has been referred by a third party and is not sure why they have been referred or what the service can do for them. Conversely, it is possible that families have a well-formed explanatory model of what the problem is, why the problem is occurring and what should be done to remediate the problem. It is then necessary for SLPs to determine whether they believe there is a need for services and to negotiate mutually motivating and achievable goals in conjunction with the family.

When making a diagnosis it is important to consider the impact of using labels to identify a problem. While the use of labels to identify health conditions is commonplace in western cultures, it can be detrimental to families from diverse cultures, leading to blame, guilt, or shame for the family depending on their explanatory model and beliefs about the causes of illness and disability (Bedford, Mackey, Parvin, Muhit, & Murthy, 2013; Maloni, Despres, Habbous, Primmer, Slatten, Gibson, & Landry, 2010). In these situations, rather than using a label, it may be best to identify a person's strengths, while also describing what they find difficult and explaining ways that support from a professional can help to develop these skills. It is then necessary to engage in discussion to find out what help the family would like to receive. Through these discussions the family's ideal outcome of intervention can be identified and goals can be built around achieving this outcome to ensure intervention continues to be motivating and relevant to the daily lives of those involved.

Resources: The Australian Raising Children Network provides valuable information for parents about supporting multilingual children in an English-dominant context:

http://raisingchildren.net.au/articles/bilingual_children.html

Using appropriate tools and resources

The use of appropriate tools and resources is important for accurate differential diagnosis of whether a need is truly present or absent, and to conduct culturally appropriate intervention to support communication if needed (McLeod & Verdon, 2014). Assessing the speech, language, and communication of people from culturally and linguistically diverse background requires a different approach from the assessment of monolingual people of the dominant culture. Many assessments commonly used by SLPs have been developed and standardised based on western, monolingual English-speaking populations and are not culturally appropriate tools for the assessment of diverse populations (McLeod, 2012). Some western assessment tools can be used informally with culturally and linguistically diverse populations as a qualitative measure to identify existing skills and to identify areas for improvement based on their English language knowledge. However, the scoring of these assessments is not applicable or appropriate for people outside of the population upon which the test was normed (McLeod & Verdon, 2014). A number of assessments are available in languages other than English (for example speech assessments, see McLeod and Verdon, 2014), but a limited number of tests have been developed for bilingual or multilingual speakers and the assessment of just one language does not provide a holistic picture of a multilingual speaker's speech, language, and communication abilities.

One alternative approach to assessment is to assess a person's ability to learn, rather than their current knowledge. This approach is known as dynamic assessment and follows a test-teach-test model. In this model, the specific skill is tested and if this is found to be an area of difficulty, the skill is taught; then the skill is re-tested to determine whether the person has been able to learn the new skill (Gutiérrez-Clellen & Peña, 2001; Lidz, & Peña, 1996). Dynamic assessment has been described as a less biased approach to the assessment of people from culturally and linguistically diverse backgrounds as it tests the potential to learn new concepts rather than current knowledge which can be dependent on level of exposure to a language (Peña, Iglesias & Lidz, 2001). Another alternative approach to assessment is contrastive analysis. This can be useful as a way of comparing a person's speech, language, and communication with a target communicator from the same language and cultural background. In this form of assessment the contrast acts as normative information to identify if errors in communication are genuinely in need of intervention or if such differences are typical due to the linguistic influences upon a person's speech (McGregor, Williams, Hearst, & Johnson, 1997).

Resources: There are a number of free online materials available to support practice with culturally and linguistically diverse populations. These include free online books in multiple languages and lists of assessments in languages other than English are available at the following links:

International children's digital library: <http://en.childrenslibrary.org/>

Children's Books Online by the Rosetta Project: <http://www.childrensbooksonline.org/>

Children's books forever: <http://www.childrensbooksforever.com/>

Links to speech assessments in available in many languages: <http://www.csu.edu.au/research/multilingual-speech/speech-assessments>

The Intelligibility in Context Scale, a screening tool available in English with accompanying translations in many of the languages spoken by Australian families: <http://www.csu.edu.au/research/multilingual-speech/ics>

Collaborating with other key people

Professional collaboration is important for providing holistic services to culturally and linguistically diverse families. If the family is not fluent or confident in English, it is important to collaborate with interpreters to ensure that families are fully informed at all times (Campinha-Bacote, 2002). Additionally, cultural brokers – that is support workers from the family's cultural background – can be used to create a bridge of understanding, familiarity, and trust between SLPs and families from different cultural backgrounds (McElroy & Jezewski, 2000). If a cultural broker is not available, it may be worthwhile consulting a trusted member of the community to build trust and mutual understanding so that families feel comfortable and safe when accessing services. When working with children, collaboration with teachers and parents during assessment is important to gain a holistic picture of children's communication and interactions as these are the people who spend the most time with the children and see them in everyday settings. Collaboration with parents and teachers is also important during intervention with all children to ensure follow-through between the home, school, and clinical contexts.

It is also important to consider whether families would benefit from the input of other professionals (such as physiotherapists, occupational therapists, social workers, dieticians or psychologists, etc.). Once a trusting relationship has been established with a professional, that professional can act as a bridge for the family to learn about and access other services. Additionally, the knowledge and skills of colleagues and co-workers may be useful if they speak other languages or have experience in diverse cultures that could be drawn upon to support practice. Collaborating with more knowledgeable others is a vital component of ongoing professional development and developing cultural competence.

Being flexible: one size does not fit all

A dilemma in health practice is that often a generalisable "one size fits all" approach to practice can be sought and applied. In contrast, the most important component of culturally competent practice is recognising that each individual is different and therefore will require a unique approach to practice. This approach will be based on the individual's language, culture, beliefs, interests, and goals. Engaging in culturally competent practice does not require SLPs to do away with current practice and start again; rather by using the principles described in this article SLPs can adapt existing practice to ensure that it is culturally responsive and meets the needs of families from culturally and linguistically diverse backgrounds.

Applying these principles to individual contexts

The application of the six principles described above will be different depending on the context in which SLPs practice and on the backgrounds and individual perspectives of the families they serve. Services based in settings such as schools, hospitals, universities, community health services, and private practice will each have their own barriers and facilitators to adapting aspects of practice to ensure that services are culturally competent. A key starting point is to

reflect upon current practices both at the individual and organisational level at the stages of referral, assessment, intervention, collaboration, and discharge to identify possibilities for incorporating aspects of cultural competence into existing practices (Verdon, McLeod & Wong, 2014). Once these possibilities have been identified, achievable changes can be implemented to enhance practice with culturally and linguistically diverse families. Larger changes may challenge the existing practice of an organisation and thus require more planning, thinking, and negotiation.

Be a boundary pusher: Challenge existing practices

SLPs can play a key role in enacting both bottom-up changes to practice through their daily activities, and advocating for top-down changes at the organisational level. Individual SLPs have the power to make small changes in their own practice which can have positive flow-on effects for larger changes to practice in their workplace. It is important for SLPs to have a vision of ideal practice and to actively take steps towards achieving this ideal by taking an activist stance towards promoting and enacting culturally competent practice. Oftentimes creating positive change requires SLPs to push the boundaries of existing practices when new evidence or more efficient approaches to practice are identified. SLPs can use the principles outlined in this article to think outside of existing practice and identify opportunities to enhance their current practice. If every professional incorporated these principles into their individual practice with culturally and linguistically diverse families, positive steps could be taken towards supporting all people with speech, language, and communication needs to reach their potential as competent communicators and active participants in society.

Acknowledgments

Sarah acknowledges support from a scholarship from the Australian Department of Education, the Research Institute for Professional Practice, Learning and Education (RIPPLE), and an Excellence in Research in Early Years Education Collaborative Research Network scholarship from Charles Sturt University. Sarah would like to thank the professionals in the Embracing Diversity, Creating Equality study for their hospitality, generosity of ideas, and for the contribution they have made to the profession by sharing their experiences of multilingual and multicultural practice.

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Intelligibility in Context Scale

A parent-report screening tool translated into 60 languages

Sharynne McLeod

The Intelligibility in Context Scale (ICS) is a free parent-report screening tool that has been translated into 60 languages. The creation of the 7-item scale was informed by the World Health Organization's International Classification of Functioning, Disability, and Health. Translation and back translation into 60 languages has been undertaken internationally by speech pathologists, linguists, and translators. Since its creation, the ICS has been validated on 120 English-speaking children in Australia and 74 Cantonese-speaking children from Hong Kong. The ICS has been normed on 804 Australian English-speaking children and additional validation, norming, and clinical studies are underway in countries including: Brazil, Croatia, Fiji, Iceland, Iran, Israel, Jamaica, Germany, New Zealand, Slovenia, South Africa, and Sweden. The ICS is a promising screening measure for speech pathologists to use to consider parental perceptions of children's intelligibility with different communicative partners.

The Intelligibility in Context Scale (ICS; McLeod, Harrison & McCormack, 2012a) is parent-report screening tool of children's intelligibility with different communicative partners. The seven questions relate to different communicative partners: the parent, immediate family members, extended family members, the child's friends, acquaintances, teachers and strangers. Identification of these seven communicative partners was informed by the Support and Relationships chapter within the Environmental factors section of the International Classification of Functioning, Disability, and Health: Children and Youth (ICF-CY; World Health Organization, 2007). Parents rate their children's ability to be understood by each of these communicative partners on a 5-point Likert scale (*always, usually, sometimes, rarely, never*) and an average score out of 5 is generated across the 7 items. Previous researchers have used parents as informants

about children's intelligibility (Flipsen, 1995) and used rating scales for quantifying intelligibility (Kent, Miolo, & Bloedel, 1994). The ICS has been described as a measure of functional success that "permits one to gain inroads into what counts as a clinically, communicatively, as opposed to merely statistically significant change in intelligibility, either generally, or, more realistically, in relation to given listeners, in given situations" (Miller, 2013, p. 608).

The Intelligibility in Context Scale was designed to provide a first-phase screening measure of functional intelligibility. It was designed so that speech pathologists can determine whether children who speak languages other than their own require additional assessment. One of the challenges of speech pathologists who work in diversely multilingual countries such as Australia is that there are few screening and assessment tools that are available in languages other than English (Caesar & Kohler, 2007; Jordaan, 2008; Williams & McLeod, 2012). While comprehensive assessments are available in some languages (e.g., Cantonese, German, Japanese, Korean, Turkish, Spanish, for a complete list see <http://www.csu.edu.au/research/multilingual-speech/speech-assessments>), many of these assessments require the speech pathologist to speak that language in order to administer and score the assessment (McLeod & Verdon, 2014). For other languages (e.g., Dari, Fijian, Hmong, Somali, Tongan, isiXhosa, isiZulu), there are few speech pathology assessments or resources. The International Expert Panel on Multilingual Children's Speech (2012) recommended that speech pathologists "generate and share knowledge, resources, and evidence nationally and internationally to facilitate the understanding of cultural and linguistic diversity that will support multilingual children's speech acquisition and communicative competence" (p. 2). Consequently, speech pathologists from across the world have collaborated to provide the ICS as a free screening tool in 60 languages.

Validation and norming of the ICS on English-speaking children

The ICS was originally validated on 120 Australian English-speaking preschool-aged children (McLeod, Harrison & McCormack, 2012b). In this study the ICS was found to have high internal reliability, good sensitivity, and construct validity. A positive correlation was found between the children's scores on the ICS and their percentage of consonants correct on the Diagnostic Evaluation of

KEYWORDS

INTELLIGIBILITY

MULTILINGUAL

SCREENING ASSESSMENT

SPEECH SOUND DISORDERS

INVITED PAPER



Sharynne McLeod

Articulation and Phonology (Dodd, Zhu, Crosbie, Holm & Ozanne, 2002), establishing criterion validity. Subsequently, the ICS was validated and normed on 804 different Australian preschool-aged children (McLeod, Crowe, & Shahaeian, 2014). Each of the children spoke English and in addition, 36.9% spoke at least one of 59 other languages. The mean ICS score for the 804 children was 4.4 ($SD = 0.7$). Significant differences in scores were identified based on sex and age, but not socioeconomic

for back translation by translators who were accredited by the National Accreditation Authority for Translators and Interpreters (NAATI). The two translations were checked and occasionally the original translators were asked to clarify wording to ensure consistency. Some of the differences have been as a result of discrepancies between words that were accessible to parents versus words that would be correct in an academic context. For example, two versions of the title were possible for the Danish translation: "Vurdering af barnets forståelighed i sine omgivelser" which was easier for parents to understand and "Vurdering af forståelighed i kontekst" which contained the more academic word "kontekst" (context). Eventually, the more parent-friendly translation was chosen and the direct translation is: "Evaluation/assessment of the child's intelligibility in his/her surroundings."

Some languages that are commonly spoken in Australia and other parts of the world had no available speech pathologists or linguists who could translate the ICS. So the second way that translations were undertaken was by translators from Australian Multi Lingual Services. Most of the translators were NAATI accredited (e.g., for Gujarati, Hindi, Hmong, Karen, Khmer, Polish, and Serbian). However, in a few cases the translators were not accredited (e.g., for Somali and Tongan), so the third method of translation was by non-accredited translators employed by Australian Multi Lingual Services. The final method of translation was undertaken when there were available speech pathologists/linguists, but no available translators at the Australian translation company (e.g., for Irish, Jamaican, Sesotho, Tshivenda, isiXhosa, and isiZulu). In these instances, translations were undertaken (and back translated) by colleagues and other speakers of the language as organized by the translators. For example, in South Africa, Dr Michelle Pascoe organised translations of the ICS in Afrikaans, Sesotho, Tshivenda, isiXhosa, and isiZulu by working with groups of speech pathology students studying at the University of Cape Town to translate, back translate, and check the ICS translations with community members. They used protocols for forward and backward translation of health-related materials from the World Health Organisation (2012). Their research is continuing so that eventually translations will be available in the remaining official languages of South Africa (i.e., isiNdebele, Sepedi, Setswana, SiSwati, and Xitsonga).

Research using the ICS in languages other than English

To date, the ICS has been used with children with typically developing speech in Slovenia (Kogovšek & Ozbič, 2013), Sweden (Lagerberg, 2013), Hong Kong (Ng, To & McLeod, 2014) and Croatia (Tomić & Mildner, 2014). It has been used with typically developing multilingual children who speak Korean and English in New Zealand (Kim, Ballard & McCann, 2014). It has been used with children with speech sound disorders who speak Cantonese in Hong Kong (Ng et al., 2014) and with children with cochlear implants in Iceland (Thoroddsen, 2014). Validation studies have been undertaken in Traditional Chinese/Cantonese (Ng et al., 2014), Slovenian (Kogovšek & Ozbič, 2013), and Croatian (Tomić & Mildner, 2014). For example, Ng et al. (2014) validated the Traditional Chinese version of the ICS in Hong Kong with 72 Cantonese-speaking preschoolers (33 typically developing and 39 with speech sound disorders).



Translators of the Intelligibility in Context Scale. L:R – Dr Karla Washington (Jamaican), Dr Dana Buntová (Slovak), Professor Martin Ball (Welsh), Professor Vesna Mildner (Croatian), Professor Sharynne McLeod (English)

status or the number of languages spoken. There were significant differences in ICS scores between the group of children whose parents had concerns about their child's speech ($M = 3.9$) and those who did not ($M = 4.6$), establishing criterion validity. The ICS had high internal consistency and satisfactory test-retest reliability. Sensitivity of .82 and specificity of .58 was established as the optimal cut-off. In another study, McLeod, Harrison, McAllister, and McCormack (2013) studied 109 children with speech sound disorders and found that there was a significant difference between ICS scores for those who had and had not attended speech pathology services. In each of these three studies, the children's speech was most intelligible to their parent, then their immediate family, and was least intelligible to strangers.

Translation of the ICS

Over the past three years, the ICS has been translated into 60 languages (see Table 1 and Appendix) with more translations being added regularly. There have been four ways that translations were undertaken. First, most of the translations were undertaken by speech pathologists and linguists in different countries throughout the world. Typically these people worked in university and clinical settings and regularly worked with children with speech sound disorders who spoke the language used in the translation. Their translations were sent to an Australian translation company

Table 1. Translations of the Intelligibility in Context Scale			
Language	Title	Language	Title
Afrikaans	Verstaanbaarheid in Konteks Skaal: Afrikaans	Hindi (हिन्दी)	संज्ञा पैमाने मे बोधगम्यता
Arabic (Standard) (العربية)	الكلام ضمن السياق العربية وضوح مقياس	Hmong (Hmoob)	Txoj Kev Ntsuas Seb Hais Taus Lus Meej Npaum Licas Nyob rau Ib Qho Chaw Qhov Twg: Hmoob
Assyrian (ܐܘܪܝܝܬܐ)	ܘܒܝܘܬܐ ܕܘܚܝܘܬܐ ܕܘܚܝܘܬܐ ܕܘܚܝܘܬܐ	Hungarian (Magyar)	Érthet ő ség Kontextusban Skála: Magyar
Bulgarian (Български)	Скала за разбираемост на говора в контекст: ългарски	Icelandic (Íslenska)	Kvarðinn Skilningur á tali í samhengi: Íslensk þýðing
Chinese (Simplified) (简体中文) (China, Singapore)	语境说话清晰度量表	Indonesian (Bahasa Indonesia)	Skala Intelligibilitas dalam Konteks: Bahasa Indonesia
Chinese (Traditional) (繁體中文) (Hong Kong, Taiwan)	語境說話清晰度量表	Irish (Gaeilge)	Scála Intuigtheachta i gComhthéacs: Gaeilge
Croatian (hrvatski)	Ljestvica razumljivosti u kontekstu: hrvatski	Italian (Italiano)	Scala d'intelligibilità in contesto: Italiano
Danish	Vurdering af barnets forståelighed i sine omgivelser: Dansk	Jamaican Creole (Jamiekán)	Mezha fi Omoch ada Plipl kyan Andastan di Pikni: Jamiekán
Dari (ڊري)	دری : سنجش مقياس فهم	Japanese (日本語)	話し言葉の明瞭度の測定: 日本語
Dutch	Schaal voor verstaanbaarheid in de context: Nederlands	Khmer (ខ្មែរ)	តារាងវាយតម្លៃស្តង់ដារ សម្រាប់បរិបទ ខ្មែរ
English	Intelligibility in Context Scale	Korean (한국어)	특정 대화자 말명료도 척도: 한국어
Farsi (فارسى)	یسراف :مف تیلباق نازیم	Malay (Bahasa Melayu)	Skala Kebolehfahaman dalam Konteks: Melayu
Fijian (Vakaviti)	Vakarau ni matata ni vosa: Vakaviti	Maltese (Malti)	Skala tal-intelligibilità fil-kuntest: Malti
Fiji Hindi	Paristhiti me samajh la skel: Fiji Hindi	Norwegian (Norsk)	Vurderingsskjema for forståelighet i kontekst: Norsk
Finnish (suomi)	Ymmärtävyyss kontekstissa -asteikko: suomi	Persian فارسی	مقياس وضوح گفتار در بافت: فارسی
French (Français)	Échelle d'intelligibilité en contexte: Français	Polish (Polski)	Skala zrozumiałości mowy w kontekście: Polski
German (Deutsch)	Skala zur Verständlichkeit im Kontext: Deutsch	Portuguese (Português)	Escala Intelligibilidade em Contexto: Portugues
Greek (Standard Modern Greek) (Πρότυπο Νέας Ελληνικής)	Ελληνικά Δείκτης καταληπτότητας ομιλίας	Punjabi (ਪੰਜਾਬੀ)	ਸੰਦਰਭ ਪੈਮਾਨੇ 'ਚ ਸੁਬੋਧਤਾ
Gujarati (ગુજરાતી)	સંદર્ભ બુદ્ધિગમ્યતા માપક: ગુજરાતી	Romanian (română)	Scala de Intelligibilitate în Context: română
Hebrew (עברית)	רובידה תובנמ גוריד מלום תירבע :רשקהב	Russian (русский)	Шкала понятности в контексте: русский

Table 1. Translations of the Intelligibility in Context Scale (continued)

Serbian	Разговетност у контексту скале: Српски	Thai (ภาษาไทย)	แบบประเมินการฟังเข้าใจคำพูด
Sesotho (Sesotho)	Teko ya kutlwisiso ya puo: Sesotho	Tongan (Lea Faka-Tonga)	Ko e Tu'unga 'o e Poto'i Faka'atamai 'i hono Fakasikeili: Lea Faka-Tonga
Slovak (Slovak)	Škála hodnotiaca zrozumiteľ'nost' reči v kontexte: Slovak	Tshivenda (Tshivenda)	Tshikalo tsha u Pfesesea ha Kuambele: Tshivenda
Slovenian (slovenščina)	Lestvica razumljivosti govora v vsakdanjem življenju: slovenščina	Turkish (Türkçe)	Bağlam İçı Anlaşılabilirlik Ölçeği: Türkçe
Somali (Soomaali)	Cabbirka Garashada Hadalka: Soomaali	Vietnamese (Việt)	Sự Hiểu trong phạm vi ngữ cảnh: Việt
Spanish (Español)	Escala de Intelligibilidad en Contexto: Español	Welsh (Cymraeg)	Graddfa Eglurder mewn Cyd-destun: Cymraeg
Swedish (Svenska)	Skattning av förståelighet i kontext: Svenska	Xhosa (isiXhosa)	Ulwazi olu Phezulu: isiXhosa
Tagalog (Tagalog/Filipino)	Antas ng Pag-unawa ng Iba't Ibang Tao sa Pagsasalita: Tagalog	Zulu (isiZulu)	Isikalelo sesigqi Sobuhlakani: isiZulu

Note: Translations in isiNdebele, Sepedi, Setswana, SiSwati, and Xitsonga are forthcoming.

They found that the ICS showed good internal consistency and test-retest reliability. Criterion validity was established by comparing results between the two groups of children. For the typically developing group the mean score was 4.6 ($SD = 0.5$) and this was significantly different from mean score achieved by the children with speech sound disorders ($M = 4.1$; $SD = 0.7$). The effect size was large $d = 0.74$. Sensitivity of 0.70 and specificity of 0.59 was established as the optimal cut-off. Tomić and Mildner (2014) used the ICS with 486 Croatian-speaking children aged 1;2–7;3 and compared parent- and teacher-reported intelligibility. They found that across the children, the mean score was 4.4 ($SD = 0.5$, range = 2.4–5.0). Kim et al. (2014) used the ICS with 26 Korean-English speaking children in New Zealand who were aged 3;0–5;5 and reported the mean score was 4.4 ($SD = 0.5$). Kogovšek and Ozbič (2013) used the ICS with 104 Slovenian-speaking children aged 2 to 6 years and found that across the children the mean score was 4.6 ($SD = 0.5$, range = 2.7–5.0). They found that parents and immediate family members were more likely to understand the children, and that strangers were least likely to understand the children.

To date, there has been remarkable consistency across these international studies and those that have been undertaken with English-speaking children (McLeod et al., 2012b; McLeod et al., 2014). It may be the case that across the world preschool children who achieve a mean score above 4.2 may be considered to be developing typically; whereas those who score below 4 may require additional assessment. Additional studies are underway in a range of countries including: Brazil, Cambodia, Denmark, Fiji, Iceland, Iran, Israel, Jamaica, Germany, New Zealand, Slovenia, South Africa, Sweden and Vietnam. Further studies will confirm whether this hypothesis is applicable across languages.

Availability of the ICS

The translated versions of the ICS are freely available from <http://www.csu.edu.au/research/multilingual-speech/ics>. Each version of the ICS is available in two formats: a monolingual format and a bilingual format with the English translation added in a smaller font. On the website and the pdf versions of the ICS the translators have been acknowledged by name and affiliation. In the footnote of each pdf version of the ICS, a suggested reference is provided that acknowledges the authors and translators. A creative commons licence has been added (<http://creativecommons.org/licenses/by-nc-nd/3.0/>) that allows users to copy and use the ICS, as long as appropriate attribution is made, the material is not used for commercial purposes, and revisions of the material are not distributed. Users are welcome to contact the authors about additional uses of the ICS.

