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# Supporting social, emotional and mental health and well-being: Roles of speech-language pathologists

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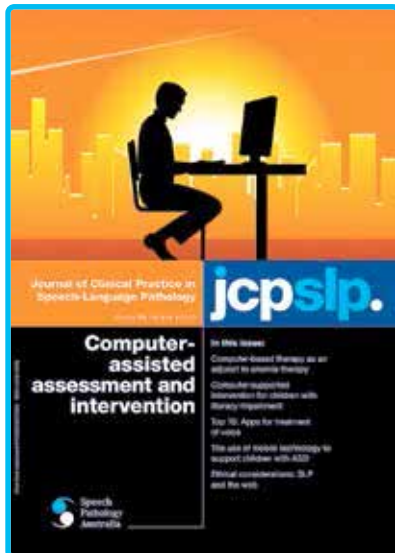
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# From the editor

Leigha Dark

Welcome to the November 2017 issue of JCPSLP entitled *Supporting social, emotional and mental health and wellbeing: Roles of speech-language pathologists*. What began as an issue focused on the role of the speech-language pathologist working in dedicated mental health contexts evolved into a broader exploration of the various ways in which members of our profession contribute to the social, emotional and mental health and well-being of clients, colleagues and communities. Mental health is defined by the World Health Organization (2017) as "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to her or his community". A complex phenomenon influenced by physical, social, emotional, psychological and environmental factors, it is more than the absence of a mental health condition. Rather, mental health is about cognitive, emotional and social health; the ability to think, feel and interact positively (Beyond Blue, 2016).

On the 10 October, World Mental Health Day 2017 was shared across the globe. With the aim of raising awareness of mental health issues and promoting support and development of mental health services, this year's theme, *Mental Health in the Workplace*, was explored. For many people, work is a significant part of life with a large proportion of time is spent there. It is known that the nature of the workplace can influence individual and collective mental health. With this in mind, the articles and columns in this issue offer insight into the different ways in which speech-language pathologists positively influence the well-being of clients, colleagues, family and friends, and community across a diverse range of contexts.

In the first article, Barbara Solarsh and Hilary Johnson open a discussion about the concept of communication access and social inclusion. They offer a thorough analysis of terminology in current use and argue that participation can be enhanced when communication access is embraced as an integral part of an inclusive community. In the second article, Hannah Stark outlines the role of the speech-language pathologist in addressing communication difficulties of primary school children with social, emotional and behavioural difficulties, offering reflection on a model of service involving comprehensive communication assessment and targeted, individualised intervention. Next, Natalie Alborés, Lyndal Sheepway and Clare Delany explore the beliefs and attitudes of allied health students towards mental health, sharing the outcomes of a clinical placement within an inpatient mental health facility. David Trembath and Elizabeth Starr share the reflections of parents involved in a multifaceted, community-based program designed to support children with social communication and learning disabilities during the transition to school. The authors highlight the importance of supportive, collaborative relationships and open channels of communication between teachers and parents as integral to the success of the transition process. Continuing with the theme of communication access, Helen Balydon and Sally Clendon present a comprehensive discussion of the access method of partner assisted scanning and the opportunities it presents individuals who use augmentative or alternative communication (AAC) to interact and participate. In the sixth article, Stacy Sheedy, Verity MacMillan, Susan O'Brien and Mark Onslow discuss the process of validating a framework of questions designed to assist clinicians to reflect on their delivery of the Lidcombe Program in the aim of promoting program fidelity and enhancing client outcomes. In the final article, Sally Hewat and colleagues present "NUSpeech", an international clinical placement model for speech-language pathology students. In their discussion, the authors highlight strategies used to promote sustainable partnerships and capacity building with communities in majority world contexts.

What is evident from the articles and columns in this issue is that, regardless of where or with whom we work or interact, mental health is everyone's business. Speech-language pathologists have an important role in promoting and supporting the social, emotional and mental health and wellness of individuals, across the lifespan.

## Contents

# Talking about communication access and social inclusion

Barbara Solarsh and Hilary Johnson

**Barbara Solarsh
(top) and Hilary
Johnson**

**Speech pathologists around the world are starting to address the issue of social inclusion for people with communication disability, and a new lexicon related to communication inclusivity is emerging. Some terms are relatively new, such as communication access or inclusive communication, while others, such as communication disability, have been redefined in terms of the shift from the medical to the social model. The lexicon under review relates to the range of individuals who benefit from communication inclusivity as well as to environments that enable social inclusion for people with communication disability. The authors seek to open a discussion on the communication access terminology in current use, and examine the terms in relation to three dimensions: the model reflected; the people who are included; and the extent to which the term is understood in the broader community. The authors propose the identification of one set of terms to be used internationally.**

**M**any western governments have policies and practices to enhance social inclusion for people with a disability (Family and Community Development Committee, 2014; Ontario, 2008). Social inclusion is a complex construct and has been defined as "the interaction between two major life domains: interpersonal relationships and community participation" (Simplican, Leader, Kosciulek & Leahy, 2015 p. 18). Johnson, Douglas, Bigby, and Iacono (2009) stated that integral to social inclusion is the "consideration of processes that develop and maintain relationships with others" (p. 180). Until recently, the focus on processes to increase social inclusion has been limited, with the main strategy being the reduction of physical access barriers. This reduction has been promoted through the adoption of the International Symbol of Access now underpinned by legislation through the Disability Discrimination Act (Australian Government, 1992). The symbol and standards have been powerful tools that have encouraged positive

community change such as increased physical access to buildings and public transportation.

While having a physically accessible community assists with community participation, there are additional, and specific strategies required to create social or communication access in order for social inclusion to occur. These include a skilled listener who can conduct a respectful interaction, communication resources to enhance face-to-face interactions and information presented in accessible formats. Practical strategies to reduce social barriers implemented to date may be due partly to the ratification and growing acceptance of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD; United Nations, 2006). The UNCRPD provided the first international recognition of the rights of people with communication disabilities and now underpins national and global policy aimed at improving the lives of people living with a communication disability (UNCRPD, 2006). Article 21 states that:

> [p]arties shall take all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of communication of their choice.

In particular, Article 21(b) refers to "[a]ccepting and facilitating the use of sign languages, Braille, augmentative and alternative communication, and all other accessible means, modes and formats of communication of their choice by persons with disabilities in official interactions" (UNCRPD, 2006).

Using the UNCRPD as a framework, several groups internationally have engaged in promoting and furthering communication rights of all individuals (Collier, Blackstone & Taylor, 2012; Scottish Government, 2011; Solarsh & Johnson, 2017). An example of this type of work was a three-year awareness campaign to promote communication accessible environments conducted in Canada (Communication Disabilities Access Canada, 2015). In preference to utilising a medical model that focuses on an individual's deficit or impairment, these groups approached the issue of communication accessibility through requiring environmental adaptations consistent with the social model of disability (World Health Organization, 2011). The key tenet that differentiates the social model from the medical model is the recognition of the role of the environment as a facilitating or handicapping agent. Social model approaches aim to reduce barriers and make

communities more inclusive for people with communication disabilities through environmental adaptations. In 2014, a consortium of speech pathology professional bodies from six countries established the International Communication Project (ICP). The aims of the ICP support and further extend Article 21 by encouraging "people around the world to join together and make a difference in the lives of people living with a communication disability" (www.internationalcommunicationproject.com).

## Exploring the current lexicon for communication access

At Scope's Communication and Inclusion Resource Centre, staff members (including SLPs) are creating communication access in the community by offering education, training, and capacity building support to businesses and services. Once the communication access standards have been met, and verified by an audit process, the Communication Access Symbol (Figure 1) is awarded. The definition of communication access states that "Communication access occurs when people are respectful and responsive to individuals with communication difficulties, and when strategies and resources are used to support successful communication" (Johnson, West, Solarsh, Wyllie, & Morey, 2013, p. 7).

However, SLPs at Scope are wrestling with the application of current communication disability terminology in the context of social inclusion. Adoption of the social model has led to a shift in emphasis from the disability itself to environmental support needs (attitude, knowledge, skills and practical resources) that arise from the disability. This shift reflects a move from clinical supports exclusively offered by a SLP to improve an individual's communication skills, towards community supports that may be offered by community members in order to facilitate successful communication in mainstream social settings. What is being described are adaptations to the environment in which the people, the setting and available communication resources, facilitate communication for anyone in that place. Yet, medical terminology and a focus on impairment still pervades discussions.

In light of this tension, the use of clinical terms such as communication disorder, impairment or difficulty that focus on an individual's impairment need to be reconsidered in relation to the role of environment as discussed by the World Health Organization (WHO, 2007). An example of reinterpretation is the increased use of alternative terms to communication disability such as *complex communication needs* (Balandin, 2002), *communication support needs* (Law et al., 2007) and *complex communication support needs* (K. Anderson, personal communication, 29 May 2017). In addition, terms emphasising the importance of the environment have appeared. Terms such as *aphasia* or *autism friendly* focus on environmental adaptations to enhance participation of specific diagnostic groups, in addition to more general communication adaptations (Howe, Worral & Hickson, 2004). Other overarching terms such as *communication friendly* environments, *communication access*, and *inclusive communication* have also come into use in the last decade (Money, 2016; Pound et al., 2007; Scottish Government, 2011; Shepherd & McDougall, 2008; Solarsh, Johnson, & West, 2012).

This discussion paper aims to present a description of the terms commonly used in discourse around creating communicatively accessible environments and identify the dilemmas in selecting the most appropriate terminology. Further, the authors hope to open a dialogue on appropriate and acceptable terminology to provide a common lexicon. We propose that such terminology avoids stigmatising or promoting an underlying medical condition, and rather recognises and promotes the need for environmental adaptations. The following questions may help guide the ensuing discussion and assist with refining the conceptual frameworks that inform practices.

1. What collective term is appropriate for the people who benefit from environmental adaptations that facilitate communication?
2. What term should be used to refer to an environment that enables this level of inclusion?
3. What do we call the process of creating responsive, inclusive communication environments?

## Discussion

A total of 12 terms have been identified from three sources: (a) discussions and relevant documents from national and international SLP colleagues involved in communication access activities; (b) discussion with communication access assessors (employees with complex communication needs); and (c) feedback from members of the Victorian Communication Access Advisory Groups (Solarsh, Johnson, & West, 2012). Of the 12 terms, six refer to communication characteristics of the individual (*communication disability*, *communication disorder/impairment*, *communication difficulty*, *complex communication needs*, *communication support needs*, and *complex communication support needs*), and six refer to environmental adaptations that include communication (*aphasia friendly*, *autism friendly*, *communication friendly*, *communication access*, *dementia friendly*, and *inclusive communication*) (see Table 1). Each term has been analysed in relation to three features that the authors consider desirable for socially inclusive contexts: (a) the model that is reflected by the term, (b) the inclusivity of group/s that would benefit from having communication supports, and (c) whether the term is transparent to the broader community.



*Figure 1. Communication Access Symbol*

### Terms referring to the individual

The terms that have been identified as relating to an individual include a person with (a) communication disability, (b) communication disorder/communication impairment, (c) communication difficulty, (d) complex communication needs (e) communication support needs and (f) complex communication support needs.

## Table 1. An analysis of communication terminology in relation to aspects of inclusive communication

| Communication term | Definition/explanation | Medical model | Social model | Applies to some or all specific disabilities | Includes all people who have difficulty communicating | Easily understood by lay person |
|---|---|---|---|---|---|---|
| **Terms referring to the individual** | | | | | | |
| Communication disability | *Communication disability* is a medical model term that has been redefined through the WHO *International Classification of Functioning, Disability, and Health* (ICF, WHO, 2001) and the *International Classification of Functioning, Disability, and Health: Children and Youth Version* (WHO, 2007). Thus, the disability exists as a result of the interaction of the various factors and not solely within the individual. A person's health condition may feature impairments of body structure and function that combine with environmental and personal factors to impact upon their communication and participation in society. | Yes | Yes | Yes | No | No |
| Communication disorder/ impairment | *Communication disorder/impairment* "is an impairment in the ability to receive, send, process, and comprehend concepts or verbal, nonverbal and graphic symbol systems. A communication disorder may be evident in the processes of hearing, language, and/or speech. A communication disorder may range in severity from mild to profound. It may be developmental or acquired. Individuals may demonstrate one or any combination of communication disorders. A communication disorder may result in a primary disability or it may be secondary to other disabilities" (American-Speech-Language Hearing Association, 1993). | Yes | No | Yes | No | No |
| Communication difficulty | *Communication difficulty* "is a lay term that refers to people who may or may not identify as having a communication disability, but who may benefit from communication supports implemented for people with communication disability. They may have a hearing impairment, limited literacy or belong to a culturally and linguistically diverse group. Each person may require a differing types and/or amounts of resourcing, depending on the context or activity, in order to feel included in a range of community interactions" (Hartley Kean, 2016). | Yes | Yes | Yes | Yes | Yes |
| Complex communication needs | *Complex communication needs* "refers to people who have little or no speech, or speech that is difficult to understand. The communication disabilities may be associated with a wide range of physical, sensory, cognitive and environmental causes which restrict/limit their ability to participate independently in society. They and their communication partners may benefit from using AAC methods either temporarily or permanently" (Balandin, 2002; Speech Pathology Australia, 2012). | No | Yes | Yes | No | No |
| Communication support needs | *Communication support needs* is a term used to "encompass the experience of a wide range of communication difficulties associated with a number of different disabilities" (Law et al., 2007, p. 6). "People have communication support needs if they need support with understanding, expressing themselves or interacting with others" (Scottish Government, 2011). They need communication partners to be flexible in the way that they communicate, and to give the individual the opportunity to express themselves in the way that is best for them (Scottish Government, 2011). The term focuses on the needs arising from a communication difficulty, rather than on the difficulty itself (Aitkin & Millar, 2002). | No | Yes | Yes | Yes | No |
| Complex communication support needs | People with *complex communication support needs* require support strategies from communication partners and/or the use of specialised AAC equipment and resources, to support their expression or understanding (K. Anderson, personal communication 29 May, 2017). | No | Yes | Yes | No | No |

| Communica-tion term | Definition/explanation | Medical model | Social model | Applies to some or all specific disabilities | Includes all people who have difficulty commu-nicating | Easily under-stood by lay person |
|---|---|---|---|---|---|---|
| **Table 1. An analysis of communication terminology in relation to aspects of inclusive communication** *continued* | | | | | | |

**Terms inclusive of the role of the environment**

| Communica-tion term | Definition/explanation | Medical model | Social model | Applies to some or all specific disabilities | Includes all people who have difficulty commu-nicating | Easily under-stood by lay person |
|---|---|---|---|---|---|---|
| Aphasia friendly | *Aphasia friendly* is when "barriers to participation in an environment are removed and facilitators for participation are provided or enhanced, in order to make the setting suitable for use by an individual or group of individuals with aphasia" (Howe, Worral & Hickson, 2004, p. 1033). Such an environment would include the following features: information written in an aphasia friendly format, facilitators and barriers to be evident in systems and policies across all life areas, communication partners are skilled communicators. and the attitudes of health professionals and members of the public are positive. | No | Yes | Yes | No | No |
| Autism friendly | *Autism friendly* refers to an enabling environment. For a child on the spectrum, the features of this environment should be based on information from an individual assessment, with input from parents and carers. The focus should be on facilitating an understanding of the social environment, and the use of visual supports for communication, considering the developmental stage of the child. Features of the sensory environment in relation to the child need to be considered and adapted (Guldberg, 2010). | No | Yes | Yes | No | No |
| Dementia friendly | *Dementia friendly* refers to a community "where people living with dementia are supported to live a high quality of life with meaning, purpose and value. For people with younger onset dementia, this should mean the option of being supported to stay at work, like any other disabled person, as being dementia friendly is not only about social engagement" (Alzheimer's Australia, 2016). | No | Yes | Yes | No | TBD |
| Communica-tion friendly | *Communication friendly* is an environment that "should make communication as easy, effective and enjoyable as possible. It should provide opportunities for everyone to talk, listen, understand and take part. Developing a communication friendly environment can also be seen as removing barriers to communication. A communication friendly environment will also support learning, social and emotional development" (The Communication Trust, 2017). | No | Yes | Yes | Yes | Yes |
| Communica-tion access | *Communication access* "occurs when people are respectful and responsive to individuals with communication disabilities, and when strategies and resources are used to support successful communication" (Solarsh & Johnson, 2017, p. 56). "Communication access is when everyone can get their message across and understand what is said to them" (Solarsh & Johnson, 2017, p. 56). | No | Yes | Yes | Yes | No |
| Inclusive communica-tion | *Inclusive communication* means "sharing information in a way that everybody can understand. For service providers, it means making sure that you recognise that people understand and express themselves in different ways. For people who use services, it means getting information and expressing themselves in ways that meet their needs. Inclusive communication relates to all modes of communication: Written and online information, telephone and face-to-face. Inclusive communication makes services more accessible for everyone. It will help to achieve successful outcomes for individuals and the wider community. It enables people to live more independently and to participate in public life" (Scottish Government, 2011). | No | Yes | Yes | Yes | No |

With reference to *communication disability*, the term *disability* is "complex, dynamic, multidimensional, and contested" (WHO, 2011, p. 3). Historically, a disability was viewed as a medical/health issue but now is understood as a complex interaction between aspects of a person's body and the culture and environment in which the person lives. Although this relatively recent understanding of disability has moved away from the medical model, lay people are still likely to understand disability as solely a dysfunction of the body. Thus, although the authors support the use of the term *communication disability* in its social model context, it is possible that the general public would interpret it through a medical model lens.