Conclusion

While over 20% of Australian speech pathologists provide services in languages other than English (Verdon, McLeod, & McDonald, 2014), most Australian speech pathologists encounter children who do not speak the same languages as they speak. The ICS is a promising tool to provide first-phase screening of children's intelligibility so as to determine whether additional assessment is required with the assistance of an interpreter or colleague who speaks the language(s) of the child. International collaboration between speech pathologists, linguists, and translators has resulted in the availability of the ICS in 60 languages and international research is underway to validate, norm, and examine the clinical applicability of the ICS across the world.

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Translators of the Intelligibility in Context Scale. L:R – Dr Sandra Neumann (German), Professor Sharynne McLeod (English), Dr Tove Lagerberg (Swedish)

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مقياس وضوح الكلام ضمن السياق العربية Intelligibility in Context Scale (ICS): Standard Arabic

(McLeod, Harrison, & McCormack, 2012)
Translated by: Ghada Khatib, Speech and Language Science, Newcastle University, UK, 2012

اسم الطفل (Child's name): _____
 تاريخ ميلاد الطفل (Child's date of birth): _____
 اللغة (اللغات) المتكلمة (Language(s) spoken): _____
 التاريخ الحالي (Current date): _____
 اسم موزع القياس (Person completing this form): _____
 درجة القراءة للطفل (Child's reading level): _____

الأسئلة التالية تتعلق بمدى فهم كلام مختلف من قبل مختلف الأشخاص. يرجى التفكير في كلام مختلف خلال الشهر الماضي عندما تطلب على كل سؤال. ضع دائرة حول أحد الأرقام لكل سؤال. (The following questions are about how much of your child's speech is understood by different people. Please think about your child's speech over the past month when answering each question. Circle one number for each question.)

	أبداً (Never)	بداً (Rarely)	بعض الأحيان (Sometimes)	كثيراً (Often)	دائماً (Always)
1. هل تفهم أطفالك؟ (Do you understand your child?)	5	4	3	2	1
2. هل تفهم أفراد العائلة الممتدة من أطفالك؟ (Do immediate members of your family understand your child?)	5	4	3	2	1
3. هل تفهم أفراد العائلة الممتدة من أطفالك؟ (Do extended members of your family understand your child?)	5	4	3	2	1
4. هل تفهم أفراد العائلة من أطفالك؟ (Do your child's friends understand your child?)	5	4	3	2	1
5. هل تفهم المعارف (الأخرى من أطفالك)؟ (Do other acquaintances understand your child?)	5	4	3	2	1
6. هل تفهم معلمي أطفالك؟ (Do your child's teachers understand your child?)	5	4	3	2	1
7. هل تفهم الغرباء من أطفالك؟ (Do strangers understand your child?)	5	4	3	2	1
الدرجة الكلية (TOTAL SCORE) =	/35				
متوسط الدرجة الكلية (AVERAGE TOTAL SCORE) =	/5				

هذا المقياس يمكن تعديله من قبل الباحثين لمقابلة لغة أخرى. (This measure may be able to be adapted for other languages by substituting child with spouse.)
 يمكن تغيير الاسم الموزع. (The term stranger may be changed to unfamiliar people.)
 (This version of the Intelligibility in Context Scale can be copied.)

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McLeod, S., Harrison, L. J., & McCormack, J. (2012). The intelligibility in context scale: Validity and reliability of a subjective rating measure. *Journal of Speech, Language, and Hearing Research*, 55(2), 648-656. <http://dx.doi.org/10.1016/j.jslhr.2012.02.008>

مقياس وضوح الكلام ضمن السياق الصينية التقليدية Intelligibility in Context Scale (ICS): Traditional Chinese

(McLeod, Harrison, & McCormack, 2012)
香港大學 杜潔敏, 吳詩雯譯
Translated by: Carol K. S. To, Ph.D. & Kaylor Ng, The University of Hong Kong, HKSAR China, 2012

兒童姓名 (Child's name): _____
 兒童出生日期 (Child's date of birth): _____ 性別: 男/女 (male/female): _____
 會說的語言 (Language(s) spoken): _____
 填寫日期 (Current date): _____ 兒童年齡 (Child's age): _____
 填寫人 (Person completing the ICS): _____
 與兒童關係 (Relationship to child): _____

下列問題是關於其他人對孩子說話的理解程度。請回想聽取孩子說話在過去一個月中的說話情況。每題選擇一個數字。(The following questions are about how much of your child's speech is understood by different people. Please think about your child's speech over the past month when answering each question. Circle one number for each question.)

	總是 (Always)	通常 (Usually)	有時候 (Sometimes)	很少 (Rarely)	從不 (Never)
1. 我能明白孩子的說話嗎？ (Do you understand your child?)	5	4	3	2	1
2. 孩子的家庭成員能明白他的說話嗎？ (Do immediate members of your family understand your child?)	5	4	3	2	1
3. 孩子的其他親戚能明白他的說話嗎？ (Do extended members of your family understand your child?)	5	4	3	2	1
4. 孩子的朋友能明白他的說話嗎？ (Do your child's friends understand your child?)	5	4	3	2	1
5. 其他認識但不熟悉孩子的人能明白他的說話嗎？ (Do other acquaintances understand your child?)	5	4	3	2	1
6. 孩子的老師能明白他的說話嗎？ (Do your child's teachers understand your child?)	5	4	3	2	1
7. 陌生人能明白孩子的說話嗎？ (Do strangers understand your child?)	5	4	3	2	1
總分 (TOTAL SCORE) =	/35				
平均分 (AVERAGE TOTAL SCORE) =	/5				

此量尺適用於其他語言。請將「孩子」替換為「配偶」。(This measure may be able to be adapted for other languages by substituting child with spouse.)
 「陌生人」可替換為「不熟悉的人」。(The term stranger may be changed to unfamiliar people.)
 (This version of the Intelligibility in Context Scale can be copied.)

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Vakarau ni matata ni vosa: Vakaviti Intelligibility in Context Scale (ICS): Fijian

(McLeod, Harrison, & McCormack, 2012)
Vakawakawa q (Translated by: Paula Cereti (Paul Geraghty), Ph.D., The University of the South Pacific, 2013)

Yaca ni gone (Child's name): _____
 Nona i ganiwau (Child's date of birth): _____
 Vosa (vosa) ni vosatata (Language(s) spoken): _____
 Tikinisiqe ni vasa (Current date): _____
 Koya e vakalere fomu (Person completing this form): _____
 Veivacani kei na gone (Relationship to child): _____

Na taro qe e vasaqali kina na matata ni vosa ni gone qo vei ira na so. Vakasamatata mada nona vosa ene loma ni vosa sa matiti qai sauma na taro yadivusa. Wivira e dua na mada ene taro yadivusa. (The following questions are about how much of your child's speech is understood by different people. Please think about your child's speech over the past month when answering each question. Circle one number for each question.)

	veigone (Always)	vekalere (Usually)	So na gona (Sometimes)	vekadivusa (Rarely)	Sega sara (Never)
1. E matata vei iko na nona vosa? (Do you understand your child?)	5	4	3	2	1
2. E matata vei iratou na wekana voloka? (Do immediate members of your family understand your child?)	5	4	3	2	1
3. E matata vei iratou na wekana tale eso? (Do extended members of your family understand your child?)	5	4	3	2	1
4. E matata vei iratou nona lala? (Do your child's friends understand your child?)	5	4	3	2	1
5. E matata vei ira na veivili tale eso? (Do other acquaintances understand your child?)	5	4	3	2	1
6. E matata vei iratou nona qasenivuli? (Do your child's teachers understand your child?)	5	4	3	2	1
7. E matata vei ira na vulagi? (Do strangers understand your child?)	5	4	3	2	1
SOQONNI (TOTAL SCORE) =	/35				
IVAKATAUVATAVA (AVERAGE TOTAL SCORE) =	/5				

Qai e vasa ni vosaqali na gone na vosaqali kina na matata ni vosa. (This measure may be able to be adapted for other languages by substituting child with spouse.)
 Na vulagi e vosa ni vosaqali na kamaqali. (The term stranger may be changed to unfamiliar people.)
 (This version of the Intelligibility in Context Scale can be copied.)

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McLeod, S., Harrison, L. J., & McCormack, J. (2012). The intelligibility in context scale: Validity and reliability of a subjective rating measure. *Journal of Speech, Language, and Hearing Research*, 55(2), 648-656. <http://dx.doi.org/10.1016/j.jslhr.2012.02.008>

Cabbirka Garashada Hadalka: Soomaali Intelligibility in Context Scale (ICS): Somali

(McLeod, Harrison, & McCormack, 2012)
Waxaa furay (Translated by: Omar Osman, B.A. English, for Australian Multi-Lingual Services, Australia, 2012)

Magaac cusuuga (Child's name): _____
 Taariikhda dhacashada cusuuga (Child's date of birth): _____
 Luqadaha lagu hadlo (Language(s) spoken): _____
 Taariikhda (Current date): _____
 Qofka foomka soo buuxiyay (Person completing this form): _____
 Xiriirka uu la leeyahay cusuuga (Relationship to child): _____

Su'aalahaan hoose waxaa loogu talagalay in lagu ogaado imita ka mid ah hadalka cusuugaaga ay dad kala duwan garan karaan. Fadax ka fikir habaha uu cusuugaaga uu hadlayo kaddibna ka soo dhacay markii aad su'aal walba ka jawaabeyso. Goobabka saar lab lambar oo kaliya ee su'aal walba. (The following questions are about how much of your child's speech is understood by different people. Please think about your child's speech over the past month when answering each question. Circle one number for each question.)

	Mar walba (Always)	Badanba (Usually)	Mar mar (Sometimes)	Sidif ah (Rarely)	Waligeedba mayna (Never)
1. Aiga miyaad garan kartaa cusuugaaga? (Do you understand your child?)	5	4	3	2	1
2. Xubinnada cusuugaaga miyeey garan karaan cusuugaaga? (Do immediate members of your family understand your child?)	5	4	3	2	1
3. Dadka aad arasho tidhi miyeey garan karaan cusuugaaga? (Do extended members of your family understand your child?)	5	4	3	2	1
4. Saaxiibada cusuugaaga miyeey garan karaan cusuugaaga? (Do your child's friends understand your child?)	5	4	3	2	1
5. Miyeey dadka kale aad taqaano garan karaan cusuugaaga? (Do other acquaintances understand your child?)	5	4	3	2	1
6. Macallimintu cusuugaaga miyeey garan karaan cusuugaaga? (Do your child's teachers understand your child?)	5	4	3	2	1
7. Dadka aadha aqoon miyeey garan karaan cusuugaaga? (Do strangers understand your child?)	5	4	3	2	1
ISU-GAAYITA DHI BICAYADA (TOTAL SCORE) =	/35				
ISU-GAAYITA DHI BICAYADA OO LA ISKU CEL-CELUEY = (AVERAGE TOTAL SCORE) =	/5				

Waxaa vasa loo hadlayo kaddibna dadka kale, ayadoo ayaga oo ay hadlayo kaddibna wada. (This measure may be able to be adapted for other languages by substituting child with spouse.)
 Isaga iisidha aqoon vasa loo hadlayo kaddibna aad ee in ayaga. (The term stranger may be changed to unfamiliar people.)
 (This version of the Intelligibility in Context Scale can be copied.)

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Appendix. Examples of the bilingual format of the intelligibility in context scale (McLeod, Harrison, & McCormack, 2012a) in Arabic, Traditional Chinese, Fijian, and Somali. Free pdf versions in 60 languages are available from <http://www.csu.edu.au/research/multilingual-speech/ics>



Managing aphasia in bilingual and culturally and linguistically diverse individuals in an Australian context

Challenges and future directions

Samantha Siyambalapitiya and Bronwyn Davidson

In Australia, cultural and linguistic diversity is a crucial factor to be addressed in planning and delivering rehabilitation services for individuals with aphasia and their families. Challenges include the extensive number of languages spoken by Indigenous and migrant Australians, as well as limited research evidence pertaining to assessment and intervention for people with bilingual aphasia. In addition, clinical challenges include lack of consistent terminology used to refer to people with aphasia who are bilingual or from culturally and linguistically diverse (CALD) backgrounds and limited existing resources for speech pathology management of this population. This paper outlines key issues relevant to speech pathology management of people with aphasia who are bilingual or from CALD backgrounds and identifies gaps in the existing research literature. Recommendations for clinical management are discussed and the imperative for further research is illustrated.

Australia is a culturally and linguistically diverse society. Aboriginal and Torres Strait Islander people, the original inhabitants of the Australian continent (Department of Foreign Affairs and Trade, n.d.), have a rich and diverse cultural and linguistic heritage. In contemporary Australian society, more than a quarter of the population were born overseas and around one-fifth speak a language other than English at home (Australian Bureau of Statistics [ABS], 2011a). The cultural and linguistic diversity found among the Australian populace can create challenges for speech-language pathologists (SLPs) working with individuals with communication disability. A recent survey investigating the aphasia rehabilitation practices of Australian SLPs found that around 50% of respondents rated their knowledge of, and confidence in, working with culturally and linguistically diverse (CALD) clients as less than adequate (Rose, Ferguson, Power, Togher, & Worrall, 2014). Similarly, a national survey exploring SLP practices with Indigenous Australians with acquired communication disorders identified that 67% of respondents who were currently seeing Indigenous clients

felt less confident working with Indigenous than non-Indigenous clients (Hersh, Armstrong, Panak, & Coombes, 2014). This article provides an overview of key contextual issues and challenges in managing aphasia in bilingual and CALD individuals in Australia, as well as providing practical recommendations SLPs can implement within their clinical practice.

Linguistic environment in Australia

According to data from the 2011 Australian census, nearly one in five people (around 4 million in total) speak a language other than English (LOTE) at home (ABS, 2013c). This figure does not indicate whether these individuals also speak English or other additional languages. Those who do speak English or other languages, in addition to the language spoken at home, may be considered to be bilingual or multilingual while others may simply be non-English speakers or have limited proficiency in English.

One of the unique characteristics of the Australian linguistic environment is the wide diversity of languages spoken: over 260 languages from diverse areas of the globe (Department of Social Services, 2013). The specific proportion and pattern of language diversity can vary between different regions of Australia and may also change over time. For example, in Brisbane, two or more languages are reportedly spoken in 15.5% of households, with the top five LOTEs being Mandarin, Vietnamese, Cantonese, Samoan, and Spanish (ABS, 2013a). In contrast, 32.4% of households in Melbourne report two or more languages being spoken, with the top five LOTEs being Greek, Italian, Mandarin, Vietnamese and Cantonese (ABS, 2013b). In recent years, Chinese languages have become the most widely spoken LOTEs in Australia, overtaking Italian and Greek, and this may reflect changes in immigration patterns.

Regional differences, as well as changes in language use over time, also exist for speakers of Indigenous languages. In 2008, 73% of Indigenous people aged 15 years or over living in a remote area spoke, or spoke some words of, an Aboriginal or Torres Strait Islander language, in comparison to 32% of people living in metropolitan areas and 28% in regional areas (ABS, 2010). A crucial issue in relation to Australian Indigenous languages is the loss of languages over time. The most recent National Indigenous Languages Survey indicated that only 120 out of 250 Australian Indigenous languages were still spoken, with around 110 described as severely or critically endangered (Marmion, Obata, & Troy, 2014).

KEYWORDS

APHASIA
MANAGEMENT

BILINGUAL
APHASIA

CROSS-
CULTURAL

CULTURAL AND
LINGUISTIC
DIVERSITY

THIS ARTICLE
HAS BEEN
PEER-
REVIEWED



Samantha Siyambalapitiya (top) and Bronwyn Davidson

The level of cultural and linguistic diversity among older Australians is important to consider, given that Australia currently has an ageing population (Productivity Commission, 2011) and age is a risk factor for stroke (National Stroke Foundation, 2014), and consequently aphasia. According to figures from the Australian census (ABS, 2011b), 36% of Australia's older people were not born in Australia, a higher proportion than that of people aged under 65 years. Those born overseas identified as being from more than 120 different countries, once again highlighting the diverse nature of the Australian cultural and linguistic environment.

Cultural and linguistic diversity, therefore, is a key factor to consider in the delivery of speech pathology services in Australia. With such a diverse range of cultures and languages found in Australia, there is a strong likelihood that SLPs will not be proficient in the languages spoken by their bilingual and multilingual clients. It may also be challenging for SLPs to be sensitive to the various cultural nuances that may impact on clinical practice. Data from Speech Pathology Australia (SPA), the peak professional body for SLPs in Australia, indicates that 19% of their membership reported speaking one or more LOTEs, suggesting that a large majority of the SPA membership speak English only. The potential mismatch between language(s) spoken by the individual with aphasia (and possibly their family and significant others) and language(s) spoken by the SLP creates complexity around the delivery of relevant, effective, and efficient speech pathology services to CALD individuals in Australia.

Research context

A key challenge SLPs face in delivering services to individuals with aphasia who are bilingual or from a CALD background is the relative lack of literature pertaining to aphasia management in this population. A review of the aphasia literature published between 2000 to 2009 in four leading journals (*Aphasiology*, *Brain and Language*, *Journal of Neurolinguistics*, *Language and Cognitive Processes*) revealed a clear trend towards articles involving English-speaking participants (62% of all reports; 85% of papers on aphasia treatment; Beveridge & Bak, 2011). The authors also identified a relative paucity of research studies investigating bilingual or multilingual individuals with aphasia (47 out of a total of 1,184 articles). The findings of this review suggest that most of our current understanding of aphasia stems from research focusing on monolingual speakers of English or western European languages.

To date, a small number of studies have explored cultural aspects of aphasia in individuals from specific cultural groups, such as Aboriginal and Torres Strait Islander (Armstrong, Hersh, Hayward, Fraser, & Brown, 2012), Māori (McClellan, McCann, Worrall, & Harwood, 2014a, 2014b), Samoan (Jodache, Howe, & Siyambalapatiya, 2014c) and South African (Legg & Penn, 2013). Recent studies have also investigated the perspectives of SLPs working with Aboriginal and Torres Strait Islander (Cochrane, Brown, Siyambalapatiya, & Plant, 2014b; Hersh, Armstrong, & Bourke, 2014; Hersh, Armstrong, Panak, et al., 2014) and Samoan people with aphasia (Jodache, Howe, & Siyambalapatiya, 2014a). These studies highlight the complex nature of delivering speech pathology services across cultures and emphasise the need for more research exploring aphasia in other cultural and language groups.

In relation to treatment of bilingual aphasia, a systematic review (Faroqi-Shah, Frymark, Mullen, & Wang, 2010) identified only 14 studies investigating intervention for people with bilingual aphasia, in contrast to the numerous studies that have examined treatment of aphasia in

monolingual individuals. Many of the studies included in the review had methodological shortcomings (Faroqi-Shah et al., 2010). Studies investigating treatment of bilingual aphasia have also largely focused on a limited set of linguistic abilities targeting the impairment level (Lorenzen & Murray, 2008). The methodological variability and paucity of bilingual aphasia treatment studies limit the ability to draw systematic and valid conclusions regarding factors that may maximise outcomes of bilingual aphasia treatment (Murray, 2014). The review findings highlight the urgent need for additional methodologically rigorous research investigating treatment of bilingual aphasia, not only due to a pressing clinical need but also for the insights that may be provided regarding bilingual language representation and consequent effects of brain impairment (Faroqi-Shah et al., 2010).

Another challenge that exists in relation to treatment of bilingual aphasia is the emerging understanding of bilingual language representation and processing in neurologically typical bilingual speakers. One of the prominent treatment models, in relation to aphasia rehabilitation, is the cognitive neuropsychological approach, which utilises models of language processing as a basis for determining assessment and treatment approaches for individuals with aphasia (see for example, Whitworth, Webster, & Howard, 2014). Currently, our understanding of bilingual language representation and processing lags behind our knowledge of how a single language is stored and processed, posing a challenge to the use of cognitive neuropsychological approaches with bilingual individuals with aphasia.

Although there are numerous models of bilingual language representation and processing in the research literature (e.g., Abutalebi & Green, 2007; Dijkstra & van Heuven, 2002; Kroll, van Hell, Tokowicz, & Green, 2010), many of these models require further elucidation and testing, particularly in relation to how they may apply to bilingual individuals with aphasia. Some relatively prominent models that may assist in understanding bilingual language representation and processing are the Revised Hierarchical Model (RHM; Kroll & Stewart, 1994; Kroll et al., 2010), the Bilingual Interactive Activation Plus (BIA+) model (Dijkstra & van Heuven, 2002) and Abutalebi and Green's (2007) neurocognitive model of bilingual language representation and control. The RHM (Kroll & Stewart, 1994) is particularly useful for considering the relative organisation and the connections between a bilingual speaker's two lexicons and their shared semantic system. The BIA+ model (Dijkstra & van Heuven, 2002) and Abutalebi and Green's model (2007) provide a framework for considering how language control mechanisms may function in bilingual speakers. Recently, Gray and Kiran (2013) used assessment data and language history information from 19 Spanish-English speakers with bilingual aphasia to propose a theoretical account of lexical and semantic impairments in bilingual aphasia. This bilingual language processing model is based on psycholinguistic models of non-impaired language processing and integrates specific levels of language processing. This framework could potentially be used as the basis for using a cognitive neuropsychological approach with individuals with bilingual aphasia; however, the model has yet to be widely tested.

It is clear from the brief overview presented here that there are several gaps in relation to research exploring aphasia in bilingual and CALD individuals. More research is needed that examines aphasia in different languages and different cultures. In addition, research that investigates assessment and treatment of aphasia in bilingual individuals is a key priority in an increasingly multilingual world and

should aim to address areas of the ICF framework that extend beyond the impairment level.

Clinical issues and challenges

As well as the broader context and challenges outlined above, there are several clinical issues that require attention and consideration for the delivery of effective and client-centred speech pathology services in an Australian context to people with aphasia who are bilingual or from a CALD background. While some aspects of speech pathology service provision to bilingual/CALD clients overlap with those of monolingual clients, there are also issues that are unique to the bilingual/CALD clients. Three main areas that SLPs may need to consider are: a) developing a better understanding of aphasia in bilingual/CALD individuals; b) identifying the most appropriate service delivery options for this caseload; and c) identifying and developing culturally and linguistically appropriate resources to enhance delivery of culturally relevant speech pathology services.

Understanding aphasia in people who are bilingual or from a CALD background

Currently, a wide range of terminology may be employed to describe the language ability of individuals who are not monolingual native English speakers including: bilingual, CALD, non-English Speaking Background (NESB), English as a Second Language (ESL), functional English, limited English proficiency. Although many of these terms may often be used interchangeably in common parlance, their meanings do not necessarily overlap. For example, a person may identify as CALD but not bilingual (e.g., Australian-born monolingual English speaker with Spanish parents) or a person may be bilingual but not CALD (e.g., Australian-born native English speaker of Anglo-Saxon origin who has learnt and is proficient in a second language). One analysis by the Australian Bureau of Statistics (2009) divides CALD status into four categories: a) born in Australia, mainly speaks English at home; b) born in Australia, mainly speaks a LOTE at home; c) born overseas, mainly speaks English at home; and d) born overseas, mainly speaks a LOTE at home. These categories illustrate the diverse range of individuals who may be classified as CALD. The notion of who can be termed “bilingual” is also a complex and multidimensional concept (see Lorenzen & Murray, 2008 for further discussion), with wide variation in the definition and measurement of bilingualism used within research studies. A systematic review of research investigating bilingual aphasia revealed that only 13 of the 77 studies included in the review provided a theoretical definition of bilingualism (Kane, Davidson, & Siyambalapatiya, 2014). The most commonly cited definition was Grosjean’s (1985; p. 467) definition of “the use of two or more languages or dialects in their daily lives”.

Clinically, it is important that SLPs identify clear definitions of these terms and encourage their correct usage within the health system to ensure accurate communication about bilingual/CALD individuals and to avoid potential problems with their management. For example, a bilingual person who loses their ability to speak English following a stroke, and subsequently reverts to their native language, may be misidentified as a person who never spoke English to begin with (and possibly not receive the appropriate speech pathology management).