Referring to a person as having a *communication disorder* or *communication impairment* implies that the responsibility for addressing barriers related to the problem is the responsibility of the person, and hence strongly reflects the medical model. A lay term such as *communication difficulty* is more transparent to the general community and is the preferred term by the authors and also by communication access workers who use augmentative communication and are employed by Scope's Communication and Inclusion Resource Centre. Communication difficulty presents as having elements of both the medical and social models. While communication difficulty focuses on the individual's impairment it is different to communication disability, in that it is a term that describes a heterogeneous group which includes people with a communication impairment/disorder as well as a range of other people who experience communication breakdown (see Table 1). However, use of this term may be seen to reinforce the medical model approach as it signifies the problem lies within the person rather than resulting from a lack of environmental supports.

Although terms such as *complex communication needs* (Balandin, 2002; Speech Pathology Australia, 2012) or *communication support needs* (Law et al., 2007) are preferred social model terms, neither is easily understood by the broader community. *Complex communication needs* replaced the term *severe communication impairment* after extensive consultations with speech pathologists, families and people who used augmentative and alternative communication (AAC), and was designed to be in line with the social model (Perry, Reilly, Bloomberg & Johnson, 2002). Explicit in the definition is the need for use of AAC by both the person with the communication difficulty and the communication partner. The recognition that everyone can benefit from AAC (through gesture, writing, pointing) was a step forward in promoting wider acceptance of AAC. Unfortunately, *complex communication needs* still remains discipline-specific jargon that is not easily understood by community members.

Law et al. (2007) proposed the term *communication support needs* as an overarching term to refer to people with varied disabilities and/or difficulties who require some degree of support to maximise their communication potential. Law et al. (2007) estimated that although the prevalence of people with diagnosed communication disabilities may be between 1 and 2% of the population, up to 20% of the population may benefit from communication support at any one time. A concern with this term is that best available evidence suggests that communication supports do need to be targeted, specific and individually tailored in order to be effective. However, as there is limited evidence as to the differential benefits of communication supports, it is valuable to consider the communication

supports that will achieve social inclusion for a maximum number of people with a variety of communication difficulties. In addition to people with disabilities are people who may not identify as having a disability but may benefit from communication supports. This may include people with mild cognitive impairment, people who are Deaf[1], people with a temporary condition (such as laryngitis), people who are generally confused, people with limited literacy, tourists and Australians who are culturally and linguistically diverse. All of these people and their communication partners may experience difficulties communicating from time to time. Although it can be useful to compartmentalise subgroups of people in terms of prevalence and intervention type for targeted funding applications, considering these people as one large group provides support for change for a substantial sector of the community. Just as kerb cuts, designed for people who use wheelchairs provide better access to people with prams or trolleys, introducing communication supports into the community may also benefit a wide range people.

The term *complex communication support needs* serves to highlight that even if a person has significant communication needs, the environment can be adapted to contribute to support their social inclusion. The authors suggest that the addition of the word *support* to the term complex communication needs, enhances the role of the community in creating inclusive environments and may be a more socially acceptable a term than complex communication needs.

Hartley Keen (2016) suggested that implementing a wide variety of communication supports will facilitate communication for the greatest number of people. She refers to the "mainstreaming of communication methods, which address both the comprehension and expressive communication support needs of the broadest population of actual and potential service users" (p. 28). The authors, in agreement with Hartley Keen, have a preference towards using the phrase *person with communication support needs* as this term is inclusive of many different people, and focuses on each individual having access to the level of support they require.

To further illustrate the applicability of communication supports, an example of a service that has implemented environmental communication supports is V/line, a large regional transport provider in Victoria, Australia (Bigby et al.,2017). The supports implemented by this organisation aimed to address the needs of diverse customers who experience difficulty with communication and included staff training, accessible web information, communication aids to download, communication boards at customer service points on stations, and communication cards and image based notepads to convey real-time information about changes to the journey carried by conductors on trains. Although some feedback suggests that these innovations have improved the journey for customers with a disability, early positive anecdotal evidence has highlighted benefits to a broader range of people with a communication difficulty than initially anticipated. Positive examples of communication support use have been reported by V/Line staff for non-English speaking tourists and refugees who, when offered the use of communication aids, were able to get their needs met.

## Terms inclusive of the role of environment

Adaptations to the environment are essential for inclusion of people who have communication support needs. These

may include attitudes, interpersonal communication skills, strategies and resources. Terms such as aphasia /autism / dementia friendly have a focus on adaptive strategies to address the communication needs of specific groups, while other overarching terms such as communication friendly (The Communication Trust, 2017), communication access (Solarsh & Johnson, 2017), and inclusive communication (Scottish Government, 2011) focus on the collective communication needs of all groups and all individuals within those groups.

With regard to terms such as *aphasia/autism/dementia friendly*, evidence exists regarding the application of specific supports required for a diagnostic group, for example, aphasia (Howe, Worrall & Hickson, 2008; Rose, Worrall & Mc Kenna, 2003). However, some adaptations may not be pertinent to all groups or even to all people within a particular group. For example, due to the varying levels of need and individual preference among people with aphasia, certain adaptations such as symbol supported text is not always acceptable (Rose et al., 2003).

The overarching process terms referring to creating *communication friendly* environments, *communication access* and *inclusive communication*, all reflect the social model. Communication friendly reflects the values and intentions of both communication access and communication inclusion. In addition, it implies that when communication is *enjoyable* the environment provides *opportunity* for communication. All three definitions allude to communication including receptive and expressive components with inclusive communication and communication friendly strategies resulting in active participation and social inclusion as an outcome. Discussions with people with communication support needs in the early stages of the communication access initiative (Solarsh, Johnson & West, 2013) suggested that the term communication friendly appeared to be preferred as it was easy to understand. However, with the emergence of newer terms such as *inclusive* or *inclusivity* further exploration of terms acceptable to the community may be required. Even though communication friendly was a desirable term, communication access was selected by Scope as it has a synchronicity with familiar terms in current use such as physical access and deaf access. The term communication access expands the notion of access to include communication and community participation. Whereas communication access may have more appeal in a professional or official context, the term's association with the Communication Access Symbol will increase community recognition and use as the term becomes common parlance. A recent National Disability Insurance Agency Information Linkages and Capacity building grant is enabling Victoria's communication access work to expand nationally into South Australia and New South Wales. Although the authors are attracted to the term inclusive communication because the underlying construct of inclusion is dominant, the term is not readily understandable. Further research is required to explore applicable, appropriate and acceptable terms.

## Summary and implications

This discussion paper has outlined terminology about communication and social inclusion currently in use and provided reflections on the key strengths, weaknesses and acceptability of the various terms. The authors suggest all of these terms are useful in different contexts and for different purposes. Nonetheless, a term such as

"communication access" is aligned with the social model and can be promoted through the presence of the Communication Access Symbol in public spaces. The authors acknowledge that where work has begun in the movement towards communication inclusivity, people have an attachment to the terminology that has informed their discourse. Despite this, the authors are interested in having the discussion as to whether it is possible to develop a set of terms through an evidence-based process to give us all a common point of reference.

The authors urge clinicians to use terms with care and consider the implied message conveyed when selecting a term. It is unlikely that professional and lay community members will agree unanimously with regard to all the terms used. The terms have not been rigorously explored with the general public or with the range of people who have communication support needs, and we suggest this is the next step in developing a lexicon of appropriate and respectful terminology. However, the use of appropriate terminology alone will not solve social exclusion. Within the context of creating inclusive communities, clinicians need to define the population for whom communication inclusion might be relevant, trial and provide a range of supports and identify an expedient route to enhance social inclusion. Bonyhady (2016) referred to the need for "reasonable and necessary supports" (p. 116), in order for people to fully participate in society. As SLPs we have a role in determining what those supports might be, promoting community awareness of the issues surrounding use of those supports, and embedding solutions in practice and policies. Participation can be enhanced when communication access is embraced as an integral part of an inclusive community.

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1   Please note people in the Deaf community (with an upper-case D) may see themselves to be part of a Deaf culture and not consider their deafness as a disability.

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# The role of the speech-language pathologist in supporting primary school students with social, emotional and behavioural difficulties

## Clinical insights

Hannah Stark

**While the adage "behaviour is communication" is frequently used in speech-language pathology practice, the interactions between communication and behaviour are often poorly understood in practice in Australian primary schools. This article will provide an overview of how classroom behaviour is conceptualised including existing literature about the communication profiles and needs of primary school students with social, emotional and behavioural difficulties (SEBD). Current education provisions for these students will also be discussed. Clinical insights from a pilot trial of a speech-language pathology program in a specialist unit for primary school age children with SEBD will be offered, along with recommendations for speech-language pathologists (SLPs) who assess, support and advocate for this population.**

Primary school age students with social, emotional and behavioural difficulties (SEBD) are a cause of great concern to teachers and school administrators (Armstrong, Elliott, Hallett, & Hallett, 2016; Graham, Sweller, & Van Bergen, 2010; Stringer & Lozano, 2007; Tommerdahl & Semingson, 2013; Van Bergen, Graham, Sweller, & Dodd, 2015). Even though most speech-language pathologists (SLPs) who work in primary school settings will have students in their caseload who present with behavioural difficulties, it is suggested that, for a number of reasons, speech-language pathology services are not sufficiently accessible to vulnerable students, including those with SEBD (Cross, 2011; Hollo, Wehby, & Oliver, 2014; Snow, Powell, & Sanger, 2012; Stringer & Lozano, 2007). The Speech Pathology Australia *Speech Pathology Services in Schools* Clinical Guidelines (2011) recommend "that SLPs working in schools continue to advocate for involvement in less well recognised fields such as behaviour management, mental health" (p. 21). Six years on, involvement of SLPs in the support of students with SEBD in schools continues to be an emerging area of practice in Australia.

This article first provides an overview of the literature, including the conceptualisation of problematic classroom behaviour, the prevalence and communication profiles of

primary school-aged students with SEBD (including an overview of current provisions), and the issues associated with the identification and remediation of language and literacy difficulties in this population. Second, clinical insights, including a description of current educational provisions, and a rationale behind the delivery of a speech pathology service for this student population is offered. This is followed by the author's reflections upon the early implementation of a service within a specialist school for students with SEBD.

## Review of the literature

### Conceptualising classroom behaviour

The affective states of students, such as increased anger, anxiety, emotional lability, depressed mood, signs of trauma, a lack of empathy or an inability to cope, and their associated behavioural manifestations, can present challenges to teachers and SLPs within classroom or clinical settings (Cross, 2011; Todis, Severson, & Walker, 1990). These associated behavioural manifestations may be externalising (for example, aggression towards peers) and/or internalising (for example, the avoidance of peers) (see Table 1), and it is important to note that these behaviour types are not mutually exclusive (Todis et al., 1990). Disruptive or unproductive behaviours in the classroom are limited only by a student's imagination, but commonly

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| Table 1. Examples of externalising and internalising classroom behaviours | |
|---|---|
| **Externalising classroom behaviours** | **Internalising classroom behaviours** |
| Aggressive behaviour towards objects or persons | Low or restricted activity levels |
| Arguing | Not talking with other children |
| Forcing the submission of others | Shyness |
| Defying the teacher | Timidity or unassertiveness |
| Being out of the seat | Avoidance or withdrawal from social situations |
| Not complying with teacher instructions or directives | Preference to play or spend time along |
| Having tantrums | Fearful behaviour |
| Being hyperactive | Avoidance of games and activities |
| Disturbing others | Unresponsiveness to social initiations by others |
| Stealing | Not standing up for oneself |
| Refusing to follow teacher or school imposed rules | |
| Source: Todis et al., 1990 | |

include distractibility, verbal or physical joking, causing others to lose concentration, and ignoring reasonable requests and instructions (Armstrong et al., 2016). The term *challenging behaviour* is often used to refer to more serious, violent, or aggressive behaviour directed towards staff, other students, or the student themselves (Armstrong et al., 2016; Cross, 2011).

## Social, emotional and behavioural difficulties

Students with SEBD present with maladaptive social and behavioural responses that are severe, chronic, and pervasive (Gresham, 2005; Hollo et al., 2014), rather than behaviours that are episodic and transitory. These prolonged emotional and behavioural responses can limit participation in the classroom, which may result in school disengagement, academic failure, and/or social isolation (Beitchman et al., 2001; Snow, 2014; Tommerdahl & Semingson, 2013). SEBD encompasses a broad range of presentations and disorders, which may or may not meet the criteria for the diagnosis of a neurodevelopmental disorder as specified in the *Diagnostic and Statistical Manual of Mental Disorders 5* (DSM-5) (American Psychiatric Association, 2013). The representation of students with SEBD has increased in both mainstream and specialist schools in Australia (Graham et al., 2010; Van Bergen et al., 2015) and overseas (Hollo et al., 2014; Stringer & Lozano, 2007) in the past decade. This is reflected, for example, in the doubling of the number of students funded under the severe behaviour category of the Program for Students with Disabilities (PSD) in Victoria (see Table 2) between 2006 and 2013. The number of students who receive this form of funding rose from 706 to 1560 (Victorian Department of Education and Training, 2016), a 120% increase, compared to a 2.84% increase in total student enrolments.

| Table 2. Criteria for severe behaviour disorder |
| --- |
| **A** Student displays disturbed behaviour to a point where special support in a withdrawal group or special class/unit is required; **AND** |
| **B** Student displays behaviour so deviant and with such frequency and severity that they require regular psychological or psychiatric treatment; **AND** |
| **C** The severe behaviour cannot be accounted for by: intellectual disability, sensory (vision, hearing), physical and/or health issues, autism spectrum disorder or severe language disorder; **AND** |
| **D** A history and evidence of an ongoing problem with an expectation of continuation during the school years. |
| Source: Victorian Department of Education and Training, 2016 |

## Risk factors for SEBD

The known risk factors for SEBD are consistent with many of the risk factors for communication impairment (Cross, 2011). These include male gender (Graham et al., 2010; Hollo et al., 2014), low SES (Bretherton et al., 2014), a history of maltreatment (Cross, 2011; Lum, Powell, Timms, & Snow, 2015), indigenous heritage (Bretherton et al., 2014), being placed in out of home care (Cross, 2011; Snow & Powell, 2011), and having a neurodevelopmental disorder, such as autism spectrum disorder (Cole, Daniels, & Visser, 2012). While the co-occurrence of multiple neurodevelopmental disorders in children with SEBD is beyond the scope of this discussion, it must be noted that many students are diagnosed with more than one neurodevelopmental disorder (Cole et al., 2012).