Obtaining a comprehensive language history and current language profile, from the client and/or their significant others, is key first step in the process of describing, assessing, and diagnosing aphasia in individuals who are

bilingual or from a CALD background. Accurate information about a person’s pre-morbid language ability is essential for determining whether any language differences are due to pre-existing issues with proficiency versus the post-morbid effects of aphasia. There are several published tools that could be used or adapted as the basis of a language history questionnaire or interview (Marian, Blumenfeld, & Kaushanskaya, 2007; Muñoz, Marquardt, & Copeland, 1999; Paradis, Hummel, & Libben, 1989), which include information such as language acquisition history; educational history in each language; language use; self-rating of proficiency in each language (in both spoken and written modalities), etc. Information about language use, both pre- and post-stroke, is especially important for bilingual speakers, as they may utilise each of their languages in different sociolinguistic contexts (e.g., home language vs work language) and for different purposes (e.g., socialising vs occupational duties) (Centeno, 2005). These usage patterns may alter following a diagnosis of aphasia. For example, a bilingual speaker who loses their ability to communicate in English as a consequence of aphasia may no longer be able to communicate as effectively with English-speaking grandchildren and friends.

As well as linguistic background, it is important to consider the influence of cultural variables on the management process and the way in which these may affect speech pathology practice. At the same time, clinicians need to take care not to culturally stereotype individuals from a particular background. A balance should be struck between identifying cultural variables that may impact upon the management process and determining the extent to which these variables are actually relevant on a case-by-case basis. Learning from the person with aphasia and his/her family about the impact of changed language on the person’s life and on family relationships is a first and critical step. This process will involve learning about cultural responses to illness, the individual’s role in the family, priorities of the person with aphasia for social participation, and their sense of self. This “insider perspective” (Brown, Worrall, Davidson, & Howe, 2010) can be explored as the therapist builds a relationship with the person from a CALD background and their family, and demonstrates a genuine interest in knowing about their patient’s culture, response to health issues, and experience of having aphasia.

Understanding recovery patterns in bilingual individuals with aphasia is also pertinent in the rehabilitation of bilingual aphasia. Previous papers have reported the various types of language impairment and recovery patterns evidenced by individuals with bilingual aphasia (see Lorenzen & Murray, 2008; Roberts, 2008). Language impairment and recovery can occur in varied and complex patterns across a speaker’s languages so it is necessary to educate the client and family regarding the client’s relative strengths and weaknesses in each language. To accurately describe the nature of language recovery occurring in a bilingual person with aphasia, it is essential to take into account pre-morbid proficiency in each language as distinct from the post-morbid effects of aphasia.

To provide effective management of aphasia in bilingual individuals, SLPs need a clear understanding of linguistic features that may present uniquely in bilingual aphasia and not monolingual aphasia. One example is code-switching, which occurs when a bilingual speaker alternates between their two languages (see Ansaldo, Marcotte, Scherer, & Raboyeau, 2008; Lorenzen & Murray, 2008). In neurologically normal bilingual speakers, code-switching may be used routinely when conversing with other bilingual speakers; however, following a diagnosis of aphasia this

behaviour may become pathological, causing bilingual speakers with aphasia to lose the ability to monitor which language they are speaking in (e.g., an Italian-English speaker may unwittingly speak in Italian to her English-speaking neighbour) (Ansaldò & Saidi, 2010). On the other hand, some bilingual speakers with aphasia may purposely code-switch in their attempts to overcome word finding difficulties (i.e., try to retrieve the word in their other language if they are having no success naming it in the first language). It is important, therefore, to identify whether any code-switching observed is intentional on the part of the person with aphasia.

Another linguistic feature that is unique to bilingual or multilingual speakers is the distinction between cognate and noncognate words. Cognate words are those that are similar in form and meaning across two languages (e.g., the Italian word for telephone is *telefono*). For healthy bilingual speakers, there is strong evidence of a cognate facilitation effect (i.e., cognates are recognised, processed, and retrieved more quickly than noncognate words) across several types of language tasks (Costa, Santesteban, & Caño, 2005; Rosselli, Ardila, Jurado, & Salvatierra, 2012). However, research findings are mixed as to whether cognates lead to facilitation or interference in older bilingual adults (Siyambalapitiya, Chenery, & Copland, 2009) or for bilingual individuals with aphasia (Kohnert, 2004; Kurland & Falcon, 2011; Siyambalapitiya, Chenery, & Copland, 2013). It is important, therefore, to observe the influence of cognate status when selecting targets for language intervention.

Speech characteristics may also be important to consider in the diagnosis and treatment of aphasia, particularly if the person speaks English with a non-native accent. Differential diagnosis of acquired neurogenic communication disorders in individuals who are bilingual or from a CALD background will need to account for the possible influence of accent when identifying the presence of phonemic paraphasias, neologisms, apraxia of speech, and dysarthria.

Service delivery

Where possible, many SLPs will try to involve family and significant others in the management of individuals with aphasia. When working with bilingual/CALD individuals, it may be necessary to rely on family members or significant others to provide language history information and information about cultural variables that may influence the clinical process. In providing intervention, some researchers argue that bilingual therapy should be offered to bilingual individuals with aphasia (Ansaldò et al., 2008). If the SLP is only able to provide therapy in English then it may only be through working with families and significant others that it will be possible to provide rehabilitation (or at the very least stimulation) of the other language, particularly where it is not feasible to provide speech pathology management via an interpreter (e.g., Boles, 2000). The decision to involve the family in the therapeutic process should be made in consultation with both the person with aphasia and their family and potential limitations of including the family should also be considered. For example, families may lack the time, energy, or motivation to be more involved in SLP intervention (Johansson, Carlsson & Sonnander, 2011), or they may be too emotionally involved or try to protect the patient from information that they think could be distressing (Taylor & Jones, 2014).

Working with interpreters is another key consideration in providing services to people with aphasia who are bilingual or from a CALD background. Many health care policies dictate that bilingual/CALD individuals should have access

to interpreter services if needed during the delivery of their health care (e.g., NSW Government, 2006; Queensland Health, 2000; State Government Victoria, 2012). However, previous research has identified potential issues that may arise for SLPs when working with interpreters. For example, content validity of a standardised assessment can be compromised when administration occurs via an interpreter (Roger & Code, 2011). Recommendations for working with interpreters include providing pre-session briefings to explain the aim, purpose, and format of the assessment, as well as education of inexperienced interpreters about typical responses from people with aphasia and the importance of error information for assessment and diagnosis (Kambanaros & van Steenbrugge, 2004; Roger & Code, 2011). The feasibility of implementing these recommendations in actual clinical practice, however, is not clear due to several practical limitations. For example, interpreters are often in high demand from many different health professionals, limiting the amount of time available for extensive input into speech pathology management. In addition, interpreters may not be available for all languages, for example, Australian Indigenous languages (Cochrane, Brown, Siyambalapitiya, & Plant, 2014a).

Identification and development of appropriate resources

As well as the relative gap in research relating to bilingual aphasia, lack of clinical resources is another challenge SLPs may face in providing a service to patients with aphasia who are bilingual or from a CALD background. This includes lack of standardised assessments in languages other than English, as well as limited therapy resources for conducting management in LOTEs.

One formal assessment, designed specifically for bilingual speakers with aphasia, is the Bilingual Aphasia Test (BAT; Paradis et al., 1989). The tool has been translated into several languages and is now available for download (<http://www.mcgill.ca/linguistics/research/bat>). It should be noted that a native speaker of the language being assessed is required to administer the non-English versions of the assessment. In addition, there may be regional variations that affect the relevance of the assessment stimuli contained in the BAT. For example, Italians living in Australia may not find all items in the Italian version of the BAT to be culturally relevant. Where standardised assessments are not available in a target language, some SLPs attempt to administer a translation of the assessment using an interpreter. However, since content validity of an assessment can be compromised when it is administered via an interpreter (Roger & Code, 2011), it is recommended that direct translation should be avoided and assessments should instead be adapted to ensure that the content remains linguistically and culturally equivalent (Lorenzen & Murray, 2008).

Research has also shown that time is a critical variable to consider in the delivery of speech pathology services to people with aphasia who are bilingual or from a CALD background (Cochrane et al., 2014b; Jodache, Howe, & Siyambalapitiya, 2014b). SLPs require more time to establish rapport, liaise with interpreters, create informal assessment and therapy resources and more time may also be required to engage in clinical reasoning around this caseload (Cochrane et al., 2014b; Jodache et al., 2014b). As a profession, SLPs should advocate for the need for additional resources in this area, particularly if we are to provide an equitable service to individuals with aphasia who are bilingual or from CALD backgrounds.

Clinical recommendations

As the preceding review indicates, delivering speech pathology services to individuals with aphasia who are bilingual or from CALD backgrounds is currently, and will remain for the foreseeable future, a challenging area of practice for the speech pathology profession in Australia. Some recommendations for clinical practice that may assist with the management of this caseload are outlined below. These recommendations are based on the available research literature and the first author's clinical and research experience with this caseload.

- Use clear and consistent terminology to refer to clients from culturally and linguistically diverse backgrounds to facilitate effective service delivery.
- Obtain an accurate and comprehensive language history and current language profile to assist with appropriate diagnosis and goal setting with the bilingual/CALD individual with aphasia (Lorenzen & Murray, 2008; Roberts, 2008).
- Obtain initial assessment data in both or multiple languages wherever possible to obtain an accurate indication of the relative strengths and weaknesses in and across languages, to assist with accurate diagnosis, and to provide a baseline for treatment (Lorenzen & Murray, 2008).
- Beware of directly translating/interpreting English aphasia assessments into other languages as this may not account for cross-linguistic and cross-cultural differences. Appropriate tools for assessment of bilingual aphasia should be culturally adapted and linguistically equivalent (Paradis, 2004).
- Where formal assessment in the other language(s) is not possible, identify a set of informal language assessment tasks that may assist with diagnosis of aphasia and obtain interpreter assistance in administering these (e.g., tasks that assess fluency, comprehension and repetition may assist with differential diagnosis of the type of aphasia). Other recommendations include the collection and analysis of language samples (Lorenzen & Murray, 2008), including narrative outputs (Kiran & Roberts, 2012), and verbal fluency tasks (Kiran & Roberts, 2012).
- Employ practices that will facilitate working with interpreters (see Kambanaros & van Steenbrugge, 2004; Roger & Code, 2011), for example, pre-session briefings to explain the aim, purpose and format of the assessment; education of inexperienced interpreters about typical responses from people with aphasia; and the importance of error information for assessment and diagnosis.
- Be familiar with relevant bilingual language processing models and use these to facilitate understanding of aphasia presentation in a bilingual person.
- Pool informal clinical resources for working with CALD populations (that may have been developed by various clinicians over time) in a central location that can be accessed by SLPs nationally.
- Identify and use relevant existing internet resources, for example, Cue Cards in Community Languages (<http://www.easternhealth.org.au/services/language-and-transcultural-services/cue-cards/cue-cards-in-community-languages>); The Internet Picture Dictionary (<http://www.pdictionary.com/>); Life as a Bilingual (<http://www.psychologytoday.com/blog/life-bilingual>).
- If therapy can be conducted only in English within the clinical setting, try to use family members or other volunteers to implement language tasks in the other language(s) at home (see for example, Boles, 2000).
- Provide appropriate education and training for speech pathology students related to management of bilingual/

bicultural clients (Cheng, Battle, Murdoch, & Martin, 2001) and professional development for practising SLPs in relation to assessment and management of bilingual and CALD individuals (e.g., Kritikos, 2003).

- Advocate for the resources needed to provide appropriate and equitable services to this population, for example, additional time; more interpreters and adequate access to their services; bilingual SLPs from various cultural backgrounds who could act as consultants to the SLP clinical community (e.g., see Hersh, Armstrong, Panak, et al., 2014; Jodache et al., 2014a).
- Finally, it is evident that there is a pressing need for more research relating to speech pathology management of clients with aphasia who are bilingual or from a CALD background. As Rose and colleagues (2014, p. 10) noted in relation to CALD clients with aphasia, "such a large discrepancy between case-load imperatives and clinician preparedness/capacity needs urgent attention".

Conclusion

This article outlined some of the key contextual issues and challenges for SLPs working in an Australian context with individuals who are bilingual or from a CALD background. The unique linguistic environment in Australia and lack of research in relation to management of aphasia in bilingual/CALD individuals was discussed, along with some key areas for consideration in delivering a speech pathology service to this population. Areas for further research have also been highlighted. Finally, recommendations for clinical practice with individuals with aphasia who are bilingual or from a CALD background have been provided to assist SLPs currently working with this population.

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Time for change

Results of a national survey of SLP practice in CALD aphasia rehabilitation

Sonia Pang, Zaneta Mok and Miranda Rose

KEYWORDS
APHASIA
CALD
CURRENT PRACTICE
REHABILITATION
SURVEY

THIS ARTICLE HAS BEEN PEER-REVIEWED



Sonia Pang (top), Zaneta Mok (centre) and Miranda Rose

This study investigated aphasia rehabilitation practices for culturally and linguistically diverse (CALD) populations via a national survey of speech-language pathologists (SLPs) in Australia. It also investigated the perceived levels of knowledge, skills, education, confidence, and satisfaction of these SLPs when working with CALD populations. Respondents (n = 73) reported having limited knowledge, skills, education, confidence, and satisfaction levels when it came to providing aphasia assessment and intervention for CALD populations. Reported challenges and areas for improvement included the limited availability of CALD assessment and intervention materials, and the limitations in clinical guidelines and information about assessment and intervention procedures. Such issues were reported over a decade ago, yet our findings suggest limited improvement. Increased attention from universities, SLP departments, and peak bodies is urgently required – and suggested by SLPs themselves – if the quality of service provision for CALD populations in aphasia rehabilitation is to improve, and disparities between CALD and non-CALD services are to be addressed.

Introduction

As of 2011, 17% of people in Australia aged 65 and over preferred to speak a language other than English (LOTE) at home and 26% were born overseas (Australian Bureau of Statistics, 2012). These statistics are likely to be reflected in the caseloads of speech-language pathologists (SLPs) such as in aphasia rehabilitation. Aphasia occurs in 30% of people with first-ever strokes (Engelter et al., 2006). In 2012, 50,000 Australians experienced a stroke and over 420,000 people were already living with stroke (Deloitte Access Economics, 2012). SLPs are reminded to monitor the quality of their services to culturally and linguistically

diverse (CALD) populations through the Speech Pathology Association of Australia (2009) position paper *Working in a Culturally and Linguistically Diverse Society*.

In Australia, much of the university curriculum and research literature surrounding speech-language pathology is tailored for monolingual English-speaking clients (The Speech Pathology Association of Australia, 2009). This has been identified as a challenge in scholarly discussions on aphasia management for CALD populations (Kiran & Goral, 2012; Lorenzen & Murray, 2008; Rose, Ferguson, Power, Togher & Worrall, 2014). It has been suggested that SLPs are required to make clinical decisions for CALD clients with little support from the research literature and evidence-based assessment and intervention materials (Lorenzen & Murray, 2009; Roberts, 1998). The lack of cultural and language concordance may translate into health care disparities, as recently identified in post-stroke speech-language pathology services (Mok, Rose, & Pang, 2013). However, little has been heard from the actual voices of SLPs in Australia with regards to their own experiences and practices. A comprehensive evaluation of our services to CALD populations must include an investigation of the current state of practice and also the state of knowledge, skills, and resources available for such practice, as reported by clinicians themselves.

Reported clinical practices of SLPs working with CALD populations

Surveys by Roger, Code and Sheard (2000) and Al-amawi (2012) have examined aphasia assessment practices with CALD populations within Australia. Both studies found that SLPs were requesting the development of more appropriate assessment tools, and were reporting a lack of knowledge, skills, and experience for working with clients from CALD backgrounds. In an investigation into aphasia rehabilitation practices of SLPs in Australia, Rose et al. (2014) found over half of respondents rated their knowledge of, and confidence with, therapy approaches and techniques for CALD clients as less than adequate.

Elsewhere, similar findings have been reported by Centeno (2009) who surveyed SLPs working in adult neurorehabilitation in New York state, USA. Specifically, respondents identified several important conceptual and clinical areas which they felt to be important in entry-level course training and continuing professional development, such as the understanding of aphasia in bilingual speakers and strategies for assessing and testing bilingual speakers.

Table 1. Localities of service provision for Australian SLPs

Locations	Current research	Rose et al. (2013)	Speech Pathology Association of Australia (2003)
Capital cities/ metropolitan area	78.1%	58.5%	84%
Regional cities	16.4 %	41.5% (combined regional and rural locations)	10.7%
Regional towns	6.8%		3.1%
Remote area	1.4%		0.8%
Very remote area	0		0

However, a similar investigation of specific knowledge and skill gaps in Australia has yet to be made.

The current body of research raises concerns about the state of the knowledge, skills, and, consequently, the quality of the services of SLPs working in aphasia management with CALD communities in Australia. Yet, little is known about what specific knowledge and skills gaps need to be addressed. Importantly, there is also little information regarding aphasia intervention practices. Large-scale investigation into SLPs' satisfaction and confidence levels regarding the overall range of services provided to CALD clients is absent. Such information along with the perceived knowledge and skill needs of clinicians can inform professional development (PD) and university programs of potential improvements and move us closer to providing quality culturally competent aphasia management services.

Aims

This research aimed to investigate current demographic characteristics, perceived levels of knowledge, skills and education, aphasia rehabilitation practices, and perceived levels of confidence and satisfaction of SLPs working in aphasia rehabilitation in Australia with CALD clients. For the purpose of this paper, we use the term CALD as a broad descriptor to refer to individuals other than the English-speaking Anglo-Saxon majority. We acknowledge that in common use the term CALD is often used to refer to individuals born overseas (Sawrikar & Katz, 2009); however, we chose not to focus on migrant status as a defining feature of the term in our survey. We also note that the term CALD does not generally include Aboriginal and Torres Strait Islander communities and we have not focused on the issues specific to these people; however, we have included occasional mention of these communities in our paper where our participants have raised relevant issues. We also investigated the challenges faced, and changes required, as reported by SLPs when working with CALD populations.

Method

Participants

Members of the target population were SLPs with a caseload including patients with aphasia (PWA) in Australia at the time of the survey. The survey link was accessed 88 times; however, only 73 surveys were completed and analysed. Fifteen incomplete surveys were excluded because the respondents completed less than 40% of the questions. At the time of data collection, there were approximately 720 SLPs on a national database held by the Speech Pathology Association of Australia who self-listed adult language disorders (including aphasia) as a specialty area in their profiles (M. Bradley, personal communication, 7

May 2013). This indicates that approximately 10% of the potential target population was recruited for this study. The average number of years spent working as a SLP was 6.70 ($SD = 4.8$) with 16.4% respondents indicating they have worked for more than 15 years. Table 1 details the regions in which the respondents provided services and how this compares to the general Australian SLP population and to the results from a recent survey into general aphasia rehabilitation practices by Rose et al. (2014). Respondents were sourced from mailing lists of the Centre for Clinical Research Excellence in Aphasia Rehabilitation and the Speech Pathology Australia Email Google Chat Group. Recruitment advertisements were also placed in the Speech Pathology Australia national and state branch e-newsletters. Ethics approval for this study was granted by the La Trobe University Faculty of Health Sciences Human Ethics Committee (FHEC 12/193).

Questionnaire

A 30-item internet survey was piloted on a group of six volunteer SLPs experienced in aphasia rehabilitation. The final survey consisted of 31 items and was expected to take 30 minutes to complete. The survey was available to respondents during March and April 2013. Results from one section of the survey dedicated to interpreting services will be reported in a future publication. The questionnaire is provided in the Appendix.

Analysis

A content analysis was conducted on text responses to open questions (Berg, 1998). Responses for each question were given a thematic code by the first author. Similar codes were grouped together to generate a "theme". All themes that were generated were then analysed to determine if macro-level themes which encompassed themes with related content were present. Using the themes that were generated, the second author re-coded 10% of all the responses. Point-to-point inter-rater agreement was achieved at 91.4%. Descriptive statistics were used to analyse responses to closed questions. Descriptive analyses are used to describe different characteristics of a population, and commonly used in survey research (Portney & Watkins, 2009). Frequency counts of nominal and ordinal data were conducted and expressed as numerical figures and percentages. Measures of central tendency (mean) and dispersion (range and standard deviation) were calculated for ratio data.

Results

This paper reports the survey findings with regards to the knowledge, skills, and education of our profession, and areas of clinical practice relevant to these topics. While the

participants' responses also yielded information about other service delivery concerns such as SLP staffing, interpreter adequacy, and working with families, information about these results will be reported elsewhere.

Demographics

All participants we required to have some clinical experience with aphasia. The average number of years spent working with PWA was 6.1 ($SD = 4.6$) with a range of less than 1 to 15 or more years. The majority of respondents (60.6%) reported providing services in acute settings and 54.9% in inpatient rehabilitation. Sixty-one per cent of respondents reported 10% or more of their caseloads comprised CALD clients.

A large proportion of respondents indicated that they worked with clients who spoke LOTE, with the 5 most common languages encountered being Chinese, 67.6%, Italian, 66.2%, Greek, 46.5%, Vietnamese, 35.2%, and Arabic, 27.8%. Just over a third of SLPs (37.5%) indicated they spoke one or more LOTE. The most common LOTE known by respondents was Italian. There were a number of languages spoken by their clients for which no SLP reported proficiency. Of the respondents who reported speaking LOTEs, only 26% ($n = 7$) indicated they were able to provide aphasia assessment and intervention in these languages.

Knowledge, skills and education

With respect to their knowledge and skills, over half the participants indicated having less than adequate (i.e., very limited or limited) knowledge regarding the impact of aphasia on the neurolinguistic basis of bilingual processing (52%) and the impact of aphasia on linguistic systems other than English (63%). A smaller but still sizeable proportion reported having less than adequate knowledge and/or skills regarding strategies for assessment (32%) and intervention (33%). With regards to working with interpreters, the large majority (94%) of respondents indicated having adequate to very good level of knowledge and/or skills. Table 2 presents a summary of the descriptive statistics for these results and Figure 1 displays the amalgamated results.

As for the respondents' perceptions of their university education and training, the majority indicated receiving very limited to limited education regarding the impact of aphasia on neurolinguistic bases of bilingual language processing (69%), the impact of aphasia on languages with linguistic systems different from English (81.7%), strategies for assessment (70.4%), strategies for intervention (77.5%), and working with interpreters (64.3%). Table 2 provides a

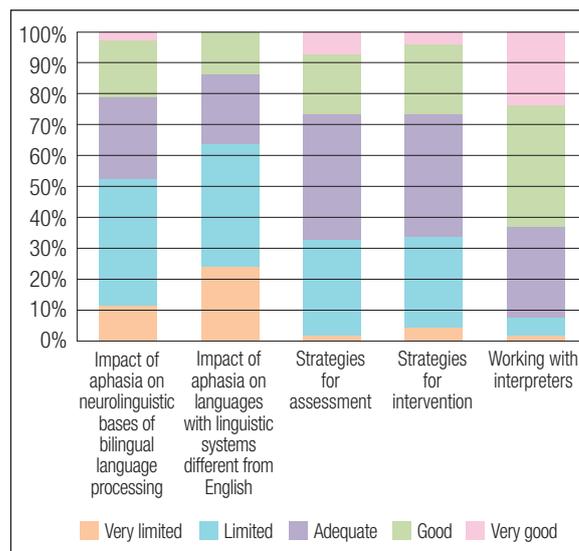


Figure 1. Respondents' perceived knowledge and/or skill levels

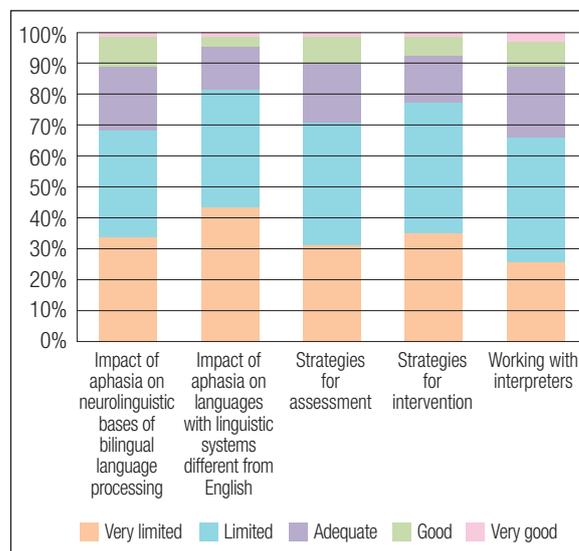


Figure 2. Respondents' perceptions of university education levels

summary of the descriptive results and Figure 2 displays the amalgamated results.

Ninety per cent of respondents indicated they felt they would benefit from participating in professional development (PD) opportunities regarding CALD in aphasia rehabilitation/management. Many respondents reported feeling interested to very interested in participating in PD

Table 2. Means, standard deviations and range of scores for knowledge and/or skills and university education levels

Variable	Knowledge and/or skill levels			Perceived university education levels		
	Mean	SD	Range	Mean	SD	Range
Neurolinguistic bases	2.6	1	1–5	2.09	1.03	1–5
Languages with different linguistic systems	2.3	.9	1–4	1.8	0.88	1–5
Assessment	3	.9	1–5	2.09	0.99	1–5
Intervention	2.9	.9	1–5	1.96	0.93	1–5
Interpreters	3.8	.9	1–5	2.23	1.02	1–5
SD = standard deviation						

Table 3. Means, standard deviations and range of scores for interest levels in PD opportunities and frequency levels of PD opportunities sought

Variable	Interest levels in PD opportunities			Frequency levels of which PD opportunities are sought		
	Mean	SD	Range	Mean	SD	Range
Neurolinguistic bases	4.2	1	1–5	1.6	1.2	0–4
Languages with different linguistic systems	4.1	0.9	1–5	1.6	1.2	0–4
Assessment	4.2	1.1	1–5	1.9	1.3	0–4
Intervention	4.2	1.1	1–5	1.9	1.2	0–4
Interpreters	3	1.1	1–5	1.5	1.2	0–4

SD = standard deviation

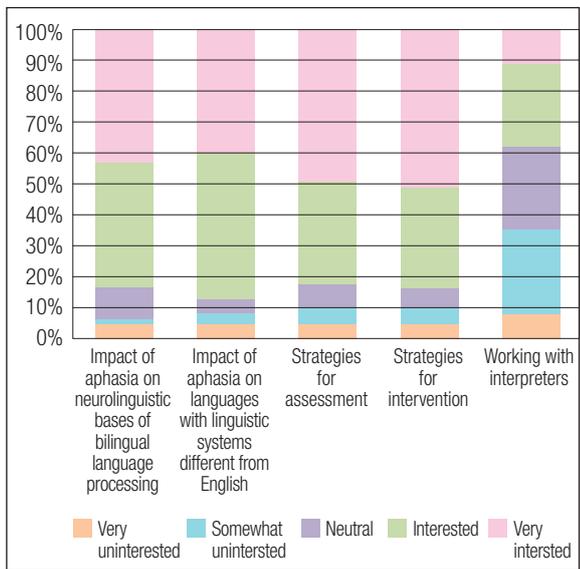


Figure 3. Respondents' levels of interest in professional development opportunities

regarding the impact of aphasia on neurolinguistic bases of language processing (86%), the impact of aphasia on linguistic systems of LOTE (87%), and assessment (83%) and intervention (83%) strategies. Yet, the large majority of respondents indicated either never, rarely, or very rarely seeking PD opportunities in the same areas (60–77%). These results are summarised in Table 3 and Figures 3 and 4.

Rehabilitation practices used

Forty-one per cent of respondents reported there were no service delivery policies in place in their current workplace specifically regarding CALD in speech-language pathology. Twenty-six per cent reported there were policies in place and 33% reported not knowing whether there were policies in place. Of the 26% who reported having policies in place, 29% reported not being able to comply with these policies. The main reasons for non-compliance included the respondents' "lack of access to and availability of interpreters", with some specifically commenting on the difficulty of finding interpreters familiar with the clients' language and/or culture. The limited availability of speech-language pathology resources and time to conduct aphasia assessments were also reasons for non-compliance with CALD policies. One respondent reported concerns that not

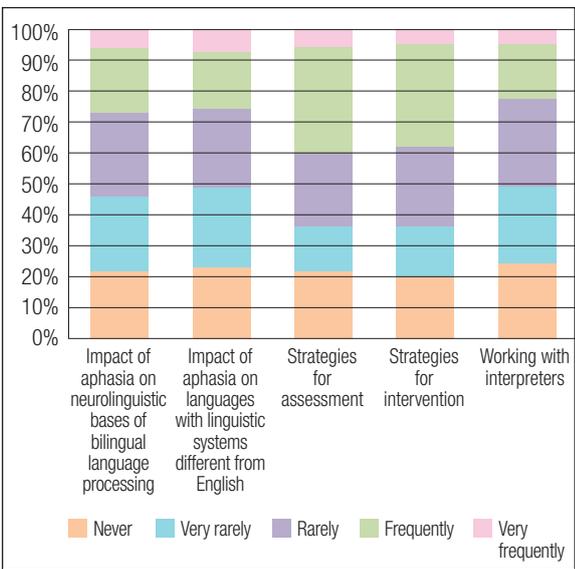


Figure 4. Frequency respondents seek professional development opportunities

having adequate policies in place might "lead to overly stereotypical response to CALD families, everyone is an individual and not all Arabic families require the same approach, as don't Chinese as don't Caucasian".

Sixty per cent of respondents targeted both English and the LOTE during assessment. Thirty-six per cent reported targeting the LOTE alone, 4% reported targeting English alone and 46% reported targeting LOTE and English. With respect to intervention, 46% reported targeting LOTE alone, 41% reported targeting both the LOTE and English, and 13% reported targeting English alone. The majority of respondents indicated that they *very frequently* or *frequently* identified the pattern of language use before aphasia (91%) and client preferences (87%) to determine which languages to target for assessment and intervention. Fewer respondents indicated using family member preferences (35%) and the most intact language following aphasia (56%) *frequently* or *very frequently*. Most respondents (76%) indicated using interpreters *very rarely*, *rarely* or *sometimes* to determine the target language. These results are summarised in Figure 5.

Challenges and changes

When asked about the challenges they faced when working with CALD populations, respondents noted that a lack of

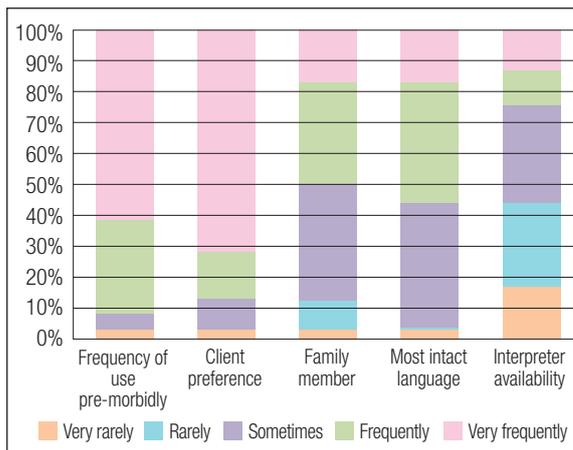


Figure 5. Frequency which different factors impact on language selection for assessment and intervention

knowledge and skills, a lack of assessment and intervention material, and also concerns with the quality of the services provided were major challenges. They reported having limited access to, and availability of, culturally appropriate assessment materials and resources, specific LOTE materials for aphasia-specific consumer education and information. Additionally, a number of respondents reported having limited knowledge and skills in appropriate processes for assessment and intervention, linguistic structures of LOTEs (e.g. morphology, syntax), speaking client LOTEs, and education of the concept of aphasia, and rehabilitation to CALD clients. Respondents also commented on the limited amount of research about aphasia management for CALD clients.

Many respondents commented on specific concerns about the delivery of their services. With regards to assessment, these were:

- limited opportunity for informal observations
- problems with transferring use of English assessments to LOTEs
- subjective measurements
- difficulties assessing higher level language and literacy tasks
- difficulties determining a diagnosis, in relation to whether the SLPs were able to confirm whether a perceived error was due to aphasia or ESL, differentiating between different LOTE and dialects, and determining pre-aphasia communication levels.

Challenges in intervention included:

- difficulty choosing/accessing appropriate topics/materials
- difficulty accessing group therapy for LOTE
- difficulty determining the target language
- ongoing concerns for support and carry-over post discharge
- difficulty educating clients about the value of speech-language pathology.

Additionally, difficulties with building client rapport, the clients' lack of uptake of health care services, and a fear of behaving in a disrespectful manner in terms of clients' religion and culture were also reported.

When asked to list changes they felt would be most beneficial, the availability of culturally and linguistically appropriate assessment and intervention materials and addressing the knowledge and skill base of the profession were again identified as major themes in the participants' responses. Respondents suggested addressing entry level SLP education – specifically, in providing linguistics studies and increased lecturer support. One respondent

highlighted that entry level education may not provide enough support for SLPs, “although sometimes I am not sure extra stuff at uni would have made a large difference, I would still encounter issues at a service level as well”. Another respondent also suggested, “Increased hands-on exposure to working with interpreters and working with CALD clients as component of SP degree studies”. Apart from the materials identified above, respondents were keen for specific improvements such as those already found in alternative and augmentative communication devices, an updated Bilingual Aphasia Test (McGill, 2014), and electronically based resources (online databases and i-pad applications). Many respondents called for increased continuing PD and education for SLPs and students in the following areas:

- the effect of bilingualism on language
- assessment and intervention strategies
- working with interpreters
- the impact of aphasia on LOTEs
- communication strategies with CALD clients.

Knowledge resource materials, specifically, clear protocols and guidelines for assessment were also requested. Speech Pathology Association of Australia, workplace departments, and SLPs combined with interpreters were identified as possible developers of such materials. One respondent suggested an “awareness drive by the Speech Pathology Association of Australia and joining together with cultural communities to advocate for action”.

Confidence and satisfaction

Thirty-one per cent of respondents reported feeling *very unconfident* to *somewhat unconfident* when conducting aphasia assessment, and 34% when conducting aphasia therapy. Eleven per cent reported feeling *very unconfident* to *somewhat unconfident* with their ability to effectively communicate in their clients' LOTE, 38% with their ability to improve language processing, 30% with their ability to improve client performance in everyday functioning, and 28% with their ability to improve their clients' quality of life. Only 11% reported feeling either *very* or *somewhat unconfident* in their ability to establish a positive therapeutic relationship with the client and their family. Sixty-five per cent reported feeling either *very unsatisfied* or *somewhat unsatisfied* with the availability of time to plan, prepare and provide services to CALD clients and 89.1% reported feeling *very unsatisfied* or *somewhat unsatisfied* with the materials available for assessment and intervention.

Discussion

This paper extends the small but growing body of research in this area, offering an opportunity for SLPs to voice the challenges encountered and their suggestions for improvements in aphasia rehabilitation for CALD populations. This paper offers an insight into the state of knowledge, skills, and resources available to our profession and the perceived adequacy of our university education training programs. Additionally, information about how confident and how satisfied Australian SLPs are with the services they provide to CALD clients with aphasia is provided. It appears little improvement has been made since Roger, Code, and Sheard (2000) carried out a survey of practices over a decade ago.

In our study, over half of the respondents reported having less than adequate levels of knowledge of aphasia in relation to non-English languages. In terms of assessment

and intervention strategies, a smaller but still sizeable proportion reported less than adequate skills.

A common suggestion for improvement was to provide education and training at both university and PD levels. However, the findings of our survey suggest that existing university education programs may be less than adequate in equipping student graduates with knowledge and skills for work with this population. Further, while SLPs in our study reported high interest in PD opportunities, this contrasted with the low frequency with which they sought PD activities. This discrepancy may reflect a lack of appropriate PD opportunities relevant to their specific needs. The SLPs in our study also indicated the need for resource materials to be made easily accessible and understood in the form of clear protocols and guidelines. Additionally, gaps in the availability of assessment and intervention materials were identified. These limitations are not specific to Australia and have been found elsewhere, such as the USA (Centeno, 2009).

This study points to an urgent need for improvement at multiple levels, such as in university entry-level programs, continuing PD opportunities, service policies and resources, as has been recommended by Speech Pathology Australia (2009), to better support clinicians working with CALD populations. Underlying the suggestions to address the knowledge, skills, and resource gaps, is perhaps the need for more research in aphasia management for CALD populations, as identified by several respondents in this survey and also in the existing literature (Centeno, 2009; Kiran & Goral, 2012; Lorenzen & Murray, 2008).

The challenges identified in this study may have implications for the quality of care provided. A sizeable proportion of the SLPs in this survey reported less than adequate confidence levels in their assessment and treatment, and also in their abilities to provide positive outcomes for their clients. The lower levels of confidence stand in contrast to Rose et al's. (2014) survey where SLPs reported very high confidence levels regarding adopting the range of social, functional, and neuropsychological approaches to aphasia intervention for monolingual English-speaking clients.

Limitations

The relatively small sample size in the current study suggests the results may not be generalisable to the entire Australian aphasia rehabilitation SLP population. The exact number of members in the target population, however, was unknown and it was not possible to determine the exact representativeness of the recruited sample.

Future implications

For a comprehensive understanding of the service practices across all areas of adult focused speech-language pathology, further investigation are recommended, in particular, adopting a more in-depth approach such as in-depth interviewing or focus groups, with an emphasis on contextually relevant factors requiring attention in order to mitigate change.

Conclusion

The results in this study add to the growing evidence that SLPs are still facing significant challenges in aphasia management for CALD populations. This is despite repeated calls by professional bodies and from the scholarly literature for changes to occur (Centeno, 2009; Lorenzen and Murray, 2009; Speech Pathology Association of Australia, 2009). Universities and SLP departments are urged to consider

increasing education and continuing PD about appropriate aphasia assessment and intervention practices with CALD populations. Increased research needs to also be considered, alongside mechanisms to support the development of suitable assessment and treatment materials for Australian wide distribution. It will not be sufficient to educate SLPs without equipping them with the right materials.

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Social conversations for hospital patients with acquired communication disabilities

Kathryn McKinley, Renee Heard, Sally Brinkmann, Julia Shulsinger, and Robyn O'Halloran

This paper describes the implementation of a supported conversation training program for volunteers at a tertiary hospital in Melbourne. The objective of the program was to provide increased opportunities for patients with acquired communication disorders as a result of a stroke to engage in social conversation with trained volunteers. Later, the program was extended to include inpatients with other communication-related disorders. The program was highly valued by patients, their families, volunteers, and hospital staff. Future directions include a formal evaluation of the program and rollout of the program across different health care services within the organisation.

The National Stroke Foundation estimates that 67% of people admitted into hospital with stroke have a communication disorder such as aphasia, dyspraxia of speech, or dysarthria (National Stroke Foundation, 2010). O'Halloran and colleagues (2009) also found that the number of people with communication disorders in hospital stroke units is very high. Of 69 consecutive patients admitted into acute hospital stroke units, 79% had a mild or greater hearing loss, 47% had a mild or greater cognitive communicative disorder, 44% had a mild or greater language disorder, and 26% had a mild or greater speech disorder. Of all the patients assessed, 88% had at least one kind of communication disorder and 69% had two or more communication disorders.

The consequences of having a communication disorder in hospital have also been explored. The majority of this research has focused on the consequences of having a communication disorder on health-care delivery. Sixty-four percent of the stroke patients identified as having a communication disorder by O'Halloran and colleagues (2009) had difficulty communicating with their health-care providers about their everyday health-care needs. As a result of their communication disorder, these patients did not always understand what was happening, could not ask questions about their care, and/or were unable to call for help when they needed it (O'Halloran, Worrall, & Hickson, 2012). When patients with communication disorders and their health care providers are unable to communicate successfully, the patients often experience distressing

adverse events (Hemsley, Werninck, & Worrall, 2013) and are more likely to be judged as unable to participate in decision-making about their health care (Carling-Rowland, Black, McDonald, & Kagan, 2014).

Another less obvious consequence of having a communication disorder in hospital is that there may be fewer opportunities to engage in social conversation (Hersh, Godecke, Armstrong, Ciccone, & Bernhardt, 2014). Social conversation provides people with an opportunity to describe their experiences, express personal attitudes and opinions, and feel known by another. Engaging in successful social conversations is fundamental to a person's psychological well-being (Kagan & Gailey, 1993). People with aphasia have identified social companionship, positive interactions with others, and a feeling of connectedness as integral to living successfully with aphasia (Brown, Worrall, Davidson, & Howe, 2012). Experiences of successful social interaction may also afford those patients with a newly acquired communication disorder such as aphasia with opportunities to experience themselves as competent communicators. Such opportunities might offer a contrast to other medically oriented interactions that occur in the hospital setting where they may experience themselves as incompetent communicators (Hersh et al., 2014; Shadden, 2005).

The skills required to support a person with an acquired communication disorder such as aphasia to engage successfully in conversation can be learned (Kagan, Black, Duchan, Simmons-Mackie, & Square, 2001; Parr & Byng, 1998). Based on a systematic review of the literature, Simmons-Mackie and colleagues (2010) concluded that communication partner training is effective in improving a communication partner's ability to engage in conversations and probably effective in enhancing the ability of the person with aphasia to engage in conversations. Family and friends may need time to adjust to the changes that have occurred and the time and opportunity to learn how best to communicate with their loved one. Volunteers who have received communication partner training may provide immediate opportunities for inpatients with newly acquired and chronic communication disorders to engage in rewarding social conversation.

St Vincent's Hospital Melbourne delivers a variety of programs with the help of volunteers. In one program named "Angel Volunteers", trained volunteers provide companionship to patients identified as being at risk of falling. The volunteers engage them in a range of diversional activities such as conversation and reading. Ways to expand the role of the Angel Volunteers were discussed by the first author who had visited Connect (www.ukconnect.org).

KEYWORDS

HOSPITAL

STROKE

SUPPORTED
CONVERSATION
PARTNER
TRAINING

VOLUNTEERS

THIS ARTICLE
HAS BEEN
PEER-
REVIEWED



Kathryn McKinley (top), Renee Heard (centre) and Sally Brinkmann

org/) and the Aphasia Institute (www.aphasia.ca/) and had completed training in supported conversation and the second author who had noticed that many inpatients with communication disorders in the hospital appeared bored and had few opportunities to engage in conversation. Together, they saw the opportunity to provide some Angel Volunteers with supported conversation partner training so that patients with acquired communication disorders following stroke could have more opportunities for enjoyable social interactions. While the authors were aware of a home-based supported conversation partner scheme for people with chronic aphasia living in the community (McVicker, Parr, Pound, & Duchan, 2009), this was the first program that they were aware of that provided supported conversation opportunities to hospital inpatients with acquired communication disorders.

Members of the speech pathology department conducted a short survey of ten patients with acquired communication disorders to gauge their interest in the proposed program. All ten patients stated that they enjoyed having good conversations in hospital but only three said they were actually having good conversations. Six of the ten patients indicated that they would like more opportunities for good conversations. They also stated that health was the main topic of conversation in hospital and they had a desire to discuss other topics. This short survey indicated that there would be interest from patients for more opportunities for social conversation, therefore a Supported Conversation Volunteer (SCV) program was piloted.



Julia Shulsinger (top), and Robyn O'Halloran

The Supported Conversation Volunteer Pilot Program

A number of steps were taken to establish the pilot SCV program. The speech pathology manager (first author) engaged with the key stakeholders including the volunteer manager and acute stroke and inpatient rehabilitation nurse unit managers to inform them about the proposal and to gain their support. Then, the first author submitted the proposal to the Allied Health Quality Committee and it was subsequently approved. The volunteer manager then approached two volunteers to participate in the pilot. These volunteers had already completed all of the necessary induction and training processes required to volunteer at St Vincent's. These included an interview, reference checks, a police check, attendance at a half-day orientation program for all new staff, and a full-day volunteer orientation program.

The speech pathology team provided information and education about the SCV program to nursing, allied health, and medical staff in the acute stroke and inpatient rehabilitation units within the hospital. They also developed guidelines, procedures, and resources to support the implementation and evaluation of the program. These included criteria to identify suitable patients for the program, procedures for referring patients, and a referral form. Criteria included a recent diagnosis of stroke, presence of a post-stroke communication disability, ability to concentrate for 20–30 minutes, conversational English, and an interest in being visited by a volunteer. A position description that outlined the roles and responsibilities of supported conversation volunteers and a document detailing the procedures for volunteers were also written. To support the volunteers in conversation with patients, a communication history questionnaire and resource folders were also developed. The communication history questionnaire was designed to be completed by the patient or a close other and included information about the patient's premorbid communication style, family, friends, lifestyle, hobbies, and interests. The resource folders included paper and markers, whiteboards,

a range of different maps, alphabet, and number boards, picture-based resources, topic cards, and word lists such as the months of the year and days of the week. Finally, a communication partner training program, tailored to meet the needs of this new program and the hospital setting was developed. This program is described in detail below.

Supported conversation volunteer training

Information and resources from The Communication Access Toolkit (Parr, Wimborne, Hewitt, & Pound, 2008) and the Supported Conversation for Adults Training Workshops (The Aphasia Institute, <http://www.aphasia.ca/health-care-professionals/ai-training/>) were combined with newly developed resources to create three separate workshops. In the first workshop, volunteers were



orientated to the program, given theoretical information about acquired communication disorders and supported conversation, and then participated in role plays. Further details about the first workshop are provided in Table 1. The second workshop, described in Table 2, included observation of a speech pathologist using supported conversation with inpatients with acquired communication disorders. These patients were current inpatients who had been referred to speech pathology and had agreed to assist with the training. The volunteers were then given the opportunity to try supported conversation strategies with these patients under the supervision of a speech pathologist. The final workshop, described in Table 3, provided volunteers with further opportunities to use supported conversation strategies with participating patients with acquired communication disorders. Opportunities for feedback and reflection were also included as part of the second and third workshops. The volunteers completed all of the training and completed a post-training questionnaire, which indicated that they felt confident providing conversation support to inpatients with acquired communication disorders before the SCV program commenced.

The pilot program

The pilot program began in February 2011 and ran for 6 weeks. Patients were referred by their treating speech pathologist and the coordinators allocated the patients to each volunteer. The treating speech pathologists on the rehabilitation units also scheduled the volunteers' appointments on the patients' weekly rehabilitation timetables. Every week, each volunteer engaged 1–2 patients in approximately 30 minutes of conversation each. In total, over the six-week trial, the two volunteers engaged ten patients in a total of 24 hours of conversation.