Students with SEBD are a heterogeneous group, but are consistently found to have a combination of risk factors that outweigh the protective factors that are present within the student, their family, and/or their environment. Protective factors against SEBD include, but are not limited to, relatively strong academic and social skills, a stable (undisrupted) home environment, a history of strong parental attachment, and having prosocial friends (Ttofi, Bowes, Farrington, & Lösel, 2014). While this population has been of interest to researchers for many years, an understanding of the causes and contributors to social, emotional and behavioural difficulties, including communication skills, have not translated into a strong understanding that underpins classroom practices (Graham et al., 2010; Law & Stringer, 2014; Van Bergen et al., 2015). A common theme in the literature, also played out in classrooms across Australia, is that students who present with challenging behaviours that are disruptive, distracting, and affect teachers' and allied professionals' capacity to complete tasks, are the students who are most likely to receive attention (Armstrong et al., 2016; Cohen, Davine, Horodezky, Lipsett, & Isaacson, 1993; Cole et al., 2012). This attention may be aimed at addressing an underlying problem, or may be punitive in nature. Further to this, Garner (2012) argued that mainstream teachers' approaches to behaviour management are most influenced by their colleagues and the culture of the school in which they work, rather than policy or pre-service training, and as such can be variable and in some contexts, overly reliant on punitive responses.

## Oral language, literacy and SEBD

For nearly three decades, oral language and literacy difficulties have been known to be unrecognised or under-recognised in students with SEBD (Hollo et al., 2014; Law & Stringer, 2014; Prizant et al., 1990; Ripley & Yuill, 2005; Stringer & Lozano, 2007). As discussed by Law, Plunkett and Stringer (2012), the frequent co-occurrence of language difficulties and SEBD does not mean that there is a definitively causal relationship, but rather, a multifaceted relationship between these two areas of functioning is evident. Chow and Wehby (2016) theorise that language influences both academic skills and behaviour, and academic skills and behaviour, in turn, influence each other, as well as later life outcomes. The meta-analysis by these authors identified a significant negative concurrent and predictive association between language and problematic behaviour (Chow & Wehby, 2016).

To date, research investigating the association between language delay and disorder and SEBD has taken two approaches. The leading approach has been to measure the prevalence of social, emotional or behavioural difficulties in children who present with primary communication impairments (Botting & Conti-Ramsden, 2000; Durkin & Conti-Ramsden, 2010; Van Daal, Verhoeven, & Van Balkom, 2007). An example of this approach is the work of Botting and Conti-Ramsden (2000), who, in a study of students who were 11 years of age and attending a specialist unit for students with specific language impairments, found that the students' average behaviour scores were within the normal range. However, the students with language impairments in both receptive and expressive modalities were more likely to present with behavioural difficulties in the clinical range when compared to students with expressive language impairments only (Botting & Conti-Ramsden, 2000).

The secondary methodological approach is measuring communicative competence in children and adolescents

who present with primary social, emotional or behavioural difficulties (Benner, Nelson, & Epstein, 2002; Bryan, Freer, & Furlong, 2007; Hollo et al., 2014; Ripley & Yuill, 2005; Snow & Powell, 2011; Stringer & Lozano, 2007; Tommerdahl & Semingson, 2013). The results of a recent meta-analysis show that it is likely that four out of five children with SEBD have unrecognised language impairment (Hollo et al., 2014). Numerous studies confirm an increased prevalence of SEBD in children with communication impairments, and vice versa (Benner et al., 2002; Botting & Conti-Ramsden, 2000; Cross, 2011; Ripley & Yuill, 2005; Stringer & Lozano, 2007).

Academic achievement is consistently identified as a protective factor against antisocial behaviour, youth offending, and drug misuse (with the inverse, academic failure, a risk factor) (Snow & Powell, 2011; Snow, 2014). If it is possible to identify primary school-aged students who, because of significant SEBD, are at risk of academic failure and school disengagement, it may be possible, through the use of targeted, evidence-based interventions that support language and literacy skills, to alter their educational trajectories and prevent future social marginalisation (Law, Plunkett, & Stringer, 2012).

Both locally and internationally, most research on the topic of co-occurring social, emotional, behaviour and communication difficulties in the field of speech-language pathology has taken the form of prevalence studies. Interventions targeting social and emotional well-being and functioning in students with SEBD are reviewed in the literature; however, fewer interventions that directly target communication are available. Law, Plunkett and Stringer (2012) have published a review of communication interventions that have targeted behaviour in children between the ages of 5 and 11 years of age. They reviewed 19 studies that all showed a positive impact on the students involved; however, there was a high level of heterogeneity between studies. Interventions trialled included speech and language interventions at both and individual and classroom level, as well as functional communication, peer and behavioural interventions that have been delivered in school, clinic, and home environments. This review highlighted the need for ongoing research in which both communication and behaviour are considered, with collaboration between SLPs, psychologists and other health professionals.

For SLPs working in Australian primary schools, there is an ongoing need to advocate for assessment, intervention and support for these students, to reduce their risk of disengagement from school, or the later emergence of offending behaviour that may result in contact with the law. In recent years, understanding and insight into the particular communication needs of adolescents in the youth justice system has grown (Bryan et al., 2007; Snow & Powell, 2011). With increasing recognition of the school-to-prison pipeline (Christle, Jolivette, & Nelson, 2005), learnings can be extrapolated to younger, vulnerable primary school age students. Indeed, conceptualising the provision of services to primary school students with SEBD as preventative intervention is warranted. Of critical importance is the provision of evidence-based instruction for these vulnerable students, to ensure the transition to literacy is made in the first three years of school (Snow, 2014).

## Clinical insights

### Current provisions for students with SEBD

In Victoria, a staged approach to managing challenging behaviour generally includes a recommendation for supporting a student with SEBD with the formulation of a behaviour support plan (BSP). A BSP is a school-based document designed to assist individual students who have experienced harm, are at risk of harm, or have caused harm to others (Victorian Department of Education and Training, 2017). This document is developed jointly by school staff and the student's parents or carers, allows the expectations and planned supports for a student to be communicated clearly, and documents any known triggers for unwanted behaviours. Guidelines for promoting positive behaviour place a strong emphasis on the importance of clear communication between all parties involved, including the student (Victorian Department of Education and Training, 2013).

If indicated, Victorian government schools may make an application for a student in the severe behaviour category under the PSD. To be eligible to receive additional support and funding, students must meet the criteria outlined in Table 2. It is at the point of application that students are often referred to a SLP to ensure they meet the exclusionary criterion of not presenting with a language impairment. Standardised language assessments are used to measure language at a word and sentence level, but are often not sensitive to subtle higher level language difficulties that affect discourse or pragmatic skills. The criterion of excluding language impairment is at odds with both the Australian and international literature that demonstrates the high rate of co-morbidity between SEBD and communication difficulties.

A growth in alternative educational settings, offering smaller classes and individualised programs, has been seen across Australia in recent years (McGregor & Mills, 2012). Mainstream settings may refer students who are at risk of disengagement and not able to participate in the classroom to these alternative programs. These settings are predominantly for secondary school students; however, alternative (often temporary) placements are available for primary school-aged students in some locations. Support may also be available from psychologists and counsellors, in both mainstream and alternative school settings; however, the success of behavioural interventions with students with undiagnosed complex communication difficulties is likely to be less than optimal if specialist SLP services are not also made available to these students.

Despite the current provisions for intervention and support, students with severe SEBD are at the highest risk of being suspended and excluded from school (Armstrong et al., 2016; Graham et al., 2010). While all students are required to attend school full-time until the age of 17 in the state of Victoria, students with SEBD are known to often have reduced attendance, and may be removed before the completion of the school day. Disrupted education experiences have long-lasting implications for the acquisition and development of language and literacy skills (Stringer & Lozano, 2007) and for opportunities to be exposed to and acquire prosocial interpersonal skills.

### A current service example

A speech-language pathology role was instigated in a Victorian Department of Education and Training specialist unit for primary school students with SEBD in an outer metropolitan area of Melbourne. Students are referred to this specialist unit by their mainstream school and attend the unit for three or four days per week for the duration of two consecutive school terms, while remaining enrolled in their mainstream school the remaining one or two days. Teaching staff at the school have a variety of professional

backgrounds, including experience in mainstream, special education, and youth justice settings. A "Team around the learner" framework is utilised, in which partnerships between the mainstream school, the specialist unit and the student's family or carers are considered paramount to the success of the intervention. This school had not previously offered a speech-language pathology service. Prior to the commencement of this part-time position, a partnership was established with university researchers, and ethics approval was granted for the collection of standardised assessment communication data from consenting students.

The primary focus of this ongoing research project is to establish a profile of the communication skills of students who have been identified as presenting with SEBD of such severity that their mainstream enrolment is problematic. Many, but not all, students who are referred to the school receive additional funding from the Victorian Department of Education and Training under the category of severe behaviour disorder. A range of standardised assessments were conducted with each student who participated in the study. This was in addition to the provision of intervention to support both communication and literacy skills of students within the unit, utilising targeted and individualised interventions (Gascoigne, 2006). This project has offered a privileged perspective of students with SEBD from a number of mainstream Victorian government primary schools. The description and rationale for the speech-language pathology service within the first year of the service are set out below. Considerations and suggestions for SLPs working with primary school-aged students with SEBD (in mainstream as well as specialist settings) are outlined in Table 3 and further discussed in the following sections.

### Oral language and literacy assessment

A central component of this SLP service was the provision of comprehensive communication assessments to all students within the unit. Widely used standardised measures provide an insight into a student's skill profile when compared to normative data, and can offer comparisons between core expressive and receptive language skills. However, for many students with SEBD,

their communication difficulties lie beyond the sentence level, with narrative, conversational and/or pragmatic skills being the primary area of impairment (Law & Stringer, 2014). For students who are frequently involved in conflict and dispute with their peers, family or teachers, narrative skills are of particular importance. In this context, it was considered crucial that assessment went beyond capturing data about morphology, vocabulary and sentence comprehension, and that contextualised communication, including conversational, narrative, social and functional communication skills were considered before communication impairment was excluded.

In addition to oral language skills, assessment of phonological awareness and literacy skills in students with SEBD can shed light on skill deficits that may underlie task avoidance behaviours. For students in the early years of primary school who are struggling to make the transition to literacy, and for older primary students who have not acquired the necessary literacy skills, identification and remediation of literacy difficulties can make the classroom accessible, as it becomes easier to attempt an academic task, rather than to avoid it. For students who were reluctant or refused to complete structured assessment tasks, samples of conversational, expository and, where possible, narrative language were collected and analysed, and the *Children's Communication Checklist* (2nd edition; Bishop, 2003) was also utilised to collect information from student's teachers.

### Targeted intervention

A tiered framework, including both targeted and individual interventions (Gascoigne, 2006), was used to guide service delivery within this specialist setting. Targeted (tier 2) interventions that supported all students attending the specialist unit included working with teacher colleagues to create classroom environments that purposefully supported communication, as per Dockrell, Bakopoulou, Law, Spencer, and Lindsay (2012). Environmental modifications included the introduction of visual timetables, and ensuring conversation promoting displays are found in the classroom. Language learning opportunities and interactions were also addressed, through collaboration in curriculum planning within the school. A core component of the SLP role was advocacy for the introduction and sustainment of an evidence-based approach to literacy instruction that included but was not limited to systematic, synthetic phonics. The introduction of a systematic approach included providing support to ensure all teaching staff were informed of the rationale behind the intervention, and were equipped with the necessary content knowledge.

The success of tier 2 speech pathology interventions within a specialist school setting rests upon collaboration between teachers and SLPs. Importantly, the SLP role was embedded within the classroom, alongside the teaching team, and it was recognised by school leadership that SLPs and teachers have different but complementary roles in education (Snow, 2016; Speech Pathology Australia, 2011; Wilson, McNeill, & Gillon, 2015). While teachers are responsible for teaching and learning outcomes in curriculum areas, the SLPs were able to focus on how to support students with communication difficulties to access and participate in curriculum areas to achieve competency in these areas (Speech Pathology Australia, 2011). Indeed, significant value can be added to school programs when teaching professionals are able to collaborate with SLPs to implement appropriate educational provisions for students with special needs, including SEBD, across the curriculum on a daily basis (Antoniazzi, Snow, & Dickson-Swift, 2010; James, Jeffries, & Worley, 2008; Speech Pathology

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**Table 3. Suggestions for SLP practice for primary school-aged students with SEBD**

- Be consistently cognisant of the language–behaviour nexus, and share this knowledge with your teacher colleagues.
- Be a team member and collaborate effectively with teachers and psychologists.
- Help the schools you work with to consider the communicative demands of behaviour interventions.
- Expand scope of speech pathology assessments, beyond commonly used language assessments.
- Consider the functional implications of specific deficits (i.e., poor narrative structure, conjunction use, comprehension of instructions), and link these skill sets to every day classroom demands.
- Support schools to make classrooms accessible to students with receptive language impairments, and advocate for preventative and early intervention in SEBD.
- Advocate for importance of evidence-based approaches to literacy that include (but are not limited to) systematic, synthetic phonics.
- Be aware of trauma-informed practice, and undertake further training.
- Be cognisant of the impact of vicarious trauma and seek professional supervision to manage this.

Australia, 2011). Teachers and SLPs must approach one another as colleagues that engage in a balanced partnership, ensuring an honest and flexible relationship with reciprocal sharing of knowledge and skills (Bauer, Iyer, Boon, & Fore, 2010).

An insight and perspective that was shared with school staff was the communication demands of many commercially available and widely used social, emotional and behavioural interventions and programs. Working with teachers to consider the language demands of these interventions, and modify them accordingly, added value to the existing approaches to behaviour support. To improve and strengthen understanding of the links between classroom behaviour and the development of language and literacy skills, professional knowledge and insights need to be shared between the teaching and speech-language pathology professions.

### Individualised intervention

The provision of individualised intervention to address specific needs is a core component of the speech pathology service within this specialist setting. As discussed by Snow (2014), students with disrupted early education experiences often reach the middle years of primary school with limited literacy skills. For these students, opportunities to acquire the necessary foundational skills to access the curriculum become fewer as they progress through school. For many students, whose insufficient language and literacy skills go unnoticed, creating a distraction through undesirable behaviour is often a preferable option (Armstrong et al., 2016).

In line with the recommendations of Gallagher (1999), the tier 3 intervention included (a) supporting students to identify communicative alternatives to undesired behaviours, (b) building emotional vocabularies to support behaviour, (c) developing social stories and social scripts, and (d) including reinforcement for positive communication and behaviour. Specific areas of language, including curriculum-specific vocabulary and the comprehension of instructions and discourse, were targeted with either small groups or individual students. Intervention took place in the classroom or in a small room adjoining the classroom. A small number of students participated in a single case design study that targeted emotional vocabulary, the comprehension and use of conjunctions, and sequencing concepts. The results of this intervention will be published at a later date.

## Conclusion

Working with this population is challenging and rewarding in equal measures. Regular exposure to students' complex histories and ongoing experiences of trauma, neglect, and abuse can have a cumulative impact on practitioners (Baird & Kracen, 2006). Skilled professional supervision and mentoring is therefore essential for SLPs working in environments such as this. With the growing momentum that is building behind the role of the speech-language pathology profession in furthering social equity, efforts focused on addressing hidden communication impairments in primary school students with SEBD have the potential to achieve an impact that is evident well into these students' futures.