After each supported conversation, the volunteer completed a reflective journal and documented the amount of time spent with the patient, the topics that were

Table 1. Training workshop 1		
Workshop outline	Description	Duration
Introduction	Introduction to the St Vincent's Supported Conversation Volunteers Program including the aims of the program and the role of volunteers	10 minutes
Theory component 1 – types of communication disorders	An introduction to different types of communication disorders including aphasia, dysarthria, dyspraxia, and cognitive-communication disorders	20 minutes
Theory component 2 – supported conversation strategies	Information on supported conversation strategies and techniques using information and resources from the Connect, UK and the Aphasia Institute Video clips were used to support this part of training Volunteers were also shown the supported conversation resource folders to assist them in conversations with patients	1 hour
Break		30 minutes
Practical scenarios	Participation in role play tasks using the supported conversation skills learnt during the theory components of training	30 minutes
Suggested reading	Provision of additional information on communication disorders and supported conversation strategies and suggested home reading tasks	10 minutes
St Vincent's Deaf and Hard of Hearing Program	Information on the St Vincent's Deaf and Hard of Hearing Program Volunteers were also shown how to use different types of hearing aids and assistive listening devices	30 minutes
Tour of St Vincent's Hospital	Volunteers were given a tour of the St Vincent's Hospital acute stroke and inpatient rehabilitation units and introduced to nurse unit managers and key ward staff	25 minutes
Questions and reflections	Opportunity to ask questions about the training workshop and reflect on skills learnt	25 minutes
Total time		3.5 hours

Table 2: Training workshop 2		
Workshop outline	Description	Duration
Volunteer observations of speech pathologists	Volunteers observed two speech pathologists using supported conversation strategies in conversations with four patients with acquired communication disorders on the acute stroke and inpatient rehabilitation units	2 hours
Break		30 minutes
Speech pathologist observations of volunteers	Each volunteer was observed by a speech pathologist, using supported conversation strategies in conversation with a patient with acquired communication disorder following stroke	30 minutes
Volunteer feedback and reflection	Volunteers received feedback on their performance separately and then had the opportunity to reflect on their experiences together	30 minutes
Total time in training		3 hours

Table 3. Training workshop 3		
Workshop outline	Description	Duration
Speech pathologist observations of volunteers	Continuing on from workshop 2, speech pathologists observed volunteers using supported conversation strategies with a further 3 more patients	2 hours
Break		30 minutes
Deaf and hard of hearing observations	Volunteers observed a speech pathologist completing 2 deaf and hard of hearing consultations with patients on acute wards	30 minutes
Volunteer feedback and post workshop	Volunteers were given feedback on their performance and had opportunity to share final reflections on their overall experiences during training Volunteers completed a post training written feedback survey	60 minutes
Total time in training		3.5 hours

discussed, and what was successful and/or challenging about the conversation. These reflective journals were kept with the patient referral forms in a shared folder in the speech pathology department. Both the volunteers and the referring speech pathologists had access to this folder. Ongoing support was provided to the volunteers through weekly face-to-face meetings with the speech pathologists coordinating the program. The reflective journals were used as a tool to support these debriefing sessions which usually took between 5 and 15 minutes.

Evaluation

The pilot program was evaluated by the patients and volunteers. The volunteers completed a written survey about their expectations of the program and their experience. The ten patients who participated were also invited to provide feedback about the program with the support of an aphasia-friendly written survey (Rose, Worrall, Hickson, & Hoffmann, 2011). The patient survey included questions about having social conversations in hospital, their confidence communicating with a volunteer, and their satisfaction with the program as well as any other comments. Written and face-to-face interviews were conducted according to each patient's communication support needs. The surveys provided quantitative and qualitative information which was analysed informally by the SCV program coordinators.

Outcomes

Both volunteers reported that they enjoyed the program and that it had met their expectations, although they both found it challenging when they were unable to communicate successfully with a patient despite using different kinds of communication support. All of the patients indicated that being part of the program provided them with more opportunities to communicate. They reported feeling satisfied with the program and the amount of time spent with the volunteers. Although some patients indicated that they would have liked to spend more time with the volunteers, no patients expressed that they wanted to spend less time with the volunteers. Unexpectedly, some patients said that they had started creating other opportunities for communication following time spent with the volunteers. For example, they would use topics that they had discussed with the volunteers with staff and family on the wards.

Patient reflections

For hospital inpatients, the SCV program provides more opportunities for meaningful, enjoyable interactions. Conversation topics typically include family and friends, work and education, hobbies, and preferences as well as their experience in hospital. Although sometimes having a volunteer visit when the patient is feeling tired can be difficult, patients frequently say that a conversation with a volunteer "takes my mind off my illness and my worries". Some patients have also described feeling more confident communicating, as well as simply enjoying the communication experiences, in spite of their difficulties. One patient told the treating speech pathologist "I really enjoyed it. When's she coming back?"

Volunteer reflections

Volunteers have also described several benefits. Speech pathology student volunteers have reported that the training and practical experience of supporting patients with communication disorders in conversation has been invaluable in developing their professional skills and enhancing their understanding of the consequences of acquired communication disorders. Student volunteers who have

since become practising speech pathologists have also reported that participating in the SCV program provided a way to demonstrate their commitment, insight, and skills in job applications. Volunteers not otherwise affiliated with speech pathology have commented upon the sense of value they experience as volunteers. Volunteers have reported that they often have much in common with patients, who appear to appreciate their perspectives on life experiences. These volunteers often report increased confidence and skill in communicating not only with patients with communication disorders but also with patients from culturally and linguistically diverse backgrounds.

Clinician reflections

Clinicians have responded positively to the SCV program. Anecdotally, they report that it provides patients with opportunities to practise communication strategies learned in therapy in a supportive environment. They have also received valuable feedback from volunteers during debriefing sessions, which has enabled them to gain a more holistic view of the patient. At times this has led to clinicians initiating referrals for patients and/or family members to other health professionals and/or to pastoral care for support. Clinicians have also reported that the presence of supported conversation volunteers on the ward and the positive feedback from patients and visitors have increased the awareness of staff and visitors about the skills required to successfully communicate with people with acquired communication disorders and the breadth of the speech pathologist's role. The SCV program has also resulted in greater recognition of the speech pathology profession. The SCV program won the St Vincent's Health Australia Quality Award in the category of Mission and Social Justice, Mary Aikenhead Award – Strengthen and Grow Our Mission in 2013 and it was Highly Commended at the 2013 Victorian Public Healthcare Awards in the category of Excellence in Service Provision.

Expansion of the SCV program

On the basis of this positive feedback, the SCV program has continued in the acute and inpatient rehabilitation units and in September 2012 it was expanded to include adult inpatients with acquired communication disorders secondary to head and neck cancer. To date, 15 volunteers, including five volunteers who were also speech pathology students, have received supported conversation training and 163 patients have participated in the program, engaging in 660 conversations.

Challenges and future directions

Despite the success of the SCV program, staff members have reported that running this program can be demanding and does present some challenges. Recruitment to the Supported Conversation Volunteer Program needs to coincide with St Vincent's volunteer intake program. All volunteers must first be recruited to the St Vincent's volunteer program and attend an interview prior to commencing their preferred volunteer role. At present, this orientation only occurs three to four times per year and this can mean suitable volunteers are not always available. Further, the speech pathology department makes a considerable investment to train volunteers and the observation and supervision sessions can run over many weeks. Therefore, speech pathologists involved in the training have felt frustrated when volunteers leave soon after completing the training or are unable to commit to regular times to volunteer once they are trained. In addition, debriefing sessions with volunteers can be lengthy if the volunteer found communicating with a patient particularly difficult.

To ensure the ongoing sustainability of the SCV program, more explicit criteria around the availability and commitment of volunteers may be required. The training requirements may also need to be modified. For example, many speech pathology students now undertake communication partner training as part of their university course and therefore such an extensive onsite training program may not be needed for these volunteers. Given that many speech pathology students are now receiving training in supported conversations and those students who volunteer describe it as a very positive and beneficial experience, it may be that providing opportunities to have social conversations with hospital inpatients with acquired communication disorders may provide a valuable introductory student placement. The availability of a larger pool of highly skilled supportive communication partners would also enable the SCV program to be rolled out into the other areas of the St Vincent's health service network to include people in residential aged care settings and those attending community rehabilitation services. A pool of highly skilled bilingual supportive communication partners would also provide the opportunity to offer this program to inpatients with communication disorders who speak languages other than English. Finally, formal evaluation of the program is required to investigate the reported outcomes for patients, clinicians, and volunteers.

Conclusion

Many inpatients with communication disorders do not get the opportunity to engage in social conversation. The SCV program provides volunteers with supported conversation training so that they can provide patients with the opportunity to have supported, enjoyable conversations. The speech pathologists, volunteers, and patients have all reported that the SCV program provides many benefits. Further evaluation of the program is required to understand the benefits of this program more fully.

Acknowledgements

We would like to acknowledge the St Vincent's Hospital Speech Pathology Department for their support and contribution to the program over the past four years, in particular, Bernadette Price for her contribution to the early development and establishment of the program and Marinda Brooks for her contribution to the extension and evaluation of the program. We would also like to thank the volunteer managers at St Vincent's Hospital and St George's Health Service for their valued support of the program. Finally, we would like to thank all the SCV volunteers for volunteering their time and making a difference to patients with acquired communication disabilities at St Vincent's.

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Diversity in speech pathology

Endangered or extinct?

Nicole Byrne

- KEYWORDS
- CAREER CHOICE
- DIVERSITY
- SEX DIFFERENCES
- SP
- SPEECH PATHOLOGISTS
- WORKFORCE

THIS ARTICLE HAS BEEN PEER-REVIEWED



Nicole Byrne

Australia's Health Workforce Series' report *Speech Pathologists in Focus* provides an opportunity to review the demographic profile of speech pathologists in Australia over the last 15 years. Currently, speech pathologists are not representative of either the Australian population, or of the clients who access the services. The scant research available also suggests that some population groups are less likely to access health and speech pathology services (e.g., Indigenous Australians, people from non-English speaking backgrounds). Greater workforce diversity, commensurate with the populations serviced, may assist in enhancing equity of services and increasing engagement and attendance at therapy for currently underrepresented client groups.

The recent Health Workforce Australia (2014) report *Speech Pathologists in Focus* in the Australia's Health Workforce Series provides the first comprehensive information on the speech pathology workforce in Australia. Byrne (2007) identified that a comprehensive workforce report on speech pathology (SP) has not previously been provided as had been available for other allied health professions, such as physiotherapy (Australian Institute of Health and Welfare [AIHW], 2000) and occupational therapy (AIHW, 2001). This Health Workforce Australia (2014) *Speech Pathologists in Focus* report is the first government agency publication providing information on all people working as speech pathologists in Australia.

Previous speech pathology workforce reports have been conducted via the professional association, Speech Pathology Australia (SPA; Lambier, 2002). Consequently the data, which were gathered via membership surveys, were limited to those people who were voluntary members of SPA and not necessarily representative of the whole working profession. Additionally, the data may have included people who were not actively working as speech pathologists, but who maintained membership. The current Health Workforce Australia (2014) data reports on SP participation in the Australian workforce and makes comparisons to census data for each of the four-year periods from 1996 to 2011. The current paper considers

the census data reported for 1996 and 2011 (Health Workforce Australia, 2014) and discusses the trends and the possible future implications for the profession. The report also provides information on student enrolment in university programs.

The drivers and demographics of the speech pathology workforce in Australia

University programs

Speech pathology is a growing profession in Australia. Both the number of universities providing SP programs and student intake numbers have grown steadily. For example, in 2007 there were eight Australian universities offering a four-year (full-time) undergraduate Bachelor degree (and some Masters programs) in SP (Charles Sturt, Curtin, Flinders, James Cook, La Trobe, Newcastle, Queensland, Sydney). Macquarie University offered only a Masters entry-level program. By 2014, there were an additional six universities offering the SP program (Australian Catholic [which offers the program on three campuses – Sydney, Melbourne, Brisbane], Melbourne, Central Queensland, Southern Cross, Edith Cowan, and Griffith; Speech Pathology Australia, 2014a).

Male participation rates

Table 1 shows that the number of people working as a speech pathologist more than doubled over the data collection period and there was an increase in the number of males working in the profession. Unfortunately, the increase in the male numbers has been proportionally lower than the increase in female numbers. The 2011 participation rate for male speech pathologists (i.e., the proportion of speech pathologists that were male) was the lowest that it had been for the preceding 15 years.

Table 1: Male participation in SP workforce

	Census 1996	Census 2011
Total speech pathologists	2,322	5,295
Number of male speech pathologists	77	134
% of total that are males	3.3%	2.5%
Source: Health Workforce Australia, 2014		

The 2011 census data (Health Workforce Australia, 2014) also identified that there were comparatively more males (7.5%) than females (6.8%) aged over 55 years, indicating in the next 10 years a greater proportion of males will likely retire from the profession. Therefore, unless the number of male entrants into the SP programs increases in the next six years (i.e., allowing for four years for program completion), the proportion of males working as speech pathologists will fall further in the future.

Unfortunately, the university commencement data indicate that there continues to be poor representation of males entering SP programs. This suggests that a change in the sex balance of the SP workforce is not going to occur in the near future. The information on students both entering and completing university programs from the Health Workforce Australia (2014) report provides potential prediction of the “drop out” rate of male SP students. This is a crude technique, which acknowledges that not all students will be required to complete the four years of the degree and that not all will do so as a full-time students, nor in consecutive years. Nevertheless, the data indicate that students who commenced the SP program in 2008 were 95.4% female. However, those completing in 2012 were 97.1% female. This discrepancy indicates that not only are fewer males entering SP programs, but also that a lower proportion of those males complete programs. The reasons for this discrepancy warrant further investigation.

Table 2: Indigenous Australian participation in SP workforce		
	Census 1996	Census 2011
Number of speech pathologists identifying as Indigenous Australians	3	11
% Indigenous Australian speech pathologists	.13%	.21%
Source: Health Workforce Australia, 2014		

Participation rates of Indigenous Australians

There is some good news in regards to the participation rates of speech pathologists identifying as Indigenous Australians. While the overall number of Indigenous Australian speech pathologists is still extremely low (n = 11 in 2011), the number has increased nearly four-fold. More importantly the proportion of Indigenous Australian speech pathologists has increased by 61%. While this provides a positive indication of the ability to change the demographic profile of SP in Australia, it needs to be stressed that there is still significant work to be done. There needs to be a concerted effort to strategically increase the Indigenous Australian participation rate in SP in Australia, in order to be reflective of the Australian population and to provide a role model and conduit within with the Indigenous Australian community and Indigenous Australian clients. The Health Workforce Australia (2014) report does not provide information on enrolments or completions of students who identify as Indigenous Australians.

Participation rates of people who are culturally and linguistically diverse

The Health Workforce Australia (2014) data suggests a small increase from 16.3% to 17.1% in the period from

1996 to 2011 in the in the number of speech pathologists born outside of Australia. There was a small increase (0.7%) in the number of speech pathologists born in Southern and East Africa. However, some consideration must be given to that fact the “did not respond”/“incomplete response” for this question for the 2011 census (6%) was double that for the 1996 census (3%), and thus the rate of speech pathologists who were born overseas may in fact be slightly higher.

Regarding linguistic diversity, Lambier (2002) reported less than 9% of speech pathologists (who were members of SPA) spoke a language other than English at home. The Health Workforce Australia (2014) report only considered whether speech pathologists were born overseas, which is not necessarily an indicator of cultural and linguistic diversity, as many overseas born speech pathologists will come from an English speaking country (e.g., UK), and many people born in Australia speak other languages. The SP workforce needs to identify methods to collect data on participation rates for people from culturally and linguistically diverse backgrounds, as this is currently not accessible through government agency reporting. Such data is crucial to inform the development of targeted strategies aimed at increasing representation to levels consistent with the general population.

International SLP students

The Health Workforce Australia (2014) data indicate that while there was a peak in the proportion of international students on study visas entering SP programs in 2009 (11.0%), the largest intake of international students was in 2011 (n = 94). The total number of international students increased from 52 in 2008 to 91 in 2012, consistent with overall increased program intake numbers, resulting in a maintenance of the proportion of SP students who were international students (7.9%). The results do not provide information regarding course enrolment type (i.e. Bachelor versus postgraduate), although Atrill, Lincoln, and McAllister (2012) reported there were a higher proportion of international students entering graduate than undergraduate SP programs.

There was a small but steady increase (2.2%) in the proportion of international students completing SP programs (11.1% in 2012). This suggests a comparatively higher completion rate for international SP students. Atrill and colleagues (2012) reported that cultural and linguistic background was a more important factor than country of birth in regard to SP student competency development. The impact of cultural and linguistic background on both intake and completion of a speech pathology program in Australia needs further examination. Consideration must also be given to a number of factors that may impact future enrolments of international students into SP programs, including foreign exchange rates, program costs, English language requirements, and delivery of SP program content overseas.

Relevant factors influencing client attendance at SLP services

Research suggests that some groups in the community (e.g., Indigenous Australian and culturally and linguistically diverse families) are less likely to access both health (Kelaher & Manderson, 2000; Ou, Chen, Hillman & Eastwood, 2010) and SP services (Broomfield & Dodd, 2004; Pickering & McAllister, 2000). An American review of cultural and linguistic diversity (CALD) across health care

services has identified the following: there is clear evidence that CALD health professionals are more likely to work with CALD/underrepresented clients and these clients benefit via communication and increased interpersonal care and attendance at appointments. Further, it was reported that increasing the proportion of CALD health professionals would improve the quality of care that CALD clients receive, including increasing likelihood of attendance and compliance with health care services (US DHHS, 2006). Professional exposure to a speech pathologist has been identified as a key factor in influencing the decision to enter SP as a career (Byrne, 2008a), highlighting a paradox where reduced access to SP services by Indigenous Australians and people from CALD groups will likely impact on the ability to influence minority groups to enter a SP program.

Implications

Addressing male participation rates

There has been some discussion over the years in regards to the sex imbalance in SP in Australia (Byrne, 2008b; McAllister & Neve, 2005; Nickless, 2004) and while recommendations have been made there has been little co-ordinated effort to address the issue. SPA has taken steps to promote the profession to males – see, for example, the webpage titled: Real Men Do Speech Pathology (Speech Pathology Australia, 2014b). This webpage is accessed by selecting the “Information for the community” then the “Education & Career opportunities” option. There are three videos of male speech pathologists and the content of these videos focuses on adult, acute care technology (e.g., FEES, AAC). While that portion of the SPA website aims to address this imbalance, it is not clear if the strategy has been effective or sufficient on its own, and further whether it may be counteracted by other aspects of the website. For example, the front page of the SPA website has a video which identifies a number of work areas for speech pathologists (Speech Pathology Australia, 2014c), and while there is a male voice over, it shows pictures only of female speech pathologists.

Byrne (2007) highlighted the low number of male SP students was potentially isolating. For example, male SP students report “*It is a bit of a social adjustment...I don't like to be considered as 'one of the girls'.*” (p. 149) and female SP students report: “*there only two guys here and I don't think they're going to last long*” and “*I'd say that males actually enrolled initially, are deterred by the fact that there are a lot of females*” (p. 148). Male SP interest/support groups (e.g., SPA Blokes in SP) and Internet websites targeting male speech pathologists (e.g., The Speech Dudes, 2014) are available, although it is not again clear what role these may play in attracting males to SP, facilitating completion rates or retention in the profession.

A co-ordinated and high level approach (e.g., professional associations, universities) in consultation with male speech pathologists/ students is needed to implement strategies aimed at increasing male SP participation rates. Further, any identified strategies that are implemented need to be evaluated for effectiveness. For example, consideration needs to be given to promotional marketing of SP (e.g., career presentations, SPA website; McKinson, 2007) to include males, working in various settings, with various client groups and tapping into specific interest areas identified by males (e.g., Byrne, 2008b). SP university programs need to consider how males are supported in the program. This support could include offering male peer-

support programs across years within a SP program at the university, across a range of university programs with lower male participation rates (e.g., occupational therapy, nursing), or even SP programs across universities. Linking male SP students to a male clinical educator for a clinical placement or with a male speech pathologist/allied health mentor (McKinson, 2007) may also help to reduce identified feelings of isolation (Byrne, 2007) and marginalisation. Support of males during the SP program may assist completion of the SP program and the ongoing contribution to the SP profession.

Addressing Indigenous Australian participation rates

A lack of Indigenous Australians in the SP workforce is consistent with low numbers reported across all health professions (Hindmarsh, 2003; Pink & Allbon, 2008); similar participation rates occur in health care for Indigenous Canadians (Dafoe, 2000; Downey & Sweetwater, 2003). Researchers have identified the training of Indigenous Australians to deliver health care services (Australian Health Ministers' Advisory Council [AHMAC], 2011; Downey & Sweetwater, 2003; Murray & Wronski, 2006; NSW Ministry of Health, 2012) is a crucial step towards addressing the discrepancies between the life expectancies and health-related diseases between Indigenous and non-Indigenous Australians. The presence of Indigenous Australian staff has been reported as a facilitator to Indigenous Australians accessing mainstream health services (Martin & DiRienzo, 2012).

While there are positive signs that the number of Indigenous Australian speech pathologists will increase in the future, the support and encouragement required to achieve this increase will need to occur at multiple levels. A range of currently utilised strategies can be applied to SP, for example university programs need to ensure programs are culturally appropriate and Indigenous Australian students (and staff) are culturally safe. Such practice includes supporting students to be both comfortable with, and understand the importance of, identifying as Indigenous Australians. Indigenous Australian cultural awareness training can help staff to understand the disadvantage experienced by Indigenous Australians (AHMAC, 2011; Martin & DiRienzo, 2012), and program content should be considered in relation to Indigenous Australians (Downey & Sweetwater, 2003).

Given the small number of Indigenous Australian speech pathologists, it will be unlikely to be able to link an Indigenous Australian SP student with an Indigenous Australian SP clinical educator. However, when allocating clinical placements for Indigenous Australian SP students, universities should consider the general clinical environment of the practice that the student will attend. For example, they might seek a clinical placement with a SP service that has other Indigenous Australian mentors available (NSW Ministry of Health, 2012) or services present on-site (e.g., Indigenous Australian liaison officers), or that provides services to Indigenous Australian clients or demonstrates a commitment to providing culturally appropriate SP services (Martin & DiRienzo, 2012), including: displaying Indigenous Australian artwork, utilising Indigenous Australian SP resources and articulating service values related to commitment to culturally appropriate service delivery.

Ensuring careers advisors are aware of SP as a career and “target” student groups may be essential to addressing

the paucity of information regarding SP as a profession at the high school level (e.g., Indigenous Allied Health Australia, 2014). Further, university liaison with schools and careers advisors to ensure information regarding support and schemes available to assist both rural and Indigenous Australian students to undertake a SP program is also paramount (Hindmarsh, 2003). Similarly, employers and speech pathologists need to be cognizant of strategies within the workplace to assist Indigenous Australian students (e.g., cadetships) and actively advocate for and support Indigenous Australian SP students (Murray & Wronski, 2006; NSW Ministry of Health, 2012). Having Indigenous health workers has been identified as an important strategy for improving access to health care by Indigenous Australians (Murray & Wronski, 2006). Educating Indigenous health care workers (e.g., liaison officers) may help increase the understanding of communication disorders and SP's role (NSW Ministry of Health, 2012) in treatment, and lead to improved access to and engagement with SP services, which may in turn positively influence Indigenous Australians to enroll in a SP program.

There are a number of potential strategies that could be implemented including university administrators being aware that some of the Indigenous Australian SP students may be living away from home and may need assistance to develop links with local Indigenous Australian networks and support services both within the university and the local geographical area (including medical services). As with male students, the low number of Indigenous Australians enrolled in a SP program will likely result in an Indigenous Australian student being the only Indigenous Australian student in his or her year, or more likely in the program at that university. Efforts to link the Indigenous Australian SP students with other Indigenous Australian students within the same university (e.g., across allied health programs) or across SP programs in different universities may also be instrumental in developing support mechanisms to facilitate program completion.

Lastly, collaboration across university SP programs to collate meaningful information on students who leave a SP program is required. For example, the small enrolment number for male and Indigenous Australian students at each university makes it difficult to draw any substantial conclusions, yet by collating information across universities, it may be possible to draw more significant conclusions. Such information may assist to understand the factors that have influenced the choice to leave the program and identify possible solutions both across and within programs for specific student groups.

Addressing participation rates of people who are culturally and linguistically diverse

In the UK, Greenwood, Wright and Bithell (2006) reported a lack of awareness of the SP profession impeded minority students entering SP programs. California State University successfully implemented a multicultural strategy that resulted in a doubling of minority students entering the SP program over a four-year period. The strategy included: on-campus multicultural speech pathology clinic, grants, peer support and mentoring programs, consideration of bilingual skills and multicultural experiences in entry criteria, and increasing program content relating to working with CALD clients (Saenz, Wyatt & Reinard, 1998). The information regarding this project was disseminated via word of mouth and through general university advertising to

high school groups (Saenz, Wyatt & Reinard, 1998). However, other attempts to actively recruit minority students to SP programs in USA (Stewart & Gonzalez, 2002) and UK (Stapleford & Todd, 1998) have been less successful.