## Acknowledgements

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# Examining beliefs and attitudes of allied health students towards mental health

## Outcomes of a clinical placement

Natalie Alborés, Lyndal Sheepway, and Clare Delany

**While the prevalence of patients presenting to hospitals with mental health conditions is growing, allied health professionals often poorly understand the needs and overall different presentation of people with mental health concerns. This research examined, via validated pre- and post questionnaires, how a clinical placement of up to 6 weeks at a metropolitan inpatient mental health facility impacted exercise physiology, speech-language pathology and dietetic students' familiarity with and beliefs and attitudes towards mental health, and perception of their role in working with patients with mental health problems.**

**Results indicated that students' beliefs and attitudes towards and understanding of mental health conditions positively changed following this clinical placement experience. All students (n = 26) demonstrated a statistically significant change (*p* = 0.03) in their familiarity with mental illness, and showed a decrease in negative, stigmatising beliefs and attitudes. Such placement experiences may assist in: (a) improving students' familiarity with and understanding of mental health, (b) shaping initially fearful or dismissive attitudes towards more positive, person-centred views, and (c) facilitating awareness of potential professional roles in caring for patients with a mental illness and supporting their needs as individuals and members of the community.**

Mental illness is a major health problem worldwide. Almost half of Australians will experience a mental illness in their lifetime (Australian Bureau of Statistics [ABS], 2009). In Australia, one in five individuals aged 16–85 experience a mental illness in any one year (AIHW, 2014). The most common mental illnesses are depressive, anxiety and substance use disorders, often co-occurring. Of the 20% of Australians with a mental illness in any one year, 11.5% have one disorder and 8.5% have two or more disorders (ABS, 2009). Within Australian hospitals between 2012 and 2013 a total of 9.37 million mental health related admissions occurred across the public acute, private acute and public psychiatric systems. accounting for 2.6% of all hospital admissions by non-indigenous individuals, and 6.2% of mental health related admissions by indigenous Australians (AIHW, 2014). With this high prevalence and the known negative impact on people with a mental illness diagnosis, there is essential need for a health workforce adequately trained to assist individuals and their families and communities to manage these conditions.

## Attitudes of health care professionals towards mental illness

There is evidence that health care professionals working within the mental health setting, as well as in more generalist health services, may hold negative beliefs and attitudes towards people with mental illness that can influence their personal and professional behaviours (Disability Rights Commission, 2006). These types of beliefs represent forms of stigma. Public stigma, as defined by Corrigan and Watson (2002), is the reaction that the general population has to people with mental illness. Self-stigma is the prejudice which people with mental illness turn against themselves. Both forms of stigma encompass three areas: stereotypes, prejudice and discrimination. Stereotypes refer to (often negative) beliefs or views held about others that are learned and agreed upon by most members of a social group. These views can inform impressions and expectations of individuals who belong to a particular group, e.g., people with mental illness. While most people within a social group can recall or describe stereotypical beliefs, they may not always personally ascribe to them. For example, a person may be aware of the stereotype that depicts people with a mental illness as violent and unpredictable, but they do not necessarily agree with it or see it as a valid representation of individuals within this group. People who are prejudiced, however, do ascribe to these negative stereotypes and may overgeneralise and apply them indiscriminately to all members within a group, even though this is clearly inaccurate. Prejudices are deeply held attitudes that involve both cognitive and emotional components. For example, a prejudiced individual may agree that all people with a mental illness are dangerous and therefore should be feared and ultimately avoided, this

*Natalie Alborés (top), Lyndal Sheepway (centre), and Clare Delany*

latter action an example of discrimination. Discrimination refers the behavioural reaction to the stereotypes and prejudices held about a particular group and may manifest in the health care sector as exclusion from, withholding of or redirecting of services. Stereotypes (beliefs), prejudices (attitudes) and discrimination (behaviours) are important to examine and understand within health care settings, as negative views can interfere with efficient patient care and hinder a truly person-centred approach to service provision.

## The role of education and experience in changing attitudes

Emerging literature highlights some evidence about the positive effect of dedicated clinical experience and/or education about mental health in shifting students' attitudes and understanding about mental health. For example, exposure to people with mental health conditions, through clinical placements, has been shown to afford several benefits for students and health professions more generally in the areas of skills and knowledge (Feeney, Jordan, & McCarron, 2013), as well as beliefs and attitudes (Markstrom et al., 2009). Students may demonstrate a reduction in their fears and anxieties about working in mental health through exposure to and involvement in this setting (Thomas & Bhattacharya, 2012) and increase intentions to pursue careers in this area of clinical practice as a result of greater familiarity and understanding (Happell & Gaskin, 2012). As the need for services to support patients with mental health concerns increases, so too does the relevance and recognised role for allied health clinicians (NSW Health, 2015). Therefore it is essential that allied health students, including speech-language pathology students, receive adequate preparation for work in a diverse range of clinical areas, prior to graduation.

Information about how training programs and clinical placements influence medical students' attitudes towards mental illness is most prevalent within the research literature; however, outcomes of studies are mixed (Happell & Gaskin, 2012; Stubbs, 2014). Some low-level studies (utilising pre-post evaluation methods) suggest training results in little or no change in attitudes, although knowledge and understanding of mental health may increase (Happell & Gaskin, 2012; Stubbs 2014). Yet other studies have found positive changes in the attitudes of health care students in connection with a clinical placement in mental health (Corrigan, Druss, & Perlick, 2011; Corrigan, Edwards, Green, Diwan, & Penn, 2001; Corrigan, Green, Lundin, Kubiak, & Penn, 2001; Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003). To date, there has been a paucity of literature exploring the benefits of clinical placements and education programs within the area of mental health for allied health students, relative to medical or nursing literature. As the role and profile of allied health professionals within this area increases and is further acknowledged, a focus on high-quality methods to adequately prepare graduates is warranted.

Exposure, discussion and explicit instruction regarding mental illness is assumed to play an important role in determining and reforming attitudes, both of professionals and students. Clinical placements within mental health are a unique and rich opportunity to influence students' skills, knowledge and understanding of a potential area of specialisation (Callaghan, Cooper, & Gray, 2007). Exposure to mental health contexts as students may also assist with identifying, challenging and addressing any negative or inaccurate beliefs and attitudes held towards patients with mental illness, as well as providing students with the knowledge, skills and awareness to advocate for ongoing services for patients throughout their professional allied health careers.

This main aim of this research study was to explore the understanding, beliefs and attitudes of exercise physiology (EP), speech-language pathology (SLP) and dietetic (DTn) students towards mental health and mental illness prior to commencing a 6–8 week clinical placement within a mental health setting, and examine the nature and degree of any changes seen post placement.

## Method

The hypothesis of this study arose from the idea that through providing clinical experience with patients who have a mental health concern, allied health students, including speech-language pathology students, will gain a greater understanding about their professional role with this clinical group and experience positive change in previously held beliefs and attitudes. A convenience sample (Teddie & Yu, 2007) of students from the disciplines of exercise physiology, speech-language pathology and dietetics was recruited. These professions were selected as they represent the allied health professions that are playing an increasingly important role in the care of people with mental health concerns. Students were invited to participate in the study by the primary author, who was associated with the research though not responsible for the clinical education of two of the included disciplines (exercise physiology and dietetics). The invitation occurred in the first week of the students' placement. Students interested in participating in the study responded directly to their clinical supervisor in their respective discipline.

The research was overseen by two academics from two universities in Australia. This study received ethics clearance from the University of Melbourne Department of Medical Education Health Advisory Group Ethics Committee (#1543866) and the NSW Health Northern Sydney Local Health District Human Research Ethics Committee (#LNR/15/HAWKE/102 & #LNRSSA/15/HAWKE/122).

### *Participants*

A total of 26 students were recruited for this study. Ten students from exercise physiology, 10 students from speech-language pathology and 6 students from dietetics participated. All students were from the same university undertaking clinical placement within a multidisciplinary team located within a psychiatric inpatient metropolitan mental health facility for a period of between six to eight weeks. The university was responsible for allocation of students to this site as per standard university procedure. As part of the recruitment process students were provided with a plain English description of what participation in the study would entail. It was made clear that participation was voluntary and the decision to participate would not impact their clinical placement assessment or influence current or future relationships with their university or the placement organisation.

### *Data collection*

Students' beliefs and attitudes towards mental health were explored pre-placement and again post-placement using the following three validated questionnaires.
- Level of Familiarity Survey (LOF) (Corrigan, Edwards et al., 2001; Michaels & Corrigan, 2013) – examining experience and familiarity with mental illness

- Error Choice Test (ECT) – examining understanding of mental illness and stigmatising beliefs (Cooper, Corrigan, & Watson, 2003; Michaels & Corrigan, 2013)
- Attribution Questionnaire (AQ-27) (Corrigan, Edwards, et al., 2001) – examining stigmatising beliefs and attitudes towards mental health

The Level Of Familiarity Survey (LOF) (Corrigan, Edwards, et al., 2001; Michaels & Corrigan, 2013) is an 11-item survey in which responses are coded for the level of intimacy and familiarly an individual has with mental illness: 11 = indicates the most familiarity, 7 = medium familiarity, 1 = little to no familiarity. Respondents select all statements that reflect their experience and then summed scores are used to generate a single familiarity score. The higher the score, the higher the level of familiarity with mental illness.

The Error Choice Test (ECT) (Cooper et al., 2003) is a 14-item survey utilising true/false statements that was developed to assess public stigma towards mental illness without drawing attention to the intent of the measure. This test was designed to obtain a more accurate self-report of stigmatising attitudes by being presented in the guise of a knowledge test. It is not, however, a test of knowledge about mental health. Each answer is given a score of 1 (more biased/stigmatising response) or 0 (less biased/stigmatising response). Thus, a higher score indicates greater stigmatising beliefs and attitudes (Cooper et al., 2003).

The Attribution Questionnaire Short Form (AQ-27) (Corrigan, Edwards, et al., 2001) is a 27-item self-report survey which assesses nine domains of commonly stereotyped responses towards an individual with mental illness: responsibility ("people with mental illness can control their symptoms and are responsible for having the illness"), pity ("people with mental illness are overtaken by their own disorder and therefore deserve concern and pity"), anger ("people with mental illness are blamed for having the illness and provoke wrath and rage"), dangerousness ("people with mental illness are not safe"), fear ("people with mental illness are dangerous"), help ("people with mental illness need assistance"), coercion ("people with mental illness have to participate in treatment management"), segregation ("people with mental illness are sent to institutions located far from the community"), and avoidance ("patients with mental illness do not live in society"). Items are presented on a 9-point Likert scale and subscale scores are calculated by summing the items corresponding to that subscale. A total score may also be calculated. Higher scores represent greater endorsement of the corresponding attitude or belief. Corrigan et al. (2003) have associated some of these constructs with discriminative attitudes (responsibility, dangerousness, fear, anger, coercion, segregation, and avoidance) and others with attitudes of closeness and assistance (help and pity).

## Data analysis

For each measure, scores were averaged within each discipline and then across all three disciplines and these averages compared pre- and post-placement. It is recognised that this method limits the specificity of the results at an individual level, but for this study cohort level change was the focus. Paired t-tests were conducted on the ECT and LOF survey results using IBM SPSS Statistics for Windows (23.0) to determine the degree of change that occurred between measurement time points. A confidence level of 95% was adopted. Descriptive analysis of AQ27 data was carried out.

# Results

## *Familiarity with mental illness*

When analysed collectively as a single group, the students overall (n = 26) demonstrated a statistically significant increase ($p = 0.03$) in their familiarity with mental illness as ascertained by the Level of Familiarity Survey (Michaels & Corrigan, 2013). Despite an upward trend in familiarity scores for all disciplines, only the change for DTn students was statistically significant. The change for SLP students was approaching statistical significance. The mean familiarity scores for each discipline both pre- and post-placement are shown in Table 1.

| Table 1. Familiarity with mental illness pre- and post-placement | | | |
|---|---|---|---|
| | Average familiarity score (Pre) | Average familiarity score (Post) | Statistically significant change |
| EP (*n* = 10) | 22.2 | 27.2 | No (*p* = .223) |
| SLP (*n* = 10) | 18.6 | 34.9 | No (*p* = .055) |
| DTn (*n* = 6) | 13.3 | 26.0 | Yes (*p* = .00) |
| All disciplines (*n* = 26) | 16.7 | 29.8 | Yes (*p* = .03) |

## *Beliefs and attitudes about mental health*

### Error Choice Test

The Error Choice Test measures understanding of and public stigma towards mental illness, in the guise of a knowledge test. There were positive change in scores on this measure across all three disciplines collectively from pre- to post-placement indicating improvement of stigmatising beliefs and attitudes; however, the degree of change did not reach statistical significance ($p = 0.83$, SD = 2.74). When disciplines were analysed separately, students in the discipline of dietetics demonstrated a positive change in their attitudes overall, whereas students from exercise physiology and speech-language pathology demonstrated a very slight negative change, reflecting a trend towards more stigmatising attitudes. Again, none of these changes reached statistical significance. Findings for each discipline separately and then for all three disciplines collectively are summarised in Table 2.

| Table 2. Changes in understanding and public stigma toward mental health pre- and post-placement (Error Choice Test) | | | |
|---|---|---|---|
| Discipline | Average score (Pre) | Average score (Post) | Statistically |
| EP (*n* = 10) | 6.8 | 6.9 | No (*p* = .90; SD = 2.68) |
| SLP (*n* = 10) | 7.7 | 8.3 | No (*p* = .54; SD = 3.0) |
| DTn (*n* = 6) | 6.6 | 5 | No (*p* = .10; SD = 2.74) |
| All disciplines (*n* = 26) | 7.1 | 7.0 | No (*p* = .83; SD = 2.74) |

| Table 3. Change in stigmatizing beliefs and attitudes pre- and post-placement (Attribution Questionnaire AQ-27) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | EP | | | SLP | | | DTn | | |
| | Mean score (Pre) | Mean score (Post) | Pre-/post-change | Mean score (Pre) | Mean score (Post) | Pre-/post-change | Mean score (Pre) | Mean score (Post) | Pre-/post-change |
| Blame | 8.4 | 10 | ↑**1.6** | 9.2 | 9.4 | ↑**0.2** | 11.6 | 10.3 | ↓**1.3** |
| Anger | 12.5 | 8.6 | ↓**3.9** | 9.4 | 7.1 | ↓**2.3** | 5.6 | 5.6 | **no change** |
| Pity | 18.5 | 17.8 | ↓**0.7** | 19.7 | 17 | ↓**2.7** | 21 | 19 | ↓**2.0** |
| Help | 19.6 | 19.2 | ↓**0.4** | 18.4 | 17.6 | ↓**0.8** | 19.6 | 18.3 | ↓**1.3** |
| Dangerousness | 12.2 | 12.4 | ↑**0.2** | 10.8 | 8.9 | ↓**1.9** | 8 | 7 | ↓**1.0** |
| Fear | 12 | 11 | ↓**1.0** | 10.4 | 8.7 | ↓**1.7** | 8.6 | 7.6 | ↓**1.0** |
| Avoidance | 17.6 | 13.2 | ↓**5.6** | 17.1 | 13 | ↓**4.1** | 15 | 15 | **no change** |
| Segregation | 14.3 | 10.4 | ↓**3.9** | 10.5 | 7.2 | ↓**3.3** | 7.6 | 9 | ↑**1.4** |
| Coercion | 17 | 15.2 | ↓**1.8** | 15.2 | 14.9 | ↓**0.3** | 17.6 | 15 | ↓**2.6** |

NB. Numbers in bold indicate degree and direction of change on this item.

## Attribution Questionnaire

Students rated each statement on the AQ 27 using a 9-point Likert scale. Three items in the questionnaire were associated with each attitudinal subscale. Thus each domain could receive a possible total of 27 points, with higher scores representing greater endorsement of that attribute. Changes from pre- to post-placement occurred across all domains and all disciplines; changes were larger for some disciplines than others and the direction of change (positive or negative) varied.

- Blame: scores for this domain increased by 1.6 points for the EP students and 0.2 points for SLP students, and dropped by 1.3 points for the DTn students from pre- to post-measure collection.
- Anger: this was a prominent domain pre-placement for all disciplines. Scores decreased for EP and SLP by post-placement (3.9 and 2.3 points respectively), and were unchanged for DTn students.
- Pity: the average score on this domain was high for all disciplines both pre- and post-placement. There was a drop of 0.7 points for EP students, 2.7 points for SLP students and 2.0 points for DTn students at post-placement collection.
- Help: similar to the Pity domain, this was highly scored for all three disciplines pre-placement and only very small reductions in scores noted post-placement (0.4; 0.8 and 1.3 points for EP, SLP and DTn students respectively).
- Dangerousness: this was a domain that saw a reduction in scores from pre- to post-placement for SLP (1.9 points) and DTn (1.0 point) students, but increased by 0.2 points for EP students.
- Fear: scores for this domain were relatively low at pre-placement and reduced further by post-placement for students across all disciplines.
- Avoidance: scores for this domain at pre-placement were high for all students. Scores reduced for exercise physiology and SLP students by post-placement (by 5.6 points and 4.1 points, respectively), with no change seen in the scores of DTn students.