The discussion regarding the lack of diversity in SP continues on Internet forums (e.g., thegradcafe, 2014), which highlights both the ongoing and international nature of this challenge. Universities may need to consider promotion of the SP program and services through key stakeholders within local cultural networks and be cognizant of the promotion of the SP program, including promotional pictures, and displaying SP students and clients from a range of CALD backgrounds.

Conclusion

Speech pathology is a profession with limited diversity in regards to males, Indigenous Australians, and people from CALD backgrounds. It is apparent the reduced diversity poses a potential clinical risk relating to access and engagement with SP services. There are significant gaps in the research literature surrounding SP student and workforce demographics. Future research needs greater consideration of the factors that influence specific groups of students to enter a SP program, as well as identify the factors that can help support students and graduates in the workplace.

Research relating to the delivery of SP services needs to also consider providing specific data on different groups (e.g., Indigenous Australians), in order to accurately identify disparity in access and identify potential need for targeted promotion of SP services.

A comprehensive and co-ordinated approach is required across a number of levels (e.g., individual practitioners, SP services, professional associations, universities, careers advisors, and community stakeholders) to address the disparity between the SP professional workforce and the community that access, or should access, SP services.

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Diversifying student placements

Understanding barriers to and benefits of placements in speech pathology private practice

Carl Sokkar and Lindy McAllister

Private practice is a rapidly growing employment sector in speech pathology in Australia. However, very few student placements occur in private practice settings. To ensure graduates are prepared to work in this employment sector, the clinical placements offered to students must diversify. This article reports the results of a project undertaken to explore the barriers and benefits associated with speech pathology students undertaking placements in private practice settings. Two groups of private practitioners were interviewed: those who had supervised students in a private practice setting and those who had not. The semi-structured interviews were used to explore the participants' perceptions of the role of private practice in student education, challenges and barriers to student placements, the benefits that might result from the placements, and satisfaction among those who had supervised students. Participants also discussed professional issues including reimbursement from health funds, legal issues, and the need to structure placements in ways that would enable them to manage workload, protect income, and meet university requirements.

The importance of private practice

There has been significant growth in private practice in speech pathology over the last decade, with a sharp rise in the last 2–3 years (Speech Pathology Australia, 2014). In 2002, 23% of practising members of Speech Pathology Australia (SPA) were working in private practice as their primary speech pathology position (Lambier, 2002). By 2013, this figure rose to 50% (SPA, 2014), indicating that between 3250 and 3500 speech pathologists are now working in private practice in Australia as their primary position.

The rapid growth of the private practice sector can be attributed to a number of factors and trends. Government

funding for privately provided allied health services through initiatives such as Chronic Disease Management (formally known as Enhanced Primary Care), Better Start for Children with Disability (Better Start), the Helping Children with Autism Package, and more recently the National Disability Insurance Scheme has meant that clients with chronic illness and disability can better afford to seek services outside the public health sector. The shrinking public sector with restricted and decreased service provision (SPA, 2014), with consequent reduced opportunities for public employment, has led to reciprocal growth in private practice.

The growth in the private sector has also been in response to an ever-increasing demand for speech pathology services, which the public sector cannot meet. These demands are a result of an ageing population and associated increase in chronic disease, improved survival rates of premature and chronically ill infants, an increase in the detection of communication and swallowing disorders, and a rise in public awareness of early intervention (Health Workforce Australia [HWA], 2013; SPA, 2014). Compounding this trend has been a desire among speech pathologists for increased autonomy, caseload diversity, and better remuneration (Lambier, 2002).

A similar trend of a growing private sector has been reported across other health professions (Green, Baskind, Mustian, Reed & Taylor, 2007; Sloggett, Kim & Cameron, 2003). However, unlike some health professions such as physiotherapy, dietetics, and radiation science, where private practices routinely provide clinical education placements, few student placements are provided by private practices in speech pathology. To illustrate, in the speech pathology undergraduate and graduate entry degrees at the University of Sydney in 2013, 3% of paediatric student placements and 0% of adult placements were provided by private practices. Despite the considerable shift of speech pathologists from the public to private sector, the majority of clinical education placements continue to be provided by traditional sites such as hospitals, community health centres, disability services, and other publicly funded institutions.

There are a number of reasons why student placement sites may need to diversify to include speech pathology private practice. With the rise in private practice, employers need to ensure that new graduates are work-ready for this sector. Traditionally, new graduates sought public sector experience first before entering the private sector. The recent SPA senate inquiry submission (SPA, 2014) reports

KEYWORDS

BARRIERS

BENEFITS

PRIVATE PRACTICE

SPEECH PATHOLOGY

STUDENT PLACEMENTS



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that new and recently graduated speech pathologists are more likely to enter the private sector directly compared to a decade ago. New graduates may be ill-prepared for private practice without having experience in such workplaces as students. One driver for Health Workforce Australia to establish the Integrated Regional Clinical Training Networks was to “facilitate greater levels of clinical training activity in primary care, community and mental health, aged care, the private sector and rural and remote locations” (HWA, no date) and increase the contribution of the private sector to clinical training.

Challenges, barriers, benefits and incentives

Numerous studies in other allied health professions, including occupational therapy and physiotherapy, have explored the possible challenges and barriers to clinical education in private practice (MacPhail, Alappat, Mullen & Napoli, 2011; MacPhee & Kotlareno, 1998, as cited in Doubt, Paterson, & O’Riordan, 2004; Maloney, Stagnitti, & Schoo, 2013; Potts, Babcock, & McKee, 1998; Sloggett et al., 2003). Common themes have emerged from the results of these studies, including perceptions among health professionals that taking students will result in fewer clients being seen and hence a loss of income for the clinician or organisation. A second theme relates to legal concerns. Clinicians reported that the uncertainty of third party funding for student-run sessions was a deterrent to taking students on placement (Doubt et al., 2004; Sloggett et al., 2003). A further common theme was that clinicians felt they did not have the time to supervise students on top of their busy caseloads, administration, and business management tasks (MacPhail et al., 2011; Sloggett et al., 2003). Clinicians also reported concerns about fluctuating caseloads, finding a

variety of clients for the student, clients being reluctant to see or pay for a session run by a student, travel costs for the students if services are provided outside of the private practice clinic, and part-time clinicians being unable to supervise students. Private practitioners also expressed concern that private practice placements may not develop a student’s autonomy due to need for close and direct supervision as a result of third party payers’ restrictions and professional indemnity insurance requirements.

The benefits of supervising students in private practice have also been examined in several of the studies outlined above (e.g., Doubt et al., 2004; MacPhail et al., 2011; Sloggett et al., 2003). Many of the benefits suggested by private practitioners surveyed are similar to those listed in the literature regarding clinical education in general (McAllister, 2005; McAllister & Lincoln, 2004; Potts et al., 1998; Rodger, Webb, Devitt, Gilbert, Wrightson & McMeeken, 2008). Indeed, clinicians reported that their own quality of work improved as a result of supervising students, and noted that students brought with them the latest theory, evidence-based practice, and knowledge of new resources. The clinicians also noted that they enjoyed the process and appreciated the enthusiasm and new ideas students brought to the workplace, thus increasing their own job satisfaction. Contrary to the perceived barriers discussed earlier, private practice clinicians reported that productivity, client care, and client satisfaction improved as a result of having students on clinical placements (Doubt et al., 2004; MacPhail et al., 2011; Sloggett et al., 2003).

Despite emerging evidence from other health professions, there is currently limited research in speech pathology as to why student placement provision in private practices does not reflect the last decade’s labour force trend towards private practice. Armstrong, Fordham, and Ireland (2004) drew on the literature and their experience

Table 1. Participant demographics

	Group	Employment status	Practice size (no. of SPs in F/T or P/T positions)	Setting	Caseload	No. of student placements	Level of student supervised
Participant 1	A	Sole trader	1	Clinic, schools & mobile	Paediatric	3	Intermediate
Participant 2	A	Owner & employer	5	Clinic, schools & mobile	Paediatric & adult	1	Intermediate
Participant 3	A	Owner & employer	4	Clinic & schools	Paediatric & adult	8	Intermediate & advanced
Participant 4	A	Employee	4	Clinic & schools	Paediatric	2	Intermediate & advanced
Participant 5	A	Partner & employer	4	Clinic & schools	Paediatric & adult	>40	Novice to advanced
Participant 6	A	Partner & employer	8	Clinic & schools	Paediatric	1	Intermediate
Participant 7	B	Owner & employer	6	Clinic & schools	Paediatric	–	N/A
Participant 8	B	Sole trader	1	Clinic & mobile	Adult	–	N/A
Participant 9	B	Owner & employer	3	Clinic	Paediatric	–	N/A
Participant 10	B	Partner & associates	9	Clinic & schools	Paediatric	–	N/A
Participant 11	B	Owner & employer	6	Clinic & schools	Paediatric	–	N/A

N/A = not applicable; A = participants who have supervised students; B = participants who have not supervised students

as clinical coordinators to describe barriers to speech pathology student placements and identify ways to address them. They found that allowing clients to choose and consent to having a student clinician and by maintaining an “apprenticeship” style of supervision, the positives for the student, client, and private practitioner outweighed the negatives. They went on to conclude that student placements are possible in private practice. However, their report was based on evaluation of one student’s placement in one private practice, and did not explore a range of known barriers to placements in private practice.

A first step in diversifying and increasing student placements in speech pathology private practice is to understand the barriers and benefits private practitioners perceive about supervising students in private practice. We conducted a quality improvement project with two groups of private practitioners, those who had previously supervised students on placement and those who had not, to explore their views and perceptions of (a) roles for, barriers to, and benefits associated with student placements in private practice and (b) satisfaction of clinicians, parents/clients, and students involved in student placements in private practice.

Method

This project used semi-structured interviews with two groups of speech pathologists working in private practice: those who had supervised student placements and those who had not.

Recruitment

Convenience sampling was used to recruit speech pathologists through private practice and university networks in New South Wales, Australia. All private practice clinicians known to take students from the authors’

university, six clinicians in total, were invited to participate in this study via email or phone contact. All six clinicians accepted (Group A). Invitations were then extended to six clinicians known to the lead author not to take students and five accepted (Group B). Consent was obtained from all participants to be interviewed. Table 1 provides summary data on interview participants in both groups.

Group A participants had a mean of 8.3 years of experience (range = 5–11 years) and Group B had a mean of 18.2 years of experience (range = 12–25 years). All participants were in private practice as their primary position. Ten out of the 11 participants were female, which is similar to the national gender demographic of speech pathologists (HWA, 2014). Most participants were practice owners, either in sole trader positions or employers. The majority provided paediatric services only.

Data collection

The lead author completed an interview with each participant using a semi-structured interview guide. Examples of questions include: “Tell me about yourself and your practice (e.g., years of experience, caseload, employment status, service deliveries used within the practice, funding schemes accessed for clients)”; “Tell me what you see as benefits of having students in your practice”; “Would you consider taking students in the future? If yes? – what are the perceived benefits, and perceived barriers/challenges. If no? – why?” As this was a scoping study, exploring clinician views and perceptions, semi-structured interviews were chosen as they are the most widely used format in qualitative research, allowing the interviewer to explore more deeply into the issues being investigated (DiCicco-Bloom & Crabtree, 2006). The interviews were conducted either face-to-face or over the phone depending on participant availability. Group A

Table 2. Participant identified factors requiring participation of private practices in student placements

Category	Subcategory	Found in Group A: those who had taken students on placements	Group B: those who had not taken students on placements
Shrinking public sector – growing private sector	An increase in the number of new graduates entering in private practice	*	*
	NDIS roll out	*	*
	Growing waiting lists in community health and the importance of early intervention	*	*
A need for student exposure to differing models, service deliveries and experiences	Limitations to service delivery models exist in public sector	*	*
	Private sector involves many differing service deliveries and clinical management approaches and capabilities	*	*
	To demonstrate to students a good, ethical and effective model of private practice	*	*
A need to ensure graduates are work ready	New graduates need to learn about the business and administration side of private practice	*	*
	Ever growing legal issues and legislation around private practice that new graduates need to know about	*	*
* = found in data from this group			

interviews lasted between 30 to 90 minutes, and Group B interviews lasted between 20 to 30 minutes. The first author made notes throughout the interviews to summarise the participants' comments and to record key statements for use in analysis and reporting.

Analysis

As appropriate for the exploratory purpose of this study, a content analysis (Hsieh & Shannon, 2005) of the notes taken during interviews was undertaken. All answers to each question were collated and then analysed. Data was read through repeatedly and units of meaning were coded. Codes were collapsed into overarching categories. Each author undertook an independent coding of the data, and codes and categories were compared and recoded until a consensus was achieved. The codes and categories were further reviewed and consolidated to arrive at the smallest number of categories which accounted for all the data.

Results and discussion

Content analysis led to the identification of categories and subcategories relating to support for, barriers to, and benefits of having student placements in private practice. These will be discussed with reference to the literature. Exemplar quotes from the interviewees will be used to illustrate key categories arising from the content analysis.

Support for placements

Both groups of interviewees reported that private practice needs to play a role in the clinical education of speech pathology students. The reality of a growing private sector in the midst of a shrinking public sector was commonly expressed; for example: "everyone is doing private work! Only 1 out of 8 of my friends has a public job" (Participant 9). This aligns with workforce data cited earlier (HWA, 2014; SPA, 2014). Some interviewees commented that "[the government disability department] is disappearing and services are being privatised more and more" (Participant 3) and that "it's unrealistic to train students for workplaces they will not likely be employed in" (Participant 3). Private practitioners believe that private practice offers different service delivery models which provide different learning experiences for students and quality care for clients: "it's a different kettle of fish" (Participant 1). They also understand that policy and service funding changes referred to earlier mean that graduates must be prepared for and have experience in the private practice sector in which they will increasingly be employed: "consumers are becoming more aware of their rights and students need to learn how to look after themselves" (Participant 5) and that as private practitioners they need to be "explicit with students about how our business works, our methods and policies" (Participant 5).

Considering the data in Table 2 shows that all participants stated that private practice has a role to play in the clinical education of student speech pathologists, why are so few student placements offered in private practice settings? As noted earlier, at the authors' university, almost no speech pathology student placements occur in private practices. The results of interviews with both Group A and B participants suggest that the low number of student placements is a result of the clinicians' perceived barriers and challenges to having students.

Barriers to placements

Content analysis of interview data revealed subcategories concerned with organisational considerations, legal and

income concerns, and educational expectations and skills for managing students. Table 3 shows that some barriers and challenges were perceived by both groups of participants. Time for students was a barrier for both groups; for example: "it was difficult taking time out of my usual schedule to get to the CE [clinical education] work" (Participant 2); "I carry a heavy caseload so I don't feel I have the time" (Participant 9); "it's just the time!" (Participant 11). Finding time for student placements in a mobile practice appeared to be even more challenging.

Lack of clarity around health insurer rebates for student-delivered services was also a major barrier for both groups. The participants were confused by advice on this matter as they know clients receiving services from students in physiotherapy private practices do claim rebates. Leadership will be required from the professional association and private practice networks to achieve clarity and perhaps revisions to what is claimable.

Some barriers to supervising speech pathology students in private practice were perceived only by Group B participants who had not had students, suggesting that Group A participants had found ways to overcome these with experience. Several participants focused on client-related concerns: for example, having enough suitable clients (e.g., age, disorder) for students, disrupted care of clients in being given to students, and how offering different fees for student-delivered services might be perceived. One clinician commented: "I'm not even sure if it's ethical to charge the same fee" (Participant 7). Other challenges were clinician-focused: fears of increased workload and concerns regarding professional indemnity insurance. For example, one participant stated "I've heard if the student does something wrong it can come back to the supervisor" (Participant 8). Consistent with the literature (Doubt et al., 2004; MacPhail et al., 2011), Group B clinicians expressed concerns that having students would result in a loss of income, due to a reduction in the number of clients they would be able to see because of the need to spend time supervising the students between sessions. Group B participants also raised concerns about organisational barriers relating to time and workspace, consistent with the findings of previous studies (Sloggett et al., 2003).

Participants in Group A who had supervised students in private practice reported a similar number of challenges and barriers as those in Group B; however, new subcategories emerged reflecting their supervisory experience. Ability to "maintain income" did not appear as a concern for clinicians who had supervised students in private practice, nor did "increased workload". These clinicians did not report that student placements disrupted their client care, nor did they report it was difficult to find enough suitable clients for student needs. Instead, the barriers identified by Group A included the organisational challenges of obtaining parent consent for student involvement and managing students in a mobile service. Uncertainty about student knowledge and skill levels and university requirements were revealed: "I didn't know what the student's current knowledge is or where they are at – what should they know?" (Participant 3). Other challenges shared by Group A clinicians related to uncertainty about their own skills as clinical educators and managing failing or weak students: "I found myself asking 'am I doing it correctly...am I being too nice?'" (Participant 1).

In considering the findings, it is noteworthy that apart from the reimbursement issues and fear of loss of income due to time spent on supervision and not on client

Table 3. Participants' perceptions of the challenges and barriers associated with having students in private practice

Category	Subcategory	Found in Group A: those who had taken students on placements	Group B: those who had not taken students on placements
Organisational challenges	Time commitment	*	*
	Finding space for students to work		*
	Difficulty managing student in a mobile practice	*	
	Finding enough parents to agree to having a student clinician	*	
	Increased workload on top of an already busy workload		*
	Finding enough/suitable clients for the students		*
Legal and financial concerns	Medicare and private health rebate restrictions	*	*
	Professional indemnity		*
	Uncertainty about fees for student delivered services – a reduced fee or no fee?		*
Concerns for the client	Potential disruption to client care		*
Knowing what to/ should expect	Uncertain about students' knowledge and skill levels, and university requirements	*	
	Uncertain of own competency as a clinical educator	*	
Weak and failing students		*	
Maintaining income			*
* = found in data from this group			

services, most of the challenges identified by the private practitioners are common concerns for clinical educators in public settings also (McAllister, Higgs, & Smith, 2008). Many of these barriers could potentially be addressed with information, briefings, training, and support from university staff. Concerns regarding potential loss of income appear to have been managed by those private practitioners who had supervised students. This knowledge of how to structure student placements in private practice so that income is not reduced needs to be documented and shared within the profession through professional activities (e.g., interest groups) and further research.

Potential benefits of placements

Table 4 shows that both groups of clinicians reported actual (Group A) or potential (Group B) benefits for their clients in having students on placement. Both groups of participants reported that supervising students fulfils a professional responsibility and obligation while making an impact by supporting the training of the future generation of clinicians. Also, both groups reported that student supervision brought with it, or could bring with it in the case of Group B, opportunities for professional development. Consistent with the findings of previous studies involving physiotherapists and occupational therapists (Doubt et al., 2004; MacPhail et al., 2011; Sloggett et al., 2003), speech

pathologists in this study reported that having students increased their access to the latest theory and evidence-based practice, as well as encouraged them to reflect on their own work practices, improving their standard and quality of clinical practice.

A benefit reported by Group A only was that having students in private practice increased productivity of their service. Participants reported that with students, they were able to provide extra services to their clients at no extra cost or reach more clients, run group programs and quality assurance projects, and develop resources that would have otherwise not have been possible due to time constraints. To illustrate, a speech pathologist who worked in a school setting noted that “alone I can only cover [years] K–2. With [the students] we serviced [years] K–6; [students on placement] increased my capacity for advocacy for the children” (Participant 2) by supporting the clinician to run teacher training in-services and information sessions.

Group A clinicians found that students in private practice could also reduce a clinician’s workload, in contrast to the perceived barrier expressed by Group B clinicians (see Table 3) that supervising student placements would increase their workload. Students not only increased clinicians’ service output in terms of producing programs and resources: “we get things done we otherwise wouldn’t have time for such as parent handouts, visual resources”

Table 4. Participants' perceptions of benefits associated with having students in private practice

Category	Subcategory	Found in Group A: those who had taken students on placements	Group B: those who had not taken students on placements
Benefits for the client	Long-term clients enjoy and benefit from the change from clinician to student	*	*
	Exposure to new and fun ideas		*
	Able to offer clients more for less cost	*	
Increased learning and professional development	Access to current literature and new ideas, helping to promote EBP	*	*
	The opportunity to reflect on own practices and clarifying own clinical processes and thinking	*	*
	Opportunity to utilise skills otherwise un-utilised (e.g., teaching and facilitation of adult learning)	*	
Rewarding/ enjoyable for the clinician		*	
Increased productivity and diversity of service	Reduced workload overall	*	
	Additional help with running groups and programs	*	
	Capacity to offer increased range of service delivery and services	*	
	Resource development	*	*
	Running of projects including quality improvement	*	
Potential recruitment of employees		*	
Growth of the profession	Fulfilling a professional responsibility	*	*
	Making a positive impact on future generation of clinicians	*	*
	Improving the profile of the profession	*	

* = found in data from this group

(Participant 4), but were able to reduce the amount of time clinicians spent on paperwork, leading to an overall workload reduction for the clinicians. Group A clinicians also reported that having students deliver treatment freed their time to get other tasks done (e.g., emails, phone calls and planning): “you have an extra pair of hands round the place” (Participant 4).

Another benefit reported by Group A only was that having students in private practice provides an opportunity for future recruitment: “I find a key benefit is that you get to see how they work. Do they fit the culture?” (Participant 5). This finding is consistent with that of Sloggett et al. (2003), who reported that students were seen as good recruitment potential by the occupational therapists in their study. Given the increase in private practice reported earlier, with future growth anticipated as a result of initiatives such as the NDIS, being able to employ graduates who are ready for work is likely to be a beneficial outcome for private practitioners who take students on placements.

Speech pathologists who had supervised students expressed high levels of satisfaction with student placements they had provided. They conveyed a sense of enjoyment and reward in having students in their practices. All but one of the clinicians reported that they planned

to continue to take students on placement in the future. These clinicians also spoke about their clients' satisfaction with their interactions with students, and their perceptions of student satisfaction with private practice placements. Typical comments appear in Table 5.

Conclusion

This article reports on a study of the views of speech pathology private practitioners regarding the barriers and benefits of supervising student placements in private practice. We interviewed two groups of private practitioners: those who had taken students (Group A) and those who had not (Group B). We found that regardless of whether private practitioners had taken students or not, they all agreed that private practice settings had a role to play in the preparation of graduates for this setting. The participants also reported that this setting had unique things to offer students on placements; for example, experiences with service delivery models different to the public sector (e.g., no limit on client access to services), opportunities to build business and practice management skills, and an opportunity to learn from the underutilised resource of very experienced clinicians. As stated by

Table 5. Group A participants' perceptions of satisfaction of clients/families, private practitioners and students involved in student placements in private practice

Category	Subcategory	Exemplar comments
Client satisfaction	Most clients enjoyed change from clinician to student Most clients happy to have student again in the future Clients appreciative of the effort put in by students	"Some clients loved it for the change of environment" "I've never had any parents or clients complain" "One client with autism didn't cope with the change"
Student satisfaction	Students enjoyed: <ul style="list-style-type: none"> • the caseload • being part of the team • access to resources • access to other clinicians • the self-directedness of the placement 	"We've had reports back that it's the best placement they've ever had in their course" "I had feedback that it was a really positive first off-campus experience"
Clinician satisfaction	5 of 6 clinicians plan to continue to have students 1 of 6 still undecided after having students for the first time	"It exceeded my expectations" "We are obviously satisfied with the experience. We would not have done it for 15 years otherwise" "I'm obviously happy as already have my next placement planned"

Participant 11: "we have a lot to offer!" There were many common challenges and barriers across both groups, including lack of clarity around reimbursement and how to manage time and space issues. Private practitioners who had supervised students identified some different barriers to those who had not, including clarity of expectations from the university and managing weak students. Workload, income maintenance, and client selection, which were perceived barriers for private practitioners who had not supervised students, were not a concern for those who had; they had found ways to manage these challenges. Both groups could see benefits in having students on placement including benefits for individual clients. Importantly, those who had taken students reported benefits of increased productivity and diversity of services able to be offered to clients, and enjoyment and reward in supervising students.