- Segregation: scores for this domain were low to moderate at pre-placement across the disciplines. Scores decreased by post-placement for EP and SLP students (by 3.9 and 3.3 points respectively); however, there was an increase of 1.4 points for DTn students on this domain.
- Coercion: this attribute attracted moderate to high endorsement from students across all three disciplines pre-placement, but there was a small decrease in scores by post-placement for all disciplines (EP 1.8 points; SLP 0.8 points and DTn 2.6 points)

Table 3 summarises the pre- and post-scores and direction of change for the EP, SLP, and DTn students separately.

## Discussion

In this study, allied health students from three disciplines (EP, SLP and DTn) were asked to reflect on their familiarity with and beliefs and attitudes about mental health prior to commencing a 6–8 week clinical placement in a mental health setting and again on completion. The aim of this small-scale exploratory study was to examine whether exposure to a mental health population (and specifically clinical placement within this area of practice) would positively impact beliefs and attitudes held about people with mental illness, by enhancing familiarity and understanding.

Students from the disciplines of exercise physiology, speech-language pathology and dietetics demonstrated low to moderate levels of familiarity with mental illness on commencement of their placement. By the end of their placement students across all disciplines experienced a statistically significant increase in familiarity with mental illness. This is a promising albeit expected finding, given that the purpose of the placement experience was to increase exposure to and familiarity with people who have a mental illness and assist students to explore their potential role with this population.

Students across all disciplines began their placement with some positive attitudes towards mental illness as demonstrated by high scores on the Attribution

Questionnaire (AQ-27) for the domains of Help and Pity, suggested by Corrigan et al. (2003) to correlate with attitudes and behaviours consistent with assistance and closeness. However, stigmatising beliefs and attitudes pertaining to Avoidance, Segregation, Dangerousness and Coercion were also prevalent pre-placement, suggesting that while allied health students appear to have a desire to help and support individuals with a mental illness, they also possess a degree of reticence and caution.

By post-placement, students across the three disciplines had demonstrated a positive shift in many of their attitudes and beliefs about mental illness and mental health when analysed at the multidisciplinary level. In particular, improvements in the domains of Anger, Avoidance and Coercion were noted across the three disciplines, indicating perhaps that with greater familiarity and exposure to patients with mental illness can come greater understanding and positive attribution. This is consistent with the suggestions of Feeney et al. (2013), who noted changes in knowledge and skills following clinical placement in a mental health setting, and Markstrom et al. (2009), who observed changes in attitudes. For some domains though, such as Blame and Segregation scores on the Attribution Questionnaire did increase in one or more of the disciplines, reflecting greater negative attribution. Thus, it seems possible that experience of mental illness can initially challenge students' perceptions and lead to reconsideration of previously held beliefs. Six weeks is only a relatively short time to experience placement and it is possible that the measures selected did not capture all the qualitative changes that may have occurred in the students as a result of their experience. It is important to note when interpreting these results that no changes in attitudes or beliefs on the Error Choice Test reached statistical significance and the scores on the Attribution Questionnaire were subjected to descriptive analysis only. These findings should therefore be interpreted cautiously.

Experiential learning is considered to be an effective method for influencing attitudes and increasing knowledge across a range of areas within and allied with health care. Providing opportunities to formalise mental health placements within tertiary curricula may assist with addressing this early on. The results obtained through this study could form a starting point for the speech pathology profession to review the involvement of clinicians in this clinical area more holistically, and prepare students at the undergraduate and postgraduate stages to ensure that they are equipped with the knowledge and understanding required to work with people with mental health conditions in the future. Given ongoing increases in government funding to mental health services, clinicians will be encountering this clinical population in all areas of practice. The refinement of clinical guidelines and position papers within the profession has assisted speech-language pathologists to understand and explore their potential role in mental health contexts. Concurrently, recognition of the contribution of speech-language pathology in the area of mental health has burgeoned. Speech-language pathology students therefore need to be sufficiently prepared prior to graduation to work with this group of individuals, and a direct way to address the current gap in knowledge and experience is for education providers to address and incorporate teaching and clinical experience in mental health into undergraduate and graduate entry programs.

In summary, the findings of this study indicate an increase in familiarity with mental illness following a 6-week placement and some change in students' beliefs and attitudes mostly, though not exclusively, in a positive direction. However, changes were conservative and more comprehensive research including qualitative examination of students' experiences and responses to mental health placement is warranted.

## *Limitations*

When considering the findings of this study, it must be acknowledged that the sample size was small which inevitably limits the ability to generalise results more broadly within the speech-language pathology discipline, to other disciplines within allied health or to other mental health settings. That said, the students who participated in the study were representative of disciplines known to be engaged in the mental health fields, and the findings can therefore provide a starting point for further research within allied health broadly and speech-language pathology specifically. Within this study, there were differences in the case load accessed by each discipline (e.g., acute vs. rehabilitation), the style and amount of supervision received, and the baseline level of theoretical knowledge prior to commencing placement. These factors likely influenced the trends seen within each discipline, and therefore the cohort level findings. As this was a preliminary study with a small sample size and resource constraints, it was not possible to analyse the interrelationship between changes in familiarity, attitudes and beliefs. Future research may be enhanced by looking at correlations across these three areas.

## Conclusion

In this study, beliefs and attitudes towards the area of mental health and people with mental illness changed positively in a sample of allied health students. On commencing clinical placement in a mental health setting, students from exercise physiology, speech-language pathology and dietetics demonstrated dominant attitudes towards people with mental illness consistent with a desire to assist and support. This is a positive finding. However, stigmatising beliefs and attitudes around avoidance, anger, segregation and coercion were also noted along with the potential for these attitudes to lead to discriminatory actions or behaviours within personal and professional contexts. Post-placement, there was a tentative trend across disciplines towards greater familiarity with mental illness and improvement of stigmatising beliefs and attitudes. These findings suggest that there is some potential for clinical placements in mental health settings to assist with improving negative attitudes, prejudices and discrimination towards people with mental illness amongst allied health students. Further robust research utilising larger sample sizes and mixed methodologies is required in this area.

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# Supporting children with social-communication and learning disabilities and their parents during the transition to school

David Trembath and Elizabeth Starr

**Transition to school is often a stressful event for families of children with social-communication and learning disabilities. The aim of this study was to the explore the views and experiences of parents whose children attended an innovative pre-prep program, with the view to identifying strategies that may support other children, parents, and teachers during the transition to school. We conducted a series of 3 focus groups with total of 10 parents at the commencement and completion of the pre-prep program. Focus groups were audio-recorded and transcribed and analysed using thematic analysis. Three themes –** *It's the foundation, Seems grown up,* **and** *Eased us and the kids into school* **– emerged to account for the participants' views and experiences, indicating positive outcomes arose from the multifaceted approach that included information and support for parents, along with a strong focus on developing children's school readiness skills.**

The transition of children to school can be a stressful event for any family (Early, Pianta, Taylor, & Cox, 2001; Forest, Horner, Lewis-Palmer, & Todd, 2004; La Paro, Kraft-Sayre, & Pianta, 2003). However, for families of children with special needs (including social-communication and learning disabilities) the process can be particularly difficult and requires a well-thought-out and executed plan (Chadwick & Kemp, 2000). The stressors for caregivers (herein referred to as parents but acknowledging the range of people who may take on this role) and children may include (a) the many "unknowns" such as the nature of the physical environment, the attitudes of school personnel towards the child, and the support that will be provided; (b) navigating the shift from one education sector to another including any differences in funding arrangements and support; (c) communicating with a new set of educators, professionals, and multidisciplinary teams (Osborne, McHugh, Saunders, & Reed, 2008); (d) differences in goal-setting practices, curriculum, and teaching strategies; and (e) the feeling of personal responsibility to ensure an appropriate educational program for their children (Seligman

& Darling, 2007). Accordingly, there is a well-established need for community relevant strategies aimed at supporting parents and their children during the transition to school.

## Common approaches to supporting transition

One common approach to supporting parents during the transition is to provide them with information, strategies, and advice aimed at facilitating the process. Fortunately, speech pathologists, other allied health professionals, and educators now have access to a range of resources that are fit for this purpose. In Australia, for example, such resources are commonly provided by education departments (e.g., Victoria State Government, n.d.), industry bodies, (e.g., Early Childhood Intervention Australia, n.d.), and service providers (e.g., Autism Spectrum Australia, 2013). An alternative approach to supporting transition is to focus on helping children develop school readiness skills, many of which fall squarely in the scope of speech pathology practice, including the ability to work independently and follow directions (Rule, Fiechtl, & Innocenti, 1990), self-regulation skills (McIntyre, Blacher, & Baker, 2006), communication, and social interaction skills (Janus, Lefort, Cameron, & Kopechanski, 2007). However, there is now a broad body of research literature demonstrating that approaches to supporting children and families must be multifaceted (e.g., information and advice for parents, communication with new teachers, developing children's school readiness skills), involve all relevant stakeholders, and be provided over a substantial time period leading into, during, and following the children's commencement at school.

Following a recent review of the research literature, Marsh and Eapan (2017), recommended a set of principles that should inform efforts to support children and parents during the transition. The focus of the review was on children on the autism spectrum, but the recommendations were drawn from the broader literature and are likely relevant to children with a range of learning profiles and needs. The authors recommended that transition programs include (a) active, early, and ongoing collaboration between a range of stakeholders; (b) establishment of positive and respectful relationships between the children, parents, and educators; (c) actively preparing the child for the transition; (d) assessment of children's school readiness; (e) implementation and regular evaluation of individualised transition plans; (f) developing skills in the child that facilitate learning; and (g) utilisation of dedicated funding

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**David Trembath (top) and Elizabeth Starr**

and resources. Yet while these recommendations clearly address the range of factors that may influence child and family experiences of transition, developing a program that addresses all principles represents a substantial clinical challenge. To this end, there are few studies in the research literature examining multifaceted programs aimed at supporting the transition to school (Marsh & Eapen, 2017).

## The PrEPIC program

In 2010, a community based organization – Early Childhood Intervention Services and Training (EPIC) – partnered with a local public school to trial a program to support children with social-communication and learning difficulties and their parents, who had been receiving early intervention services, transition to school. Labelled PrEPIC, the program involved 10 children attending a class held within the school grounds, four days per week, during school hours, in the year prior to them commencing school. The children were taught by two teachers who were experienced in educating children with special needs. Classroom activities were similar to those that the children would be exposed to in preparatory classes, in the following year, such as group story reading and emergent literacy activities; drawing, cutting, and pasting tasks to develop children's fine motor skills; and free play time aimed at developing children's social skills. All activities were adapted to the children's learning strengths and needs. The teachers set individualised goals for each child and parents were taught and supported to implement learning strategies at home, thereby involving them in the program. Support for parents was provided through regular individual parent-teacher meetings, a home-school communication book for each child, and informal meetings at the start and end of each day. PrEPIC was designed such that children could either continue in the same school in the following year, or transition to a different school depending on parental preferences.

## Aim of study

The development and roll-out of PrEPIC provided a rare opportunity to examine the possible impact of a multifaceted transition program. Accordingly, this study was designed to examine parents' views and experiences of the PrEPIC program, with the view to identifying strategies that may support other children, parents, and teachers during the transition based on their experiences. In this article, the overarching goal was not to present an evaluation of the program, but to identify lessons that can be learned from the program that may help speech pathologists, other allied health professionals, and educators in their future attempts to better support children and their parents during the transition to school.

## Method

### Ethics approval

The study was approved by the La Trobe University Human Ethics Committee (FHEC11/R7).

### Design

A qualitative study design involving a series of three focus groups over two years and subsequent thematic analysis (Braun & Clarke, 2006) was used to address the research aim.

### Participants

Invitations to participate in the focus groups were sent to all of the parents of the 10 children who had finished the program the year prior (Group 1), and to those of 10 children who had recently enrolled in the program (Group 2). Parents in Group 2 were also invited to attend a follow-up focus group at the end of the PrEPIC program. Further follow-up groups were scheduled 12 months later but due to issues of low attendance (Group 1), poor audio quality inhibiting transcription (Group 2), and the fact that the sentiments expressed were consistent with those expressed in earlier groups, only the pre- and post- groups are presented in the study.

As presented in Table 1, a total of 3 parents in Group 1 and 8 parents in Group 2, participated in focus groups over the course of the study. The children were all aged 4–6 years at the time of entry into the PrEPIC program and presented with social-communication and learning difficulties associated with a range of diagnoses. Formal measures of the children's cognition and adaptive behaviour

| Table 1. Participant demographics | | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Parent** | | **Child** | | | **Focus group/s attended** | |
| **Group** | **Name** | **Gender** | **Name** | **Gender** | **Diagnosis** | **Pre** | **Post** |
| 1 | Anne | F | Luke | M | ASD | n/a | Yes |
| 1 | Grace | F | Leanne | F | ASD | n/a | Yes |
| 1 | Ava | F | Michelle | F | ASD | n/a | Yes |
| 2 | Sophie | F | Nathan | M | ID | Yes | Yes |
| 2 | Ella | F | Jake | M | ASD | Yes | Yes |
| 2 | Kate | F | Oliver | M | ASD | Yes | No |
| 2 | Sue | F | Lara | F | ID | Yes | Yes |
| 2 | Hannah | F | Michael | M | ID | Yes | No |
| 2 | Mia | F | Sean | M | CP | Yes | Yes |
| 2 | Elise | F | Ben | M | ASD | Yes | Yes |
| ASD = Autism spectrum disorder. ID = Intellectual disability. CP = Cerebral palsy. | | | | | | | |

(including communication skills) were not available for inclusion in the participant description. Pseudonyms have been provided to all children and parents for privacy reasons.

### Procedure

The focus group for parents whose children had completed PrEPIC (Group 1) was held in the evening in a meeting room at a university and lasted approximately 75 minutes. For Group 2, focus groups were held on two different occasions during the day in an empty classroom in the school and lasted approximately 90 minutes and 30 minutes respectively. The first author facilitated the focus groups using a semi-structured question guide (available on request) that encouraged the parents to reflect on, and share, their experiences of the program. Parents were asked to reflect on their children's skills, expectations for the program, and perceived outcomes. The use of the semi-structured question guide, along with the fact that the participants were familiar with one another, created what appeared to be a relaxed atmosphere, helping to ensure that all contributed to the discussion. They frequently acknowledged one another's comments in a supportive manner through body language and their own comments. All focus groups were audio recorded to assist with transcription and analysis.

### Coding and analysis

The authors and research assistants first transcribed the audio-recordings verbatim. The first and second author then reviewed the transcripts while listening to the recordings to check for transcription accuracy. The transcripts formed the basis of a thematic analysis completed according to the procedure described by Braun and Clarke (2006). Specifically, the first author read each transcript to ensure familiarity with the contents. Next, using line-by-line analysis, preliminary codes were assigned to identify discrete ideas, incidents, and events in the data. Similar and related codes were subsequently grouped into categories, from which abstract themes emerged. Each theme was reviewed with reference to the original transcriptions to determine the extent to which it accounted for the participants' views and experiences.

The second author reviewed all transcripts and the first author's analysis to identify any differences of interpretation in the coding that were resolved through discussion and consensus coding as necessary. Guidelines for ensuring credibility developed by Chiviotti and Piran (2003) were adhered to, including specifying the aims of the research, the basis on which participants were selected, how the literature relates to the themes identified, and, where possible, using the participants' own words when creating themes and presenting the results.

## Results

Three themes emerged to account for the parents' views and experiences of the PrEPIC program. Here, we provide an overview of each theme, while Table 2 presents a selection of participant quotes illustrating the constituent categories for each theme.

The first theme to emerge – *It's the foundation* – captured the fact that the transition program was comprised of multiple components that came together in a cohesive manner to support the parents. As Ava explained, "It's the foundation, in one word, really. It's the foundation to what's ahead." As is evident in Table 2, the components included parents having a strong commitment to education for their children, matched by the skills of experienced teachers. Parents spoke frequently of the importance of providing their children with a strong foundation for starting school, and doing so in a way that was age appropriate, but at the same time accounting for their children's learning needs. To this end, they said they valued the proactive approach in the PrEPIC program, whereby their children could begin the transition to school early via the program, thus reducing the likelihood of having to repeat either a year of preschool or the prep year. In working with teachers, parents spoke of the importance of open communication and how they appreciated staff having a sense of humour when it came to managing their children's behaviours.

The second theme – *Seems grown up* – emerged in response to the large number of parent comments regarding the perceived impact of the program on their children's development. Ella summarised: "PrEPIC [has been] brilliant so far. He absolutely loves it. He seems grown up. He's just, like, not a baby any more." Parents observed positive changes in their children's social-communication skills and behaviour. As illustrated in Table 2, some parents spoke of improvements in expressive language, with children learning to share information about their day and becoming more skilled and interested in interacting with the other children. Others focused on changes in their children's emotional regulation and behaviour, and the positive impact of these new skills on their children's learning. Collectively, the parents expressed a strong sentiment that the children were more mature, confident, and prepared for their transition to school.

The final theme – *Eased us and the kids into school* – accounted for the unanimous sentiment from parents that the transition to school would be easier for both them, and their children, following the program. The theme label originated from Aisha's comment that:

> It's kind of eased us, well, eased us and the kids into primary school because it is doing PrEPIC but it is like a primary school, so it's a lot easier for the children and also for the parents too.

Parents explained that their anxiety decreased while their children were in the program, primarily due to changes in their children's skills and the support provided by teachers and other parents. Several parents reported that the positive changes in their children's skills and behaviour meant that they now had more schooling options to choose from for the following year, with mainstream schooling (as opposed to special education) seeming like a viable option. Notably, parents also explained that changes in the children's skills and behaviour had led to positive changes at home, further reducing pressure on families during the transition. In spite of these reported benefits, several parents still expressed trepidation regarding the transition from PrEPIC to the first year of school, suggesting that some anxiety is possibly unavoidable even when a range of supports is put in place.

## Discussion

Despite widespread acknowledgement in research and clinical settings of the importance and challenges of transition to school, few studies have examined community-based attempts to support children and their parents during this process. Accordingly, the results of this study provide novel insights into the possible impacts that a comprehensive program targeting transition may have on children and their parents. Here, we consider the key

## Table 2. Summary of themes and their categories with illustrative quotations

| Theme | Category | Parent | Illustrative quotations |
|---|---|---|---|
| "It's the Foundation" | Parent commitment | Sue | "I can see that it'll all be worth it…to get off on the right foot…to find the love of learning…" |
| | Experienced teachers | Elise | "They're teachers that have worked with special needs kids. They know." |
| | Age appropriate | Sophie | "It just seemed to slot in exactly what we needed, you know, another year of kinder is too much boredom, and school's just too quick." |
| | Individualised approach | Sue | "One of the best things is the fact that they are [the children] taught as individuals." |
| | Communication | Sophie | "You open your [communication] book every day, you see what they've done…it's great. I love having that." |
| | Sense of humour | Mia | "It's also nice to be told what funny or stupid thing they did, laugh about it, because, they're all kids." |
| "Seems grown up" | Communication | Ella | "He comes back with stories, which has never happened in kinder. I used to drag the words out of him, but now he has actually started telling me what he's done at school." |
| | Social interaction | Anne | "He would never participate before. Now he participates okay. They helped that. If they didn't do that he would be in the corner playing with his trains again." |
| | Emotional regulation | Kate | "I knew emotionally, he just wasn't ready whereas now I'm comfortable to say, yes, he's ready now to go to a mainstream school." |
| | Behaviour | Hannah | "I thought, they're not going to be able to deal with him. I couldn't even imagine him sitting at a table for 30 seconds, let alone the whole day." |
| | Maturity | Ella | "He absolutely loves it. He seems grown up. He's just like, not a baby anymore." |
| "Eased us and the kids into school" | Parent support | Sue | "That's what I'm going to miss the most is not having the support of the other parents." |
| | Teacher support | Mia | "It's been that extra support from the teachers." |
| | Reduced anxiety | Elise | "It's just made me more relaxed for next year thinking, well, he's not going to be the child's that's struggling." |
| | Creating options | Sue | "The only option I felt was to put him in a special school whereas now, I think, you know, I could have had options." |
| | Impact at home | Anne | "He will have at least four stories tonight with my husband. Because of them. They're amazing." |
| | Trepidation | Ella | "PrEPIC is so good and I know I'm very happy about that but he won't have it next year. Is he going to be different in a mainstream setting? I don't know, will he fit in? Will he cope?" |

findings of the study, and their relevance to speech pathologists, other allied health professionals, and educators who support children and parents during the transition to school.

The PrEPIC transition program was identified to be *foundational* in the sense that it brought together multiple components of support, not only for the children, but also their parents. According to parents, key elements included an individualised approached to identifying and addressing children's learning needs, the establishment of supportive and open communication channels between teachers and parents, and an intensive approach whereby children attended the program four days per week in the year prior to school. These elements (e.g., individualised approach, open communication) appear to be consistent with Marsh and Eapan's (2017) recommendations for programs aimed at supporting the transition to school. However, the resource-intensive nature of the program means that replication in other educational settings is likely to be challenging. For speech pathologists and other professionals working to support children and

parents, the key implications appear to be the value of (a) helping parents, existing early intervention staff, and future teachers to establish open and effective avenues of communication; (b) embedding activities to boost children's school readiness skills within existing programs ahead of the transition; and (c) seeking to do so in a way that will see children practising these skills repeatedly at home and in early childhood settings in the lead up to school.

In addition to supporting children during the transition, the results indicate that the PrEPIC program led to a range of positive outcomes for parents. There is clear evidence that supporting children with social-communication and learning difficulties during the transition to school can be very challenging for parents (Chadwick & Kemp, 2000). Thus, the findings that parents felt more supported, less anxious, and are in a position to have increased choice regarding their children's future schooling following the program, are encouraging. For speech pathologists and other professionals seeking to support similar outcomes in parents, apparent lessons to be learned from the PrEPIC program include (a) the need for people with experience in

supporting children with special needs to be at the centre of transition efforts; (b) the value in connecting parents with one another in order to establish support networks; and (c) the importance of helping parents to understand the range of educational options available to their child and to feel confident in advocating for their preferences.

Yet despite the reported benefits of the program, some parents continued to feel anxious regarding their child's transition from the PrEPIC program to the first year of schooling. To this end, it is important to contextualise the transition period within the broader journey that parents travel in raising children with social-communication and learning disabilities. For speech pathologists and other professionals seeking to support children and parents, the results suggest the importance of establishing longer term working relationships that ensure that support is available as and when it is needed. Presumably, the level and nature of support will fluctuate over time, but the fact that it remains available may act as a stabilising force at a time of substantial uncertainty as children and parents make the transition.

## Limitations

In considering the findings and implications for practice, it is important to note several limitations to the study. First, consideration should be given to the fact that we examined a pilot program in one educational setting. Both sample size and resource constraints limit the generalisation of both the findings and program to other settings. Second, the fact that formal measures of the children's skills were not available for inclusion in the study means that only broad descriptions of changes, based on parent report, are included and no attempt to differentially link these outcomes to children with different diagnoses is made. Furthermore, our focus in this study was on exploring parents' views and experiences of the program, rather than a formal evaluation of the outcomes. Accordingly, when considering the findings, it is important to note that we have reported outcomes, as perceived by parents, along with the factors that they felt contribute to the perceived success of the program. There is clearly a need for future research to evaluate the outcomes of similar attempts to support children and parents during the transition to school in a holistic manner, including the use of experimental research designs.

## Conclusion

The results of this study suggest that timely and comprehensive support can lead to positive outcomes for children and their parents during the transition to school. For speech pathologists, other allied health professionals, and educators working to support children and families, the findings point to the likely value of taking an individualised approach to each family, encouraging open and effective communication between parents and teachers, and connecting parents to support one another. Furthermore, the findings of this study appear to highlight the importance of speech pathologist and other professionals taking a long-term approach to supporting parents on their journey raising children with social-communication and learning difficulties that includes the greater span of time prior to, during, and following the children's transition to school.

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# Partner assisted scanning

## Enable the unexpected

Helen Bayldon and Sally Clendon

*Helen Bayldon (top) and Sally Clendon*

**Partner assisted scanning (PAS) is a strategy used with people who have complex physical, cognitive, and sensory needs (CPCSN) to enable expressive communication and facilitate language learning. This paper describes how and why PAS may work for individuals with CPCSN. It outlines some of the barriers to augmentative and alternative communication (AAC) intervention for individuals with CPCSN who may use PAS. Finally, the paper presents factors to consider when implementing AAC with PAS, including considerations for the design of AAC systems with reference to research findings and advice from clinical experts.**

In the past few years, partner assisted scanning has become more widely used as an access method, however, it is still not well understood by speech-language pathologists, or others, who support individuals with complex physical, cognitive, and sensory needs (CPCSN) (Nevers, 2016). There is very little literature that describes PAS as an intervention strategy, and thus, limited discussion of its efficacy. However, several clinical experts (e.g., Burkhart, 2016; Farrall, 2015; Porter, 2012; and Zangari, 2016) have suggested that when combined with a robust augmentative and alternative communication (AAC) system, PAS is a strategy that supports language learning and communication in children with complex communication needs and multiple challenges.

The number of individuals with CPCSN is relatively small in New Zealand. In 2015, approximately 1.1% of the total school population received Ongoing Resource Scheme (ORS) funding, which provides the very highest level of support for students needing special education. Of those 8,525 students, nearly a quarter (2005, or 23%) received very high ORS. These are the students with the most complex physical, vision, hearing, language or learning needs (Education Counts, 2016), and for whom PAS may be a useful strategy to access communication.

In this paper, the authors describe the key aspects of PAS and the rationale for using this strategy. Some of the barriers that inhibit AAC intervention with individuals with CPCSN, and how PAS may offer a solution, are also

discussed. Clinical implications for those working with individuals with CPCSN, including considerations for the design of the vocabulary set, the choice of selection method, and training for communication partners in how to provide an environment that supports aided language development, are presented.

## What is partner assisted scanning?

Communication is a complex process that involves four observable components. People take turns being receivers (listeners) and senders (speakers) of information (the message) via a means of communication (e.g., speech, writing, gesture, sign, accessing a communication device) (Beukelman & Mirenda, 2013; Burkhart & Porter, 2006; Light, Beukelman & Reichle, 2003). The information component starts with the sender's intent, and requires the coordination of attention and a sophisticated set of motor movements to access the means of communication and thereby relay the intent to the receiver.

When individuals with developmental or acquired disabilities cannot use typical motor movements to speak, write, gesture or sign, they may use aided language strategies as a means of communication to relay their messages. Aided language includes the use of pictures, objects, photos, written words or braille to represent words, phrases or concepts. The bank of symbols that are available is called the vocabulary set and this may be organised into an AAC system such as a communication book or device, or taken from the context or environment and offered as a list (Burkhart, 2016). The items selected for a particular individual need to reflect his or her communication needs, which are dependent on age, cultural background and environment (Light & McNaughton, 2014).

Individuals who use AAC indicate their choice via direct selection or indirect selection through scanning. Direct selection involves touching or pointing (for example, with a finger, head tracker, eye pointing [including eye gaze technologies], or optical pointer) at the desired item and is the simplest and most "direct" method for making a selection (Treviranus & Roberts, 2003). Direct selection is often the first choice for access to an AAC system, as it is operationally simple and more efficient. However, for some people with significant motor impairments that inhibit or compromise direct selection, indirect selection via scanning (switch or partner assisted) is a viable option (Dropik &

Reichle, 2008; Horn & Jones, 1996; White, Carney & Reichle, 2010).

Scanning as a selection method requires the selection set to be presented systematically. The communicator waits until the desired item has been presented, and then signals in some way to select it. Items are often selected by activating a switch, particularly when the selection set is presented electronically (e.g., speech generating device) (Beukelman & Mirenda, 2013). Scanning can also occur without technology using PAS. The focus for this paper is on PAS, a non-electronic method for selecting and interacting with AAC.

During PAS, the communication partner presents or highlights items for the communicator to respond to, and watches and/or listens for signals from the communicator. PAS may be used with or without a physical AAC system. In any environment, words or objects may be scanned to support choice making and promote active participation for the person with CPCSN (Burkhart, 2016). These words or objects are presented to the individual as a list and the individual waits until the item they want is presented, and then they respond with a "yes" signal to select it. The items may be offered visually (i.e., shown to the individual with no auditory input), or as auditory cues (e.g., reading through the alphabet), or the scanner may use auditory plus visual cues (i.e., symbols are spoken aloud as they are pointed to), depending on the skills and needs of the individual with CPCSN. Visual symbols or objects are more concrete and less transient than auditory symbols, and during PAS, a communication partner may highlight, or show these for longer if necessary. During auditory scanning, the order that the items are presented is the arrangement or layout of the AAC system (Porter, 2012).

Individuals who utilise PAS may use vocalisation, body movement including eye gaze, facial expression, or change in affect to signal acceptance or rejection of a presented symbol. Some individuals may use a recognisable gesture, such as a head nod or shake, to respond yes/accept or no/ reject to the scanned items. In other instances, movements may be idiosyncratic and subtle (e.g., blinking, raising an eyebrow or arm). The team supporting the individual with CPCSN must look for at least one discrete and reliable motor movement, which can be used immediately or shaped over time, to signal acceptance during a scan (Burkhart, 2016).

The communication of a message using PAS requires skill on both sides of the communication dyad. The individual with CPCSN needs to be motivated to engage and interact, and perform sometimes physically and cognitively challenging skills. They need to:
- autonomously create their message;
- recognise the symbols that represent it;
- use working memory to hold the message;
- initiate the interaction; use motor movements to indicate that they have something to say;
- filter extraneous auditory and visual stimuli;
- wait and attend while the options are presented;
- anticipate when the option they want is coming up;
- attend to visual and/or verbal stimuli;
- determine the item/s they need; and
- perform a motor movement to signal when the item they want is presented (Burkhart and Porter, 2006).

When PAS is used, the communication partner is involved in co-constructing the message. The communication partner needs knowledge and skills to perform at least two roles during communicative interactions: operating the scan; and participating in the exchange in an interactive way (Burkhart & Porter, 2006). When communication partners operate a scan, there are several things they need to remember:
- When the scan is auditory, the communication partner needs to differentiate between their "scanning" voice and their social interaction voice. The scanning voice needs to be monotone and rhythmical, so that the partner doesn't lead the communicator, or provide extraneous auditory information that needs processing (Burkhart, 2016; Porter, 2012).
- During PAS, items should be presented as a list rather than a series of questions. This reduces the extra language that may be difficult for the individual with CPCSN to process and allows them to problem-solve and initiate rather than become prompt dependent (Burkhart, 2016).
- The list of choices may be presented several times to allow the individual with CPCSN to learn and anticipate the item they want and organise their body to respond.
- Each list needs to offer a "way out" or an option for indicating "none of these", "something else" or "finished". Individuals with CPCSN may not respond to a list of options, either because they do not understand the task, or because they may not want to select any of the items offered (Burkhart, 2016).
- The items for selection must be presented systematically, in the same order each time, to allow the individual with CPCSN to develop familiarity and

J is a 6-year-old boy who loves listening to Justin Bieber, reading or listening to books, and playing with his dog and his sister. He loves swimming and hanging out with his friends and going to school and being outside.