The results of this preliminary study need to be considered with caution given the sample size was small and the participants' perceptions may not reflect those of other members of the profession. In addition, the interviews were not recorded and transcribed verbatim, thus limiting the authors' capacity to complete member checks with participants on accuracy of the data. However, it is noted that the study did include all private practitioners who are currently taking students at the authors' university, thus reducing the risk of bias within the targeted population. Furthermore, the issues the participants raised were largely consistent with those raised in similar studies examining the perceptions of physiotherapists and occupational therapists.

There are some clear implications from our findings. Participants want clarity around reimbursement and professional indemnity issues when students are involved in service delivery, and also clear information about expectations from universities who send students on placements. Participants want advice on how to make student placements work effectively for them. Therefore, in the next phase of this project we will attempt to respond to comments such as "we're going to have to take a role eventually. It's got to be something we have to resolve but I'm just confused as to the hows" (Participant 7)

and "I don't know how to do it; it's just in the 'too hard basket'" (Participant 10). We will work with willing private practitioners to explore a range of strategies to make it possible to take students on placements in private practice.

Acknowledgements

The authors thank the speech pathologists in private practice who participated in this study for their generosity of time and ideas.

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Living out diversity in practice

A clinical educator's reflections on ethical decision-making in a university clinical setting for culturally and linguistically diverse children

Shannon Golding and Suze Leitão

Working in a culturally and linguistically diverse setting raises a number of ethical issues. This article outlines stories from the field and reflections of a clinical educator who worked in a university clinic at a primary school in a lower socioeconomic area. The narrative approach to ethical reasoning is used to discuss one example of an ethical dilemma that arose while working in this setting. The use of both the narrative and the casuistry frameworks are discussed as methods of ethical reasoning and decision-making with reference to the experiences of the supervisor and the university students that were on placement.

Description of the context

In this issue's ethical conversation the first author will reflect on her experiences as a clinical educator at a university inter-professional practice (IPP) clinic set in a local primary school. The first author believes that the experience was an example where she lived out "diversity in practice". The university students on placement included speech pathology, occupational therapy, physiotherapy and nursing students who themselves came from a diverse range of cultures and experiences. The clinic's focus was on the development of the students' discipline-specific clinical skills as well as their collaboration and learning within the IPP team. The university students worked with children with developmental delay, cerebral palsy, autism spectrum disorder, other disorders that were typical of a paediatric setting, and some unique cases that were specific to the setting.

The school is located in a relatively low socioeconomic suburb south of Perth and features great cultural and linguistic diversity among students with more than 45 languages spoken, including a number of Aboriginal languages. Countries represented in the school community include the Philippines, New Zealand, Thailand, China, Malaysia, Tanzania, India, Kenya, Japan, Myanmar (formerly Burma), and Sudan. Some children come from homes where English is not spoken and their first and only exposure to English was in the school setting. The school community includes refugee families who are new to Perth and have limited access to support and services.

For these reasons, the clinical placement provided interesting and rare learning opportunities for the university

students on placement, along with a number of new challenges for both supervisors and students. Some of the ethical and practical issues faced in this setting were uncommon and not experiences that the first author had encountered previously. Although she had experience working with clients from culturally and linguistically diverse (CALD) backgrounds, she had not experienced the concentration of CALD clients and ethical issues within one setting. For some students it was their first and only paediatric clinical placement in their final year of study. The World Health Organization's *International Classification of Function, Disability and Health (ICF)* (2007) was an important model for considering the children's speech and language skills, experiences, family environment, and support available to them.

This article describes a number of stories from the field that outline examples of the experiences and challenges that the clinical educator and students running the clinic encountered on a regular basis. One story will be worked through using the narrative approach to ethical reasoning from the Speech Pathology Australia Ethics Education Package (Leitão et al., 2014). The casuistry approach to ethical decision-making will also be considered as each experience added to a collection of cases that could be reflected on in order to support the students' learning. Finally, a reflection on how to manage working in this clinical setting and supporting students will be discussed in order to support and encourage other speech pathologists who may face similar ethical issues in their clinical setting.

Stories from the field

The university students and clinical educator encountered many interesting stories each and every day. Working with a CALD group of children and families presented many new experiences for the university students on placement that required explicit and detailed discussion due to the complexity of the ethical issues. The following stories are a snapshot of some of the interesting ethical dilemmas that arose during the clinical educator's time at the clinic. Identifying information has been removed.

Before any child could be seen by the university clinic, informed consent was required from the child's caregivers. This was often difficult as many parents had very limited English skills. One mother did not speak English at all and a translator was unavailable. The child's teacher explained the consent form to the year 6 client who was to be seen for his language difficulties and asked him to explain it to his mother and have her sign it when he went home. The student was the one who would have the most contact

KEYWORDS

CALD

DIVERSITY

ETHICS

NARRATIVE
APPROACH



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with the parent as she did not come to school to collect him. We discussed this as a team as we wondered if the mother truly understood what she was signing and if informed consent was indeed provided. We were aware that this situation was not ideal as the student was both the messenger and the client; however, it was the only viable option for obtaining consent.

Each child who was seen was given a note to take home to their parents with information about how the sessions went and ideas for home practice. These were simplified for some parents and for others they weren't sent home at all as we were unable to access translators. We faced the difficult question of how to encourage home practice if there was no communication with the parents. Was it more important to see the children who would only receive intensive English-language therapy instruction at school or should we have seen the children that could both participate in school sessions and complete home practice as a more intense dosage would lead to greater change? These questions were regularly discussed when prioritising the children on the waitlist and allocating children to services. In terms of working with interpreters there were a number of issues. Most of the time official interpreters and translators were unavailable. On occasion there were other parents who were bilingual and could be used as interpreters; however, this raised a number of ethical issues. It was unknown if they could translate correctly as they were not specifically trained in the area, and any such interaction raised concerns about the privacy of our clients. Although we could have used other parents to assist in interpreting and working with parents who did not speak English, we decided not to do this, as the school community was small and there would have been significant ethical issues involving a third party in the discussion of the children's difficulties and progress.

Some parents were quite isolated from the school community and had very limited contact with the teachers and our university clinic. We partnered with teachers, education assistants, and Indigenous support officers as they often knew the parents best. We valued the involvement, expertise, and assistance of the teaching staff. We found collaborative practice was important in this setting as the teachers had close and regular relationships with the children and their families. Although not typical practice, one teacher would text a mum to remind her to complete forms or send her son to school for his speech pathology sessions. We did ask ourselves if this practice crossed professional boundaries, potentially breached privacy, and how ethical it was to contact parents using personal communication devices?

The school provided a free breakfast program as many children came to school without being fed. The university students volunteered at this program three mornings per week before their day of clinical placement began. As a team we talked about the importance of having a broader view of health and not focusing solely on the specific domain of their specific profession. The students believed they could be involved in encouraging the development of the children's health and well-being beyond their delays or difficulties and that as health professionals it was important to have a holistic view of the child and not be limited by the specific focus of their discipline.

Some of the stories, of the school students and their families, were of great struggle and it was clear that many other issues were occurring outside of school hours. We used the WHO ICF model (WHO, 2007) to guide our thinking and ensure that we viewed the child in relation to the external factors that might be impacting

on their development. Unfortunately, attendance was poor, with some children being absent for weeks at a time or attending only a few days per week. These students had significant speech and language difficulties and their teachers were very concerned. However, it was difficult to work with these children as there was no guarantee they would attend school. We decided to always have a session prepared and to provide therapy whenever the child was at school, in addition to a full caseload of other clients. This may have meant having two or three sessions one week and then no session for another week or more depending on the child's attendance. We had deep respect, care, and concern for our clients and their families. We realised that speech pathology, occupational therapy, or physiotherapy sessions may not be a priority, and that we could not be frustrated when sessions were cancelled or plans had to change. It was a difficult decision to offer these children services over other children on the waitlist as it was unknown if the children would benefit from services delivered so inconsistently, but these students were often the teachers' highest priority and most concerning.

The narrative approach to ethical reasoning

The narrative approach to ethical reasoning is one approach outlined in the Speech Pathology Australia Ethics Education Package as a process for considering ethical dilemmas by listening to and interpreting the clients' life stories with particular attention to the past and future (Leitão et al., 2014). This approach will be used to reflect on one ethical dilemma that was faced by the university students on placement at the school clinic.

The clinical educator (first author) was on her first day in her role at the clinic and had a new team of students. A speech pathology student was conducting an initial language assessment with a child. The child was referred for limited language and appeared to have receptive and expressive difficulties. What could have been a simple and routine procedure turned into an event that introduced all who were involved into the real experiences and ethical issues that were occurring in this linguistically and culturally diverse setting.

During the assessment the child told the student clinician that she was being hit at home. The student was taken aback by the comment and did not know how to respond or if to ask for further information. The child did not seem too distressed and continued on with the assessment, but mentioned it a second time later in the session. The speech pathology student and the clinical educator discussed the child's disclosure and were unsure if it was enough information for mandatory reporting of child abuse. The child was being seen for her delayed language development and it was unknown if she had misinterpreted an event at home that was not significant or if she was indeed at risk at home and was unable to clearly explain what was happening to her.

The narrative approach requires professionals to focus on the voice of their clients and the ethical conflict that can arise from their own expression of their life stories. The approach draws upon the richness and detail of the client's personal story in order to support the ethical clinical decision-making process (Leitão et al., 2014). In this case there was a dilemma regarding just how much of the story was expressed. The child had stated there was some physical abuse; however, these comments were not elaborated upon or followed up by the student clinician at the time as it was unknown if these comments were

enough to proceed. Reflecting on the situation in hindsight makes one think about the questions one would ask or the response that would be given if a client made a similar comment in the future. It may be important to find out further information but it would be critical to do so without leading the child on or asking a loaded question.

It was important to ask ourselves the following questions which structure the narrative approach. What was the child's background story? What might have led the child to make such comments? Was the child able to clearly and correctly articulate what was occurring at home? What was the child's current story? What was known about the child and their current home life? How could we find out more information about the client's situation? What was the child's future story? What would be the potential outcome if we did report? What would be the outcome if we didn't report the child's comments?

There could have been potential consequences for reporting something that wasn't an issue and rather was a miscommunication by the child and misinterpretation by the student clinician and clinical educator. There could have been serious consequences for not reporting if indeed the child was being physically abused at home. In line with the SPA Code of Ethics (2010), we saw the importance of telling the truth and preventing further harm for the child. We were aware that it was important to share this information with the teacher and principal for both legal and compelling moral reasons. The school staff members were aware of the child and her history and would be able to deal with this information accordingly.

As health professionals who were new to the setting and new to working with the child, we did not know the answers to many of these questions. The child, her teacher, and the school principal were all important characters in the narrative as they could all provide details and different perspectives to the story and ethical dilemma. The narrative approach highlights the importance of obtaining the full story. The teacher and principal were well aware of the background story for this child and were able to provide us with some insight into the important factors in the child's history. As we were unsure how to interpret the child's comments, it was important to gain further information from the school staff members to support our decision-making. Due to privacy and confidentiality they were unable to share specific information; however, their comments made us confident in reporting the child's comments as unfortunately the child's comments seemed to "fit" with the child's previous experiences and family history. (Further action was taken by the school staff after we made our report.)

This was not an isolated event – there were other occasions where children disclosed experiences of abuse to the university students on clinical placement. These experiences were quite upsetting for the university students and, as a clinical educator, it was important to ensure that both the university students' well-being and the well-being of the children were protected. The first experience of disclosure provided the team with a precedent that allowed for more efficient and ethical management of future examples as per the casuistry approach which supports case-based learning (Leitão et al., 2014).

Reflections on working in this setting

We had daily debrief team meetings where we could discuss issues and events of the day. This was frequently focused on the challenges and possible solutions of working with CALD clients. The university students had not

had significant experience with this population and benefited from the support and advice of their peers. They also found they were reading more research in order to up skill for this new client group. The clinical educator was aware that she was responsible for the students and so supervised closely to ensure that they acted within their competence. She kept more complex cases for later on in the students' placements when they had developed their confidence and clinical skills with CALD clients. These meetings meant that our practice was always being evaluated and improved, and we were able to deliver a high-quality, ethical and efficient service to the school population. These debrief sessions and case discussions allowed the university students to broaden the focus on the clinical aspects of the cases and discuss numerous ethical dilemmas which prepared them for other ethical dilemmas that they faced over the course of their placement. The casuistry approach to ethical decision-making (Leitão et al., 2014) supports decisions and reasoning to be based on previous cases that a team has either experienced, read about or discussed.

As the clinical educator I needed to use my past knowledge and experience in the placement to guide and assist the students to follow the narrative approach to ethical decision-making and to refer them back to previous cases using the casuistry approach. Not only did the university students develop their clinical knowledge and skills in this setting but they also had the experience of working through numerous ethical issues that were unique to the cultural and linguistically diverse clients in that setting. Both the students and my own ethical decision-making skills and problem-solving abilities were greatly challenged. The placement allowed all of us the opportunity to develop two different methods of ethical reasoning, the narrative approach and the casuistry approach, that could be used to resolve ethical issues in the future.

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What's the evidence: Diversity in practice

Cori Williams



Cori Williams

A column addressing the evidence on diversity in the context of speech pathology in Australia could take a number of different perspectives. It could focus on the evidence surrounding approaches to assessment of clients from diverse backgrounds, or on the evidence surrounding the important questions of intervention with this population. Neither of these possibilities is taken up here. Rather, this column will address the evidence surrounding diversity in the profession, and diversity in the client base in Australia.

Diversity in the profession

What constitutes diversity in the profession of speech pathology in Australia? It could perhaps be seen to encompass two aspects – diversity in the workforce and diversity in the range of practice and employment contexts.

Evidence of diversity in the workforce is difficult to track down, one of the reasons that Speech Pathology Australia (SPA) continues to advocate that speech pathology be included in the national registration and accreditation scheme. Some evidence is, however, available. We are all aware that the gender balance in the speech pathology workforce is skewed very much in the direction of women. Records of membership of SPA indicate that only 2% are male. From this perspective, diversity in the profession is somewhat lacking. Evidence on the cultural background of members is not available, although SPA plans to request this information of members in the near future. Currently, the association does record the languages other than English that members report speaking. A total of 80 languages is recorded, from Afrikaans and Arabic to Yolngu Matha and Zulu, and including a range of European and Asian languages. A small number of members also report speaking African (e.g., Shona) and Middle Eastern languages (e.g., Arabic) and languages from the Indian subcontinent (e.g., Hindi, Gujarati). The most commonly reported languages are, in order of frequency, Auslan, French, Cantonese, Mandarin, and Italian. No information is available regarding the level of proficiency of members in these languages, an important consideration when evaluating the capability of the workforce to provide services to clients from culturally and linguistically diverse backgrounds. Proficiency levels may not be high. A national

survey carried out in late 2012 indicated that 30% of 540 respondents reported speaking at least one language other than English. Of these, 25% reported that they were proficient in at least one other language (Williams, in preparation).

Diversity in the range of practice of speech pathologists is outlined in SPA documents, including *Competency-based Occupational Standards for Speech Pathologists* (CBOS; SPA, 2011) and the *Scope of Practice* (SPA, 2003). Speech pathologists work across the lifespan, providing services to clients with needs in the core areas of communication and swallowing and to their families, carers, educators, and employers as well as with other professionals involved in their care. The range of services provided is similarly diverse, and encompasses both direct and indirect approaches. The scope of practice lists services under ten categories: clinical services; specialist advice; use of instrumentation; behavioural and environmental modification; services related to hearing loss or central auditory processing disorders; modification of communication; service management; negotiation of service delivery models; and provision of expert witness evidence. Services are provided in a wide range of contexts, for many purposes and using a variety of approaches. Similar diversity in range of practice and contexts for working is embedded in the documents of other speech pathology organisations (see, for example, American Speech-Language-Hearing Association [ASHA], 2007; Royal College of Speech and Language Therapists [RCSLT], 2006; Speech-Language and Audiology Canada, 2014). Such diversity clearly points to the need for members of the profession to adopt a philosophy of lifelong learning. It also provides opportunity for those of us working in the profession to take up new challenges within the profession during our working lives.

Diversity in the client base

The diversity of the Australian population is well known. Compared with other western countries, Australia's migrant population makes up a relatively large proportion (around 26%) of the total (Australian Bureau of Statistics [ABS], 2014). Migration is the main component of population growth in Australia – population increase through migration has exceeded growth from births for six consecutive years (Department of Immigration and Citizenship, 2012). Migrants come from a range of countries. The largest number of migrants come from the UK and New Zealand, but those from China, India, Vietnam, the Philippines, South

Africa, Malaysia, Sri Lanka and the USA have increased in the period between 2001 and 2010. The majority (85%) live in major cities. Sydney, Melbourne, and Perth have the highest migrant population. The ABS report *Where Do Migrants Live* provides detailed information on the percentage of migrants living in particular areas of those cities (ABS, 2014). Despite this diversity, the 2011 census reveals that the majority of Australians (74%) were born in Australia, and both parents of 54% were also born in Australia (ABS, 2013).

The relatively large migrant population is associated with linguistic as well as cultural diversity. More than 300 languages are reported to be spoken in Australia (ABS, 2012a). The most common language spoken in Australian homes is, perhaps unsurprisingly, English. Some 81% of the respondents in the census of 2011 reported that they spoke only English at home. Two percent spoke no English. The most common language other than English (LOTE) reported was Mandarin. Other frequently reported languages included Italian, Arabic, Greek and Vietnamese (ABS, 2013; ABS, 2012b). The most common LOTEs spoken in the home vary with immigration patterns and across age groups. Changes in immigration patterns introduce new languages to the range spoken in Australia, and alter the proportion of speakers recorded for individual languages. These changes are seen in differing demand for services within the community. For example, the Department of Immigration and Citizenship (2012) reports increased demand for interpreting services in Persian, Tamil, and Hazaragi (a dialect of Persian spoken in Afghanistan) in 2010–11. Migrants who have recently arrived in Australia are more likely to speak a LOTE in the home than are those who have been in the country for longer (67% of recent arrivals, 49% of more longstanding residents), and maintenance of the LOTE reduces dramatically with increasing length of residence – from 53% for the first generation to 20% in the second and 1.6% in the third (ABS, 2012b).

The most common LOTEs spoken by children differ from those reported in the census. McLeod (2011) reports data extracted from the Longitudinal Study of Australian Children which shows that, in a sample of 4,983 4–5-year-old children, the most commonly spoken LOTE was Arabic, which was only the fourth most common reported in the census. Data from the same study also indicates that the percentage of children reported to speak a language other than English is lower than the percentage reported in the census, and differs by age. At the first time of sampling, when children were up to 1 year of age, 9.1% were reported to use a LOTE. This increased to 15.7% at time two (2–3 years) and 15.2% at time three (4–5 years). The percentage of children who maintained use of a LOTE between time two and time three was high (Verdon, McLeod, & Winsler, 2014).

The proportion of people speaking a language other than English differs by state. Data collected in the 1996 census showed the highest proportion is found in the Northern Territory (24.5%; reflecting the indigenous population) and lowest in Tasmania (3.4%). The proportion in Victoria is 20.7%, New South Wales 18.7%, ACT 14.1%, South Australia 12.6%, Western Australia 11.8%, and Queensland 7.1% (ABS, 2006). The proportion of particular languages spoken has also been shown to vary by state. For example, McLeod (2011) reports that, in the sample of children investigated, Arabic was the most common language spoken in New South Wales and Victoria. Greek was

the most common in South Australia and the Northern Territory, Vietnamese in Western Australia and Samoan in Queensland. The language spoken may also differ from suburb to suburb within the same city. For example, in 2011 Chinese-born migrants living in Sydney were concentrated in Hurstville, Rhodes, Burwood, and Allawah, while migrants born in India were concentrated in Harris Park, Westmead and Parramatta (ABS, 2014).

The evidence regarding linguistic diversity reported above reflects the general Australian context, and has clear implications for the profession. Evidence regarding the representation (in terms of percentage of caseload) of clients from culturally and linguistically diverse backgrounds is not readily available, but evidence that this client group is of concern to the profession is to be found in publications in SPA journals. Volume 13(3) of *ACQuiring Knowledge in Speech, Language and Hearing* took cultural diversity as its theme, and attracted papers and clinical insights across a range of areas. With the exception of one article (Stewart, 2011) and one column (Bowen, 2011), all address issues surrounding working with children. Working with adults from diverse cultural backgrounds also presents challenges to the profession, challenges which Australian speech pathologists do not feel highly confident of meeting (Rose, Ferguson, Power, Togher, & Worrall, 2014).

Diversity in the future

The range, contexts and purposes of practice of speech pathology seem likely to continue to diversify, not only within Australia, but worldwide. New technologies open new possibilities for service delivery and intervention approaches (see, for example, Finch, Clark, & Hill, 2013; Ward & Burns, 2012), thus diversifying the practice of speech pathology. The emerging development of the profession in other countries (see, for example, McAllister et al., 2013) will increase diversity in the international professional workforce, in the clients who will benefit from services, and in the contexts in which speech pathology services are offered. As ASHA states, “Speech-language pathology is a dynamic and continuously developing profession” (2007, p. 2). Who can predict the extent of the diversity we will see in our dynamic and developing profession in fifty years’ time?

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Taking Twitter for a twirl in the diverse world of rotational curation

Caroline Bowen

Rotational curation (RoCur) is the practice of rotating the spokesperson for a social media account that embraces many topics within a subject area. Typical subject areas are countries (Australia; Sweden), cities (Brisbane; Leeds), groups (Indigenous Australians; LGBTIQ people; student nurses), jobs (scientist; writer) academic disciplines (education; humanities; public health), and people with conditions (multiple sclerosis).

Founded in March 2014, **@WeSpeechies**¹ is the first ever speech-language pathology/speech and language therapy (SLP/SLT) RoCur, as well as the first allied health RoCur. It already has a strong reputation among followers as a useful point of contact for #SLPeeps (SLPs/SLTs with Twitter accounts), #SLP2B (students), and colleagues in other disciplines. It appeals to those interested in accessing support, resources, discussion, and information related to evidence-based practice (EBP) and research, in a collegial advertisement-free environment. Its subject area is SLP/SLT and, using some of the A's as examples, weekly topics have been academic issues, advocacy, aphasia, apraxia, and augmentative and alternative communication (AAC).

Head honchos and hosts

Facetious, fun for word lovers, and given to a sexist turn of phrase, **vocabulary.com**² defines “administrator” as “the boss, the head honcho, the guy in charge: the person responsible for managing things and running the show”. Founders and co-administrators Caroline Bowen and Bronwyn Hemsley are the guys running the @WeSpeechies show. They ensure smooth segues between curators as a new person takes over to Tweet from the handle on a Sunday, hosting discussions for a week that ends on the Saturday. They also help curators plan, design, publicise, and moderate a spirited one hour long Tuesday Twitter Chat, related to their overall topic, on the #WeSpeechies hashtag.

Rotation curation

A curator (from the Latin, as opposed to “from a **blow gun**”³: *curare* meaning “take care”) is a manager or overseer. RoCur, usually referred to as Rotation Curation, became a thing in December 2011 when Svenska Institutet and VisitSweden initiated Curators of Sweden with the enduring handle @Sweden. Every week, a different Swedish person assumes the responsibility of demonstrating, *in English*, Swedish diversity and progressivity – simply by being themselves on Twitter. The idea was emulated fast,

and @PeopleofLeeds and @WeAreAustralia, which also remain active, made their debuts in the first three weeks of 2012. The RoCur model has been ported to Instagram but continues to be most conspicuous on Twitter.