J has spastic quadriplegic cerebral palsy, GMFCS level 5, and a severe vision impairment. He does not sit, stand, walk, talk, eat, drink, dress, or do anything without assistance. But J has a small amount of intentional control over his right arm and uses it to communicate. J uses PAS and a 20 cell per page PODD (Pragmatic Organised Dynamic Display) communication book (Porter, 2012) to tell his mother about school, to ask his friends to come and play and to comment on his favourite singer.

When J has something to say, his communication partner holds his PODD book in front of him and reads through it, following PODD operational conventions, column by column, then item by item, pointing at the symbols they are speaking. J signals "yes" to the symbol he wants by extending and raising his right arm. He tells his communication partner to move to the next column or item by holding his right arm down to indicate "no". He navigates through his book in this way until he indicates that he has completed his message.

J accesses a robust vocabulary to express a variety of communication functions. His communication partners don't know what he wants to say when he starts saying it, but they work together to create his message. It is autonomous communication, although it does not happen independently and requires a competent communication partner to co-construct the message.

anticipation, and to support learning, so symbols must be presented in the same order each time. This is true for both visual or auditory or auditory plus visual scanning methods. Individuals with visual or auditory impairments need repetitive practice to support their interactions and the development of rich cognitive schemas (Burkhart, 2016; Kovach & Kenyon, 2003)

- An important aspect of operating a scan is not to predict what the individual is going to say or lead them in any way (Porter, 2012).
- Partners need to keep scanning until the person indicates that they have finished selecting and then recap and sometimes interpret meaning from the keywords selected.

When the partner switches role to the interactive partner, they must respond contingently to the message.

## Who may benefit from PAS?

PAS may benefit individuals who have impairments in sensorimotor, cognitive or linguistic skills that inhibit them from using a direct access method. Individuals who are beginning communicators and do not yet have any effective form of communication, and those for whom other strategies are not working or available, may also benefit (Burkhart & Porter, 2006). Others may use PAS as an alternative access method when their high technology devices are not in use.

For individuals with cortical visual impairment (CVI) who have CCN, auditory or auditory plus visual scanning of an aided AAC system offers systematic language support that does not require the use of visual processing (Burkhart & Porter, 2012). Auditory scanning may be beneficial, not just for individuals with visual impairments, but for those with intact vision also (Burkhart, 2016; Kovach & Kenyon, 2003). For those who do not have visual impairments, visual or auditory plus visual PAS may enhance the pattern of the visual information and support the learner to become more familiar with the arrangement. It may also assist the individual to learn the symbol names, and help the individual to maintain attention to the visual presentation, as well as encourage visual interaction between the communication partners (Burkhart, 2016; Kovach & Kenyon, 2003).

For individuals with developmental or acquired disabilities, it may be difficult to coordinate cognitive, sensorimotor and language learning all at once. Individuals with significant physical and visual and/or auditory challenges may take a long time to develop reliable and automatic control of body movements, and while this develops, even simple intentional movements can require cognitive energy to perform (Burkhart, 2016; Isaacson & Quist, 2011; Myrden, Schudlow, Weyand, Zeyl, & Chau, 2014; Treviranus & Roberts, 2003). One solution is to focus on one component or skill set at a time, in activities that provide natural contexts and opportunities for meaningful learning. For example, supporting a child to express an opinion, make a comment or ask a question using PAS, enables them to work on developing linguistic and social skills while keeping the motor and cognitive demands relatively low. Working on switching skills in a motivating activity such as a computer game or turning on music, allows the development of more automatic motor skills while reducing the relative demand on language or cognitive processing (Burkhart, 2016; Isaacson & Quist, 2011).

Reducing the sensory and/or motor demands while actively engaging in language construction supports the development of language to become an automatic skill. PAS can provide the "consistent and predictable opportunities to experience and manipulate language" (Burkhart & Costello, 2008, p. 11) that individuals with CPCSN need access to. At a later time, this language skill can become the context for developing a motor skill, for example, switch access, or vision processing. Once language operates in the background as an automatic skill, vision or other sensory challenges can be addressed and targeted (Burkhart, 2016).

PAS has advantages over technology for some people who use AAC. During PAS, the communication partner must become a skilled and experienced or "smart" partner who can interpret movement and recognise intent by interpreting the individual's body language, facial expression and context, to co-construct the message. A smart partner can adjust the speed of presentation, within a single communication turn if necessary. A smart partner can read subtle movement cues sent from the individual with CPCSN, or use context and personal knowledge to ignore movements that were unintended. This allows the focus to remain on the development of language, communication skills and social skills and supports the communicator to be as successful as possible (Porter, 2012).

PAS may be a strategy to promote the development of communicative autonomy and competence, by providing opportunities for linguistic, operational, social and strategic skills to develop in meaningful communication contexts (Burkhart, 2006; Porter, 2012). It is a strategy that may provide accurate, efficient and non-fatiguing access to an AAC system and meet immediate needs for communication (Beukelman & Mirenda, 2013; Porter 2012). PAS can be used anytime, anywhere and with anyone. Zangari (2012) suggests that PAS facilitates spontaneity and flexibility and allows expressive communication in all situations. People who require AAC should have access to a range of systems (e.g., high-tech and low-tech) and access modalities (e.g., PAS and eyegaze) to suit different communication needs and environments. PAS may be one of several strategies that an individual employs to communicate. Different strategies may be used at different times of day, or in different settings or with different communication partners (Burkhart & Seligman-Wine, 2012).

One disadvantage of PAS is the requirement for a skilled communication partner to be present and active during every communication turn. This may limit the frequency of interactions across a day, as skilled partners often have other needs to attend to. However, communication using PAS does have the advantage of not being limited to the times when the individual with CPCSN has all of their technology available. The use of non-electronic access to a communication system means that language can be accessed at all times, not just when the individual has access to their individualised supportive seating or standing equipment (York & Weiman, 1991). Individuals who use AAC should not have to rely on high technology systems as their only communication modality. High-tech AAC is not always available throughout the whole day (e.g., when outside, during bath time, or when the battery has run out), and the social cost of learning to use technology may be high, requiring substantial learning time that could be better spent interacting, playing, socialising, and learning language and literacy (Drager, Light, Speltz, Fallon, & Jefferies, 2003). Thus a multimodal communication approach is desirable when supporting communication, interaction and participation for individuals with CPCSN.

S is a visual scanner who accesses a low-tech 20 cell per page PODD by eye gazing at yes/no symbols. She does this while in her power wheelchair or in her standing frame or while lying in supine while stretching. Her communication partner holds the PODD book in front of her and points to the first column on the left of the first page. If the symbol she wants to select is in that column, S looks at a "yes" symbol located on the left side of her book. If the symbol she wants to select is not in that column, she looks at the "no" symbol (placed to the right of the book), thus moving her partner to the next column. When the partner reaches the column that contains the symbol she wishes to select, and S has indicated affirmatively, the partner then points to the top symbol in the column and waits for S to respond. The partner then knows whether to move on to the next symbol, or to respond contingently to her selection. With PODD, symbols may have links or operational commands to allow S to control movement between levels (Porter, 2012), or tell her partner where to go next.

S also independently uses a high-tech GridPad 3 with Mygaze (an eye gaze system) technology to access PODD. There are times when she requests to use her paper book, such as when she wants to discuss personal or emotional topics, and other times when she prefers to use her high-tech system, particularly during break times when her teacher is busy with other tasks or students.

## Barriers to AAC intervention for children with CPCSN

The Candidacy Model for AAC provision and intervention influenced practice during the 1970s and 1980s (see Kangas & Lloyd, 1988; Reichle & Karlan, 1985; and Romski & Sevcik, 1988 for refutations of this practice). During this time, candidates for AAC intervention were required to display certain levels of cognitive, social or physical skill, or be a certain age. This model has been superseded by the Participation Model (Beukelman & Mirenda, 2005), which views access to communication as a basic human right for anyone with any combination of communication ability and need. Within the Participation Model, AAC provision is made through a process of assessment, intervention and review that is founded on principles that support fundamental participation and communicative requirements based on same age peers without disabilities (Beukelman & Mirenda, 2013).

American Speech-Language-Hearing Association (2016), makes it clear that current best practice does not require individuals to have any prerequisite skills before successfully beginning to learn and use an AAC system. Despite the shift away from the candidacy model, individuals with CPCSN are still sometimes excluded from robust AAC intervention because they are deemed "too something", or are not displaying the cognitive, physical and/or social skills that indicate they are ready to learn language (Romski & Sevcik, 2005).

The lack of skilled communication partners, to provide aided language modelling and demonstrate the operational, linguistic, social and strategic skills necessary to become a competent AAC user, may be a further barrier to communication development for individuals with CPCSN (see Sennott, Light & McNaughton, 2016, for a review of AAC modelling intervention research).

## Cognitive and sensorimotor skills

The relationship between symbolic language skills and cognition is not simple or clear cut (Romski & Sevcik, 2005; Rowland & Schweigert, 2003). In their review of the literature on the connection between language development and cognition, Kangas and Lloyd (1988) outline six models that seek to describe this relationship and suggest that no one model is sufficient to fully explain how language development and cognition are linked. They conclude that the research suggests a correlation rather than a causal relationship.

Reichle (1991) details some specific classes of cognitive milestones that are often thought to be prerequisite skills to beginning AAC intervention, including *means–end* or intentionality, *imitation*, and *object permanence*. There is little or no evidence to support this, but rather, there is an understanding that many of these cognitive skills develop alongside language. When children are not provided the means to learn and develop language, this potentially precludes them from also developing some early cognitive skills. Demonstration of early cognitive processes is severely limited for individuals with sensorimotor and communication impairments (Porter, 2012; Romski & Sevcik, 2005).

The literature supports implementing AAC intervention with individuals who display cognitive impairments. AAC intervention with children and adults with cognitive disabilities results in positive outcomes for language comprehension and expression. Aided language modelling – where a communication partner highlights symbols as they are spoken during natural contexts – is one such intervention technique. Research completed on the effects of aided language modelling with preschoolers, school-aged children, and adults with cognitive impairments indicates that this strategy increases symbol production, comprehension and social skills (Beck, Stoner & Dennis, 2009; Dada & Alant, 2009; Harris & Reichle, 2004).

For individuals with complex cognitive needs, the use of PAS may scaffold their understanding of the function of communication, support them to become active participants and increase their cognitive engagement. PAS, alongside a robust AAC system, may provide the basis for learning conceptual and linguistic knowledge while reducing the demand on other skills that are both physically and cognitively demanding, for example, switching, that are both physically and cognitively demanding (Burkhart, 2016).

## Physical skills

Treviranus and Roberts (2003) acknowledge that the research on motor control of AAC systems is scarce for a number of reasons, including the heterogeneity of the population. They suggest that much of the decision-making around designing an AAC system for individuals with CPCSN is based on clinical experience and thorough assessment of needs, and that the ideal access method should be reflexive and controlled, so that the user can concentrate on the message, rather than the physical skills needed to create the message. For example, physical access using a yes/no response with PAS may be as small as an eye blink, or head turn to one side, whereas eye gaze access to a high technology device requires sustained head control to maintain position as well as controlled eye movements with a period of sustained dwell or blink to select. For any access method to become instinctive, there must be a large amount of time and practice invested in perfecting the motor patterns and skills needed (Treviranus & Roberts, 2003). As discussed above, the time spent on

learning the physical skills for electronic access to high technology AAC may better be spent on interacting, developing language, playing and socialising (Drager et al., 2003). Some individuals with CPCSN may benefit from separating learning of physical skills from the language development task. PAS can support language learning whilst physical access can be learnt in parallel during other tasks (Burkhart, 2016).

## *Visual skills*

Cerebral palsy (CP), a neurodevelopmental disorder of movement and posture, is one of the leading causes of physical disability in childhood (Cerebral Palsy Society of New Zealand, 2017). CP is commonly associated with vision impairments. Research suggests up to 80% of people with cerebral palsy will have ocular or cortical visual impairments, and that the incidence increases according to the severity of physical impairment (Alimović, 2012). Visual and/or auditory impairments have a significant impact on language learning in typically developing children, and an even more profound impact on individuals who require AAC (Kovach & Kenyon, 2003).

The work of Roman Lantzy and Blackstone (2014) on assessment and intervention has provided principles for guiding improvement of vision and development of language for individuals who have CVI and CCN. They include PAS as a strategy that may work to support both language development and functional vision. Providing clear and consistent modelling to enhance visual and auditory patterns is paramount, as the individual becomes familiar with the visual associations related to language (Roman Lantzy & Blackstone, 2014). During PAS, the availability of a smart communication partner who pays close attention to the individual's responses and timing may support language development to move ahead of visual or auditory skills. Familiarity and confidence with aided communication provides a natural context for developing other sensory skills within the process of conversation (Burkhart, 2016).

# Clinical implications

AAC intervention starts with traditional and dynamic assessment, to gain knowledge about the individual and the people supporting them. This is to ensure that informed decisions are made about the:

- adequacy of the individual's current communication needs and skills;
- their future communication needs;
- the AAC techniques and strategies that may be most useful;
- and also considers the people (parents, teachers, other professional staff and peers) who support the individual with CPCSN, who will build a supportive AAC environment (Beukelman & Mirenda, 2013; Farrall, 2015).

Practitioners and supporters need to keep in mind three long-term outcomes for individuals who are learning to use AAC:

- communication autonomy
- communication accessibility
- communication competence (Porter, 2012).

A supportive aided language environment and PAS provides opportunities to develop each of these areas. Communication partners need to be trained in how to use PAS to maximise the outcomes for the individual with CPCSN.

## *Long term-outcomes for individuals learning to use PAS*

### Communication autonomy

An autonomous communicator can say whatever they want, to whoever they want, whenever they want (Farrall, 2015; Porter, 2012). Autonomous communication is not the same as independent communication for individuals who use alternative access methods. PAS is a strategy for access to communication that may support autonomous language development of learners with CPCSN by providing:

- a smart communication partner
  - who can read subtle movement
  - change the speed of presentation
  - use context to co-construct messages;
- opportunities for language expression with minimal demand on visual or physical abilities;
- opportunities to encourage visual interaction; and
- support to maintain attention to the AAC tool (Porter, 2012).

### Communication accessibility

Accessible communication refers to the people in the social environment who will scaffold, support and understand aided language as it is learnt and used. PAS supports accessible communication by sharing the responsibility for communication between the communication partner and the individual with CPCSN. Family members, carers, professionals and friends must be familiar with the skills needed to provide AAC support, including how to:

- operate the scan
  - differentiate between scanning voice and social interaction voice
  - present items as a list, rather than a series of questions
  - present items consistently in a systematic order;
- recognise the movements that indicate selection or not;
- keep an open mind about what will be selected; and
- sometimes interpret the meaning of the message depending on context.

Communication accessibility also recognises that communication happens all the time, and that access to AAC is required at any time. PAS enables and supports this belief (Porter, 2012). Training of communication partners in the operational use of the AAC system, the access method that the learner will use, as well as how to maximise the linguistic, social and strategic learning for the individual is a key component of AAC intervention.

### Communication competence

Some communication partners will need to become very competent AAC users themselves, in order to gain enough linguistic, operational, social and strategic knowledge of the AAC system for it to be natural and intuitive, and for them to pass this knowledge on (Porter, 2012). This reflects the way typically developing children learn language in natural everyday contexts. Usually parents and other family members, and teaching staff are the key communication partners who model aided language. Aided language modelling is well documented as an effective intervention strategy to teach linguistic skills to individuals who use direct access (Sennott et al., 2016). For example, training of parents and other communication partners to use a range of intervention strategies that facilitate early communication and language skills using programs such as ImPAACT, have

been successful (see Binger, Kent-Walsh, Berens, Del Campo, & Rivera, 2008; Kent-Walsh, Binger, & Hasham, 2010; Kent-Walsh, Binger, & Malani, 2010; and Rosa-Luo & Kent-Walsh, 2008 for examples, and Douglas, 2012 for a review). These programs may be used to prepare parents and other communication partners of individuals with CPCSN who will use PAS to facilitate language also.