Noteworthy diversity

@WeSpeechies is noteworthy for its role as an SLP/SLT learning, teaching, and sharing tool; for the diversity of its curators and their topics; for its multicultural Twitter following which is both international and cross-disciplinary; and for its interesting and useful content. The curators have spanned many time zones and eight countries to date: Australia, Canada, England, France, New Zealand, Scotland, South Africa, and the United States. Some curators are specialists in their SLP/SLT fields, or SLP/SLT-related endeavours such as advocating as a parent for **young people with Aphasia**⁴, or working in the fields of linguistics or neuropsychology. Others do not see themselves as specialists per se, but have unique professional backgrounds and viewpoints that shape the overall feel of their week, enriching the conversations.

The curators

Singling out a few topics curated by the one-time (so far) curators: Avril Nicoll (Laurencekirk, UK) posed the question, “Making a change in your practice: What does it take?”; Felicity Bright (Auckland, NZ) explored “Patient-provider communication”; Harmony Turnbull (Sydney, NSW) took on “Plain English and accessible language in practice”; Megan Sutton (Vancouver, BC) curated on “Apps in SLP/SLT practice”; Andrea McQueen (Melbourne, VIC) inspired with “Fostering communication for participation for people with intellectual disabilities”; while Pam Snow (Bendigo, VIC) examined “Literacy and language development in vulnerable youth”; Susan Rvachew (Montreal, QC) unpacked the issues surrounding “Waiting times for SLP/SLT services”, and Tricia McCabe (Sydney, NSW) bore the massive task of tweeting from the Speech Pathology Australia 2014 Conference.

Several curators have served twice. Melissa Brunner (Sydney, NSW) led weeks on “Traumatic brain injury” and “Looking for evidence and EBP”; neuropsychologist Dorothy Bishop (Oxford, UK) curated “Is SLI a useful category?” and “Apprehensive academics on Twitter”; Rachel Davenport (Melbourne, Vic) steered WeSpeechies through “Work-life balance and the doctoral journey” and “SLP/SLT clinical education”; Kate Munro (Adelaide, SA)



curated on “Lurking and Tweeting” and “Mentoring and AAC users”; and Emily Wailes (Far North Coast, NSW) chose to tweet on “Communication support for people with intellectual disability who have challenging behaviour” from her own handle, and about “Assessment for AAC systems and tools” for @AGOSCI.

The administrators have taken a turn at RoCur too, with Bronwyn Hemsley (Newcastle, NSW) on “e-health solutions”, “SLP/SLT terminology” (with Caroline), “Using Twitter and social media to support countries developing AAC communities of practice” and “Developing and administering a RoCur”. Caroline Bowen (Wentworth Falls, NSW) has led on “Engaging in Twitter: Demystifying the experience”, “Words, words, words: Untangling our terminology” (with Bronwyn), and “Controversial practices in SLP/SLT”.

The remaining 2014 curators were Joanie Scott (Hertfordshire, UK) on ‘People with Aphasia and their Families and Friends’; Jenya Iuzzini, (Boston, MA) in a week about ‘Childhood Apraxia of Speech’; Nancy Owens (Canberra, ACT) regarding ‘Communicating evidence clearly and effectively to inform healthcare decisions’; Nicole Whitworth (Leeds, UK) on ‘Clinical Linguistics in SLP/SLT Education’; Gail Bennell (Launceston, TAS) with ‘Using Video in Clinical settings, and Video Blogging’; Ariane Welch (San Francisco, CA) on ‘Taking your SLP/SLT Credentials Abroad’; Sarah Masso (Sydney, NSW) with ‘Translating Research into Practice, and Practice into Research’; Tom Sather (Eau Claire, WI) on ‘Aphasia’; Naomi MacBean Hartley (Madison, WI) regarding ‘Voice’; John McCarthy (Athens, OH) with ‘Twitter in (and out of) the Lecture Hall’; Renena Joy (Halifax, NS) and ‘Working with Children who have Autism Spectrum Disorder in School Settings’; Olivia Hazelden (Toronto, ON) on ‘Use of Social Media from Student to Professional’; Kelley Babcock (Nashville, TN) on ‘Dysphagia’; Joy Pénard (Alsace Region, France) on ‘Clinical practice with Multilingual Clients and their Families’; Claire Hartley (Birmingham, UK) on ‘Simulation in SLP/SLT Clinical Education’, and finally the Administrators on ‘What are you SUPPOSED to be doing?’.

Handles and hashtags

Anyone with a Twitter handle can follow the @WeSpeechies handle in order to quietly experience it in action, and unfollow if it is not for them. A handle or username is how a person or group is identified in Twitter, and, like an email address, it is unique and not case sensitive. A handle begins with the @ symbol. For instance, Speech Pathology Australia is @SpeechPathAus and the Australian Senate of **Prevalence of different types of speech, language and communication disorders and speech pathology services in Australia**⁵ fame is @AuSenate.

A hashtag, meanwhile, is any word, phrase or alphanumeric sequence that begins with the # symbol. Clicking on a current hashtag takes you to all the Tweets containing that same hashtag. In discussions of AAC, aphasia, and apraxia the tags #AUGcomm, #aphasia, and #apraxia are often used. The obvious hashtag for AAC, #AAC, is unsuitable because it is used for topics that include athletics, soccer, and weapons. Accordingly, #AAC in the #AUGcomm sense can easily be swamped in a huge archive of Tweets that have nothing to do with #AUGcomm. Hashtags stay current if they are used and “disappear” quite quickly if they are not. For example, #ICP2014 has

decayed due to disuse since the end of last year, while #GivingVoiceUK has good longevity because it is ongoing and not confined to one particular year.

Strategic tweeting

“Reach”, in Twitter, is the sum of all users who mention a handle (i.e., have it in their timeline) plus the sum of their followers. Bruns and Moe (2014) describe three types of Tweets that help any tweeter to engage with others in different ways: micro, meso, and macro, with reach in mind.

Micro level . @

At this level the curator’s (or your) reply to a follower (let’s call him @EsmondSLP) is termed “conversational” and starts with the @ symbol, like this @EsmondSLP May 1 Tweet you re Webwords 51, using your handle and responses as examples in the published article in Mar 2015 JCPSLP? Only mutual followers of WeSpeechies and @EsmondSLP will see the Tweet in their timeline. While its “reach” is as limited as reach can be, @EsmondSLP may quite like it because the tweet is directed to him personally, and it may even make him feel a little more special than he usually does as a **bloke in speech pathology**⁶. Esmond is agreeable and Tweets back at Micro level @WeSpeechies No probs :-)

Meso level . @

When the @WeSpeechies curators (or you) put any character or characters before the @ that appears at the beginning of @EsmondSLP like this . @EsmondSLP Thanks so much for responding Ezza, really appreciative. Will show you the MS before submission., the Tweet will go to @EsmondSLP and to all the people in WeSpeechies’ followers network.

Macro level . @ and

Here, the curators (or you) Tweet a micro or meso level Tweet to someone and add a hashtag of mutual interest. Like this . @EsmondSLP, thanks for helping with my demo about hashtags and #WeSpeechies Then, @EsmondSLP replies to the curators, like this . @WeSpeechies Happy to help, #WeSpeechies Love your work! Esmond’s Tweet will be seen by all Twitter users who follow the #WeSpeechies hashtag, as well as all those who click on the hashtag out of interest or curiosity. The combination of meso plus hashtag will give the Tweet the greatest reach, amplifying Esmond’s voice and the probability that his ideas will be heard.

Anniversary celebration and call for contributors

The week 1–7 March 2015 marks @WeSpeechies’ first anniversary, and as many curators to date as possible will be on hand to celebrate what has really been an amazing, voluntary, cooperative effort between administrators, curators and loyal followers. Provided @WeSpeechies attracts fresh curators, this year the range of topics expands to include aged care, change, continuing professional development, craniofacial anomalies, cranial nerves and oral motor assessment, ethics, fluency disorders, humanitarian outreach, laryngectomy, professional associations in Twitter, school-based SLP/SLT, simulated clinical practice, SLPs/SLTs in retirement, statistics in practice, Twitter in academe, working in developing communities, writing for scholarly journals, and more.

A RoCur is similar to a small professional association (e.g., @NZSTA, @IASLT), a state branch (e.g., a Branch of @SpeechPathAus), a provincial association (e.g., @bcaslpa), a regional hub (e.g., @YorkshRCSLTHub), or an independent practice association (e.g., @ASLTIP). The common feature is that they all tend to be run, with or without administrative support, by small hard-working executives who, with the assistance of committed members, offer their services freely in order to benefit the totality of association, branch or hub. In fact, there would be no association, branch or hub without such people. Similarly, @WeSpeechies is only made possible by the few who contribute knowledge, time, effort and enthusiasm to enhance the wider speech-language-hearing community's learning.

What a satisfactory development it would be if even a small percentage of Webwords' readers decided to take part in @WeSpeechies in three ways. First, by following the handle, actively engaging in discussions and chats relevant to them, thereby shaping its future at "consumer and contributor" levels. Second, by taking a turn as a curator and elaborating a topic that is important to them. Third, by thinking about becoming an administrator for a period. Among the appealing features of rotation curation are its vitality and variety, with the followers dipping in and out of discussions according to their needs and interests, with the job of curator being handed from one host to the next, and with the guys who run the show knowing when it is time for new head honchos to take charge.

Further information about WeSpeechies, including a calendar of curators and topics, and chat transcripts is available at www.speech-language-therapy.com⁷.

Reference

Bruns, A., & Moe, H. (2014). Structural layers of communication on Twitter. *Twitter and Society*, 89, 15–28. Retrieved 11 November 2014 from http://eprints.qut.edu.au/66324/1/Twitter_and_Society_-_Structural_Layers_of_Communication_on_Twitter_%282014%29.pdf

Links

1. <https://twitter.com/wespeechies>
2. <http://www.vocabulary.com>
3. <http://www.speech-language-therapy.com/pdf/curare.jpg>
4. <https://www.youtube.com/user/SymphUK>
5. http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Community_Affairs/Speech_Pathology/Report
6. <http://www.speechpathologyaustralia.org.au/education-and-careers/real-men-do-speech-pathology>
7. http://speech-language-therapy.com/index.php?option=com_content&view=article&id=147

Webwords 51 is at www.speech-language-therapy.com with live links to featured and additional resources, including thumbnail biographies of all the 2014 rotational curators, and a 2015 update of @WeSpeechies' progress.

Top ten resources for clinicians on the move or in resource-poor settings

Lydelle Joseph



Lydelle Joseph

From going door to door in a village, hours from the nearest road to find children with disabilities, to presenting the latest apps and accessibility features of iOS8, my career has been an exercise in diversity. I've worked with adults with complex communication needs, in Early Intervention, private practice, schools for the Deaf and children with hearing impairments, a specialist autism service, and in several volunteer roles in Fiji and Vanuatu. This Top Ten represents a wide range of the resources that I have kept going back to. One thing that they all have in common is that I have used them in many ways to achieve goals that I am sure were never even dreamed of by the original developers.

1 Listening Room resources

"Hearing Journey" is a forum for families and professionals to discuss hearing loss and cochlear implants. "The Listening Room" is an online resource full of language and listening activities for people of all ages. Materials range from songs to sing to infants during routines such as dressing, mealtimes and getting ready for bed, to verbal discrimination activities for adults. Though designed for the context of deafness and hearing loss, I have used many of the toddler resources as parent handouts for children with a range of needs. The easy- to-understand language and practical activities can be implemented by parents with even the most limited resources. http://www.hearingjourney.com/Listening_Room/preview.cfm?langid=1

2 Guess Who?

The original form of this board game has been around for years. More recently, simplified versions as well as themed spinoffs such as Pixar-animated characters and "Ben 10" have appeared on the market. Hasbro has even produced a range of downloadable sheets for its most recent evolution. I use several different versions for developing deductive reasoning, asking and answering questions, turn taking, picture description, and many other skills. The game has even featured in work on pronouns. Like many of the resources here, applications for Guess Who? are really only limited by your imagination.

3 Lego Juniors Create & Cruise App

I use a wide range of apps in my intervention with children. Some of them are very specialised and well designed by experienced speech pathologists. My most frequently



accessed app, however, is definitely Lego Juniors Create & Cruise. Children choose parts to build vehicles to drive (or fly, run, or jump) along a track to the finish line. During the drive, they collect tokens that unlock more pieces for their vehicles. When the race ends, they build an object consisting of three to six pieces. For a number of the children I see with autism spectrum disorder and for many other children, Lego is highly motivating. For others, accessing the iPad is the reward in itself. I consider this app to be an excellent reward or motivator because it has a clear beginning and end point, has stimulating content and is simple to use. However, the app can also be used for language development activities including requesting, labelling, describing, and sequencing. Available on the iTunes app store and free at the time of writing.

4 Laminator

My love of the laminator probably began in my childhood when my dad took the well-worn, slightly torn money and playing cards from some of my favourite board games into his office and gave them a new lease on life by laminating them. Game cards became easier to deal, easier to clean, and much more durable. In my professional life, having some of my assessment and therapy resources laminated has saved them from flood damage, mould, hungry rodents, and even the odd infuriated child. Laminating pouches ranked right alongside Cadbury chocolates as priorities for family and friends to bring over when visiting me in Fiji or Vanuatu, where even photocopy paper and toner for my host organisation typically came out of my volunteer allowance. Here in Australia, I recommend to many families using visuals to support communication that they invest in their own laminator for home as well as a high quality printer and digital camera.

5 “Magic wand” and magnetic chips

I first met this motivational wonder in one of Super Duper Inc.’s “Chipper Chat” kits and now find it an invaluable tool on its own. A collection of translucent coloured circles about the size of 10-cent pieces with magnetic rims, the magnetic chips are marketed as “bingo chips” in a range of online stores. They can be used for any purpose for which you would use another type of token or counter and have an appeal that is far wider than I would have expected. For example, in some language groups I have run with boys in senior primary school, they have been a powerful currency for an extended period. Not only have participants tried to earn the most tokens but they have also come up with the most astonishing tricks and patterns for picking them up with the magnetic (magic) wand. Available from www.leisurelearning.com.au for A\$9.90.



6 Webber® Photo Cards – Verbs

I think most speech pathologists have some favourite picture collections and visual stimuli that they use frequently. One of my favourite collections is the Webber® Photo Cards – Verbs. There are 62 pairs of cards with photo images ranging from simple high frequency verbs for young children, such as “eating” and “sleeping”, through to much lower frequency verbs such as “loading” the dishwasher and “arranging” flowers. The images have mostly been accessible to the people I have worked with in a range of cultural contexts, both in terms of the actions depicted and the range of people in the images. I have used them in some way to target almost any language goal, as well as occasional articulation goals and vocal modulation goals where these were used as part of a scale to represent different volume levels. Available from Brainstorm Educational and Special Needs Resources <http://www.brainstormed.com.au/webber-photo-cards-verbs.html> for A\$45.

7 Key Word Sign

Key Word Sign is one of the most useful, transferable, and easily implemented augmentative and alternative communication (AAC) systems available. Apart from the advantages of being visual and simplified to support spoken communication, no physical materials are needed. As it is not reliant on written language, it is particularly useful in oral cultures, where limited literacy can prove a barrier to some other AAC systems. In multilingual environments, such as Fiji and Vanuatu, Key Word Sign has provided a universal communication system, although for specific individuals the signs are paired with different spoken languages.

8 Near and Far board game

“Near and Far” is a board game by Buki Ltd designed to help children understand and use prepositions. It is similar to a barrier game in that one player holds a picture and

describes where to place objects on the base board in order to create a 3D scene. It can be used to develop receptive understanding of specific vocabulary, to enhance understanding of increasingly longer and more complex instructions, to develop the use of positional vocabulary, and to give complete and grammatically correct instructions. Overseas, I used this game, and my own locally created version, to help me learn local language, as well as to teach clients. There are farm and jungle versions of the game. Previously available via <http://www.fishpond.com.au/Toys/Near-Far-Buki/0026304106712> but currently out of stock.



9 Magazines and “junk mail”

What do you do with a mailbox loaded with advertising materials or boxes of donated newspapers or magazines? Cut them up for language therapy, of course! Categorising, picture description, matching, prepositions, articulation, and other basic concepts can all be targeted both expressively and receptively. In resource-poor settings, they have been my paper-based “Google images”. Families have frequently been heartened by the fact that such easily accessible materials can be used to develop their child’s skills, as have teachers and community-based workers. Paired with a trusty laminator, materials can be created for long-term use. I have memory games, barrier games, Guess Who?, What Am I? and many other games made with clippings from a range of different sources that have lasted for years.

10 Self-inking stamps

I think I like stamps even more than stickers as rewards or tokens. For the same cost as a pack of stickers, a self-inking stamp will give literally thousands of impressions. Children with fine motor difficulties often have more success independently stamping than removing the back off stickers. Others with sensory aversions to sticky textures are likewise not bothered by stamps. As with the magnetic chips previously mentioned, stamps can be used for any task requiring counting or quantities. For example, stamps can represent syllables or phonemes in phonemic segmenting and blending activities. They can be used to track and reinforce positive behaviours or the number of turns in a game needed before a break. Best of all, for a speech pathologist on the move, they can fit in a pocket or tiny corner of a pencil case.

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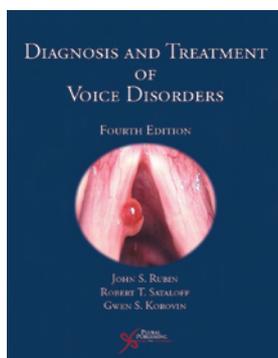
email: lydellej@irabina.com

Speech pathology resources

Rubin, J. S., Sataloff, R. T., & Korovin, G. S. (Eds.) (2014). *Diagnosis and treatment of voice disorders* (4th ed.). San Diego, CA: Plural Publishing. ISBN13: 978 1 59756 553 0; pp. 1019; US\$350; https://www.pluralpublishing.com/publication_datvd4e.htm

Kate Baumwol

With relevance for singers to surgeons, the 4th edition of the *Diagnosis and Treatment of Voice Disorders* aims to be a definitive complete reference for all professionals on the “art vs. science” continuum of voice work. At 1,019 pages and weighing over 4 kg, it certainly covers a significant amount of content. The format of the 4th edition follows previous editions and the book is separated into three units: Basic science, Clinical assessment, and Management. Ten chapters have been added since the previous edition, in acknowledgement of the substantial advancement in knowledge and treatment of voice disorders in the past 10 years. The new chapters include “Vocal fold extracellular matrix and wound healing”, “COUGH and the unified airway”, “The role of the voice coach in the treatment of vocal disorders”, “Occupational voice”, “Anesthesia in laryngology”, “Reinnervation: New frontiers, emerging approaches to laryngeal replacement and reconstruction”, “Recurrent respiratory papillomatosis”,



“Office-based phonosurgery”, and “Telemedicine”. In addition, several chapters, mostly within the Management unit, have either been updated or had a complete shift in focus – for example, the chapter on “Laryngopharyngeal reflux”. Basic science chapters considered “classics” have not been updated, although they would have benefited from revised diagrams and images.

For the speech pathologist or student with emerging skills in voice, the chapter by Thomas Murray and Clark A. Rosen – “The role of the speech-language pathologist in the diagnosis and treatment of voice disorders” – provides a clear overview of the speech pathologist’s role and includes protocols based on evidence from research and clinical practice. More experienced clinicians may find advanced chapters more interesting, such as R. J. Baken and R. F. Orlikoff’s chapter “Towards a dynamic diagnosis of vocal function” and others detailing surgical management. The addition of the “Role of the voice coach” chapter is indeed interesting; it presents very specific voice training exercises for the actor and professional voice user which occasionally contradict the speech pathologist’s motor learning approach, particularly with regard to the use of metaphors and imagery.

The 4th edition of the *Diagnosis and Treatment of Voice Disorders* is a comprehensive reference that would be a good addition to a teaching or clinical library. For students and speech pathologists new to voice it would be a useful tool. However, if I owned the 3rd edition I would not rush to purchase the 4th edition, as the editors accurately point out “there has been a veritable explosion of advances based on the associated sharing of information” and a great deal of the new content is easily accessible elsewhere online and in voice journals.

JCPSLP notes to authors

The *Journal of Clinical Practice in Speech-Language Pathology* (JCPSLP) is a major publication of Speech Pathology Australia and provides a professional forum for members of the Association. Material may include articles on research, specific professional topics and issues of value to the practising clinician, comments and reports from the President and others, general information on trends and developments, letters to the Editor, and information on resources. Each issue of JCPSLP aims to contain a range of material that appeals to a broad membership base.

JCPSLP is published three times each year, in March, July, and November.

Issue	Copy deadline (peer review)	Copy deadline (non-peer review)	Theme*
Number 3, 2015	13 April 2015	29 June 2015	Student Edition: Fresh Science & Pioneering Practice
Number 1, 2016	1 August 2015	14 October 2015	Prediction and Prognosis
Number 2, 2016	1 December 2015	9 February 2016	TBA

* articles on other topics are also welcome

General

Material submitted must be your original work. Any direct quotations or material used from other sources must be credited in full. If copyright clearance is required to use material included in your article, please supply evidence that this has been obtained.

With rare exceptions, we do not publish material that has already been published.

Articles will be checked by a copy editor to ensure consistent presentation and standard of English.

Length

Articles should not usually exceed 3500 words (including tables and references). This is equivalent to approximately 11 double-spaced pages. Longer articles may be accepted, at the discretion of the editors. For further information go to

<http://www.speechpathologyaustralia.org.au>

Format

The article should be submitted electronically via email (as an attachment). One hard copy and a copy on disk (preferably in Microsoft Word) is required if the article contains symbols (e.g., phonetic font).

The title page should contain the title of the article, the author's name, profession, employer, contact phone number, and correspondence address, as well as a maximum of five key words or phrases for indexing. Please provide brief biographical details (up to 15 words) for all authors.

The format must be double spaced with 2.5 cm margins, in a serif face (such as Times or Courier), each page numbered sequentially.

CDs must be clearly marked with file name, author's name and program used, including version number and whether PC or Macintosh (e.g., MS Word 2007). Each table or figure must be in a separate file on the disk. Do not incorporate figures or tables within the text of the article. Formatting must be kept to a minimum. Do not use tabs, bold, or other highlighting of the text. References must appear at the end of the article. The first line of each

paragraph should be indented. Do not right justify the text. Use one space after punctuation, including full stops. Double quotes should be used.

Peer review

Articles submitted to JCPSLP generally undergo a double-blind peer-review process. The article will be sent to two expert reviewers. The authors will be provided with information from the review process and will be invited to revise and resubmit their work if this is indicated. The sentence "This article has been peer-reviewed" will appear after the title for all peer-reviewed articles.

Style

Clear and concise writing is best. Use short sentences and paragraphs and plain English.

Reproduce any quotations exactly as they appear in the original and provide the page number(s) for the pages you have quoted from.

References, which should be kept to a minimum, should follow the American Psychological Association (APA 6th ed.) style.

The title should be kept as short as possible (maximum 80 characters).

Headings should be short. Within the article a maximum of two levels of headings should be used. For first level headings use all capitals, centred with one line space above and one line space below. For second level headings use a capital letter for the first letter of the first word only, centred with one line space above and one line space below.

Tables and figures

If there are to be tables or figures within your article, these should be in separate files with a clear indication of where they are to appear in the article. All tables and figures should be numbered. Figures should be presented as camera-ready art. Do not incorporate tables or figures within the text of the article. Digital images should be sent as uncompressed TIF or EPS files.

Abstract

Please include an abstract of approximately 100 words describing your article.

Photograph

Please include a clear photograph of yourself. This can be a casual or formal shot. A good quality print or slide is acceptable. These should be labelled with your name on a sticky label on the back. To avoid impressions damaging the back of the photo, write on the label before it is attached to the photo. Digital photos should be JPEG files (>120kb).

Article submission form

If your article is accepted for publication, it will only be published if the "Article Submission Form" and "Copyright Warranty and Assignment" are completed and signed (please contact National Office for these forms) or go to

<http://www.speechpathologyaustralia.org.au/publications/jcpslp>

Send articles marked Attention JCPSLP Editor to:

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