Individuals with CPCSN who currently, or will in the future, use PAS, will benefit from aided language modelling where the partner highlights only the direct items needed in order to construct a message. They will also need to experience full models of the complete PAS strategy to enhance their operational skill learning. A full model includes all of the scans that the partner will do, and all of the yes/no responses that the individual will make. A full model is more time-consuming than a direct model, and reduces the amount of aided language modelling that is possible in a given situation. A full model provides examples of "how" to operate AAC to communicate, as well as teaches the individual that this is a valid and acceptable way to communicate. There is no current research to suggest exactly how often this should happen in natural contexts, but clinical experts suggest full models should be conducted some of the time, and maybe as much as once a week (Burkhart 2016; Jane Farrall, personal communication, 2016; Porter, 2012). Full models are easier to observe when there are two people taking a role each in the dyad, one as communication partner and the other using alternative access. Full models support the individual to observe the interaction without needing to concentrate on the message (Porter, 2012).

## Customising AAC for PAS

Decisions about the physical characteristics (number of items, size, colour, contrast, distance, orientation, complexity and arrangement) of the selection set need to consider the cognitive, language, and sensory skills of the individual who will use the system (Beukelman & Mirenda, 2013; Kovach & Kenyon, 2003; Roman Lantzy & Blackstone, 2014). Lists that come from a natural context need to include at least three options, and a way for the individual to indicate that they want "none of these" options. These lists are temporary and will usually be presented as an auditory list, although objects may be used to give visual support (e.g., instruments, books, people to sit with, songs, song verses) (Burkhart, 2016).

### Item presentation

Typically there are three patterns for scanning of AAC symbols sets, including *circular*, *linear*, and *group-item*, or *section-group-item*. Circular presentation arranges symbols in a circle which are presented item by item until a selection is made. Circular scanning is cognitively simple, but visually demanding. Linear scanning presents or highlights items one by one until a selection is made, usually top left to right, row by row. By nature, this limits the number of vocabulary items available before the selection set becomes too large and unwieldy. Group-item scanning presents a symbol group or category for selection first, then items within the selected group for consideration. This design allows for scanning efficiency, but requires the user to make two selections to indicate an item and the understanding or knowledge of how items are grouped or categorised. An example of group-item scanning is column-row, or row-item scanning. Coded access communication systems employ section-group-item (e.g., page–column/row–item, or

section–column/row–item) scanning to give efficient access to an even wider range of vocabulary items, although three selections are required to indicate any given item. Selection sets may be highlighted electronically or by a communication partner. There is little guidance in the literature about how to choose a particular scanning pattern or access method, with most of the emphasis placed on linear or row–column electronic scanning as the primary alternatives to direct access (Beukelman & Mirenda, 2013).

### Horizontal vs vertical visual vocabulary organisation

Typically, written words are arranged into vertical lists when we want to locate a specific word in the group. For the same reason, symbols arranged into vertical columns may facilitate the visual scanning of the group to locate the target item (Light & McNaughton, 2013; Porter, 2012). The vocabulary in PODD pages, for example, is organised in columns to aid sentence building for English word order – grouping together parts of speech (e.g., subject, verb, object). The items are picked from columns and the sentence is created from left to right across the page (Porter, 2012). There is some suggestion that vertical scanning potentially leads to the establishment of position bias, or the tendency to pick the first item offered (Piché & Reichle, 1991). The literature is unclear on this and there is no established research to support this theory.

One reason that high technology systems typically use row–column scanning is to reinforce the head and eye movements that are used for reading in English (Piché & Reichle, 1991; Porter, 2012). However, horizontal scanning requires eye tracking and head movement, often across the midline, which may be physically challenging for some individuals (Light & McNaughton, 2013; Porter, 2012).

While there is no research to support horizontal over vertical, or vertical over horizontal vocabulary organisation with grid layouts for low technology communication books, there are several research studies on redesigning layouts and scanning techniques to reduce learning demands for typically developing children (see Drager et al., 2003; 2004). The AAC systems in these studies are high technology devices and reported outcomes include the visual discrimination skills of typically developing children, and as such may not necessarily be comparable to children with CPCSN.

### Selection method

One movement alone can indicate a selection during PAS, but the communication partner needs to provide adequate wait time after presenting an item or group of items, and the communicator needs to reliably produce their accept movement within that time. One signal allows the individual less control over the speed of the interaction, as they must wait between each item until the partner presents the one that they want. Many children with CPCSN only have one controlled or consistent movement so only a "yes" or preferred response is demonstrated and used consistently.

With two signals – one for accept and one for reject – the individual may communicate to the partner to move to the next item without the need to wait as long. Less familiar communication partners may feel less confident with scanning when there is only a single movement, and more confident when there are two movements. For some individuals who use AAC and PAS though, it can be more fatiguing to produce two movements (Burkhart, 2016; Burkhart & Porter, 2006).

## Conclusion

AAC intervention requires problem-solving around the circumstances that support the individual with CPCSN to meet their current and future communication needs "as intelligibly, specifically, efficiently, independently, and in as socially valued a manner as possible in order to understand others and to be understood" (Porter, 2012, p. 16).

PAS is a potentially useful strategy to meet current and future communication needs and skills for individuals with CPCSN. It enables expressive communication and encourages active participation and learning. PAS supports language development while reducing the demands on physical, cognitive and sensory skills (Burkhart, 2016). The communicator develops linguistic, social, operational and strategic competence through participating in communicative interactions, and also observing knowledgeable and skilled partners operate their AAC system in natural and everyday contexts (Beukelman & Mirenda, 2013; Porter, 2012).

PAS requires both members of the communication dyad to contribute to the construction of a message during the scanner's turn. PAS is a strategy that recognises and supports individuals with CPCSN who may need:

- parallel learning opportunities to develop sensorimotor and cognitive skills while their linguistic and social skills develop;
- access to communication at all times, and not just while they are positioned optimally with technology available;
- a smart communication partner, who may interpret their subtle cues and use contextual knowledge to support successful interaction and communication;
- multimodal communication options to meet different communication needs, at different times, with different communication partners.

One of the key aspects of successfully implementing PAS is the training and support of communication partners. They need knowledge and skills to be confident and competent with PAS in natural, everyday environments in order to build habits that support communication to happen at any time (Porter, 2012). Skilled communication partners will provide the opportunities and scaffolds, and create the aided language environment, that enables the individual with CPCSN to communicate successfully.

## Useful websites

http://www.med.unc.edu/ahs/clds/resources/deaf-blind-model-classroom-resources/partner-assisted-scanning

http://www.med.unc.edu/ahs/clds/files/conference-hand-outs/TeachingStrategies.pdf

http://www.guides.mclibrary.duke.edu/c.php?g=158201&p=1036021

http://www.janefarrall.com/

http://praacticalaac.org

http://www.speakforyourself.org/uncategorized/myth-augmentative-alternative-communication-aac-pre-requisite-skills/

https://www.youtube.com/channel/UCfvD20l2wn-fS2Ar4bdTXZg (We Speak PODD on Youtube, although there is a very useful Facebook page which has more detailed posts)

https://vimeo.com/18545415#

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# Lidcombe Program

## Development and validation of reflective questions

Stacey Sheedy, Verity MacMillan, Sue O'Brian, and Mark Onslow

The Lidcombe Program of early stuttering intervention is an evidence-based behavioural treatment originally developed for children younger than 6 years. Problem-solving is inherent during Lidcombe Program treatment. Therefore a number of reflective questions were devised to assist speech-language pathologists (SLPs) to detect clinical procedures that vary from those recommended in the Lidcombe Program Treatment Guide and to employ suitable strategies. A two-stage validation process of the reflective questions was conducted. First, questions were developed and then revised with input from the members of the international Lidcombe Program Trainers Consortium. Then feedback on their clinical usefulness was obtained from public health SLPs. The outcomes of each stage of validation are reported and implications for speech-language pathologists delivering the Lidcombe Program discussed.

The Lidcombe Program is a behavioural treatment originally developed for young children who stutter. The Lidcombe Program Treatment Guide (Packman et al., 2016) outlines the clinical process. Parents or carers (referred to hereafter as parents) provide verbal contingencies after stutter-free speech and after moments of stuttering during conversational speech. At the beginning of the program, these contingencies are provided during practice sessions, usually implemented once and sometimes twice per day for 10–15 minutes each time. As treatment progresses the parent starts to deliver verbal contingencies during naturally occurring conversations throughout the day. The Lidcombe Program is supported by randomised clinical trials and experiments, translational research, meta-analysis and treatment process research (for an overview see Packman et al., 2016). The treatment has an odds ratio of 7.5 for children to attain below 1.0 per cent syllables stuttered at follow-up (Jones et al., 2005; Onslow, Jones, Menzies, O'Brian, Packman, & Menzies, 2012). Sustained treatment effects were shown for most children in the Jones et al. (2005) trial at a mean of 5 years post-randomisation (Jones et al., 2008). The efficacy of the treatment has been shown with three randomised trials

(Arnott, Onslow, O'Brian, Packman, Jones, & Block, 2014; Bridgman, Onslow, O'Brian, Jones, & Block, 2016; Jones et al., 2005).

There are two stages of the Lidcombe Program. The aim of stage 1 is for the child to attain no stuttering or almost no stuttering. It requires the parent to deliver treatment to the child every day and to attend the clinic weekly until program criteria are met. The median treatment time for stage 1 completion is 16 weeks (Onslow, 2017). Subsequently, stage 2 commences. The aim of stage 2 is for the child to maintain no stuttering or almost no stuttering for a long and clinically significant period. During stage 2, the speech-language pathologist (SLP) guides the parent to gradually and systematically withdraw treatment while maintaining treatment gains. During stage 2, clinic visits occur less often, contingent on maintenance of treatment gains.

While the procedures in the Lidcombe Program are clearly documented in the Lidcombe Program Treatment Guide (Packman et al., 2016), SLPs both within Australia and internationally have required training in the program as benchmarks were reportedly difficult to attain. Hence, the Lidcombe Program Trainers Consortium was established in 2004 to provide 2-day training workshops. There are consortium members in 11 countries across Europe, North America, Asia, New Zealand and Australia. A recent study (O'Brian et al., 2013) reported that community SLPs who had received consortium training administered the treatment more comprehensively and attained better clinical outcomes than those who did not receive that training. This raises the possibility that such training is causally related to better treatment outcomes.

Clinical skill is an essential component of evidence-based practice (Sackett, Rosenburg, Gray, Haynes, & Richardson, 1996). Consequently, to assist SLPs to optimise their clinical skills with the Lidcombe Program, the Stuttering Unit at Bankstown in Sydney offers a consultation service. Two-thirds of such consultations are prompted because children do not progress through the program as expected (Harrison, Ttofari, Rousseau, & Andrews, 2003). Sources of departure from the Treatment Guide that might be responsible are well known (Harrison et al., 2003; Packman et al., 2016). Examples include: inconsistent or non-existent collection of severity ratings by parents, incorrect verbal contingencies for moments of stuttering, failure to do practice sessions daily, and sensitive children who react negatively to verbal contingencies.

Clinical reasoning is built on robust knowledge and is dependent on critical thinking and reflective self-awareness (Higgs & Jones, 2008). Reflective clinical practice promotes

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*Stacey Sheedy (top) and Verity MacMillan*

self-awareness and is a method to enhance clinical skills. Reflective practice is a recommended component of the Competency-based Occupational Standards for Entry Level Speech Language Pathologists in Australia, and is particularly emphasised in the development of junior clinicians:

> Reflective practice enables the entry-level speech pathologist to consider the adequacy of their knowledge and skills in different work place and clinical contexts. Reflective practice requires the individual to take their clinical experiences and observe and reflect on them in order to modify and enhance speech pathology programs and their own clinical skills. (Speech Pathology Australia, 2011, p. 36)

To facilitate such reflective practices, Swift, O'Brian, Onslow, and Packman (2012) developed a clinical tool to assist SLPs to identify clinical problems that arise when parents give verbal contingencies during practice sessions. However, this tool focuses on only one part of the treatment. The present report extends the Swift et al. process by developing and validating a comprehensive list of reflective questions for the SLP to use throughout treatment. The questions were designed to alert SLPs to any specific instances where their clinical procedures differ from those described in the Lidcombe Program Treatment Guide (Packman et al., 2016). Validation of such reflective questions is important to establish their credibility and utility. Martz (2009) documented a two-part validation process consisting of an expert panel critical review followed by a field study. This two-part approach is used in this report to validate the Lidcombe Program reflective questions.

## Method

Based on the Lidcombe Program Treatment Guide (Packman et al., 2016), the authors developed an initial set of questions. The purpose was to assist SLPs to reflect on their clinical practice and to ensure that all relevant components of the Lidcombe Program are considered when treating an individual child. Such reflection is particularly relevant when clients are not progressing according to clinical benchmarks (Jones et al., 2005; Onslow, Harrison, Jones, & Packman, 2002).

The validation process consisted of two parts. Part A, the expert panel critical review (Martz, 2009), involved a review of the questions by members of the Lidcombe Program Trainers Consortium, an international group considered to be experts in the Lidcombe Program, to assess clarity and relevance. Part B, the field study (Martz, 2009), required SLPs routinely using the Lidcombe Program, to use the reflective questions with a client and comment on their clinical usefulness.

### Part A – Expert panel review

Participants were the 20 members of the Lidcombe Program Trainers Consortium, none of whom were involved in the initial design of the questions. Participants were required to evaluate each question using a 5-point scale where 5 = extremely valid and 1 = not valid at all. The questions were then amended to take account of consortium member responses, and were discussed and finalised at an international meeting of members. The final list of reflective questions is presented in the Appendix.

### Part B – Field study

Ethical approval was obtained from South Western Sydney Local Health District HREC (HREC reference number LNR/16/LPOOL/140, Local project number HE16/073) to recruit participants from SLPs working in the South Western

Sydney Local Health District. Participants were four SLPs with experience treating children who stutter. Two SLPs each had less than 12 months experience and two had 8 and 12 years experience respectively treating children who stutter. They were sent the reflective questions along with a short survey requesting feedback about the clinical usefulness of the questions. Respondents were asked to apply the reflective questions to the treatment of a child who was under the age of 6 years when treatment commenced and who was not progressing as expected. They were then asked to indicate their agreement with the following statements using a 5-point scale ranging from strongly agree to strongly disagree.

1. When you completed the reflective clinical questions, it prompted a reflection of your clinical practice with the client
2. The reflective clinical questions identified one or more clinical practices to improve upon
3. The time spent completing the reflective clinical questions justified its benefits.

Additionally, SLPs were asked to state their overall impression about the clinical value of the reflective clinical questions.

## Results

### Part A – Expert panel review

Nine of the 20 (45%) questionnaires were returned. Respondents were from Australia, North America, Europe and Asia, and represented a range of years of consortium training experience from 1–10 years, with a mean of 6.7 years.

Thirty-five of the 73 reflective clinical questions (48%) were scored as 4–5 by all respondents. Fifty-one of the questions (70%) were scored as a 3–5 by all respondents. In the case of one respondent, 21 of the remaining items were scored as not valid (1–2). The respondent stated the reason for this was that the document gave no indication about the treatment period to which questions pertained. Consequently, the reflective questions were revised to state "give responses for the past month".

Only one reflective clinical question attracted low validity ratings of 1–2 by more than one respondent. This question was "Did you collect and graph percent syllables stuttered measures within the clinic?" Given that collection and graphing of percent syllables stuttered is an optional Lidcombe Program measure, the question was reworded to read "If you are using percent syllables stuttered did you collect and graph them each week within the clinic?"

In response to participant validity scores and comments, 12 questions were reworded and 10 were deleted.

### Part B – Field study

All four participants in part B applied the reflective clinical questions to their management of a client under the age of 6 years and subsequently completed and returned the short survey. All four strongly agreed that the reflective questions prompted reflection on clinical practice with the client and that as a result of the process one or more clinical practices were identified to improve upon. Two of the SLPs strongly agreed and the remaining two agreed that the time spent completing the reflective questions justified its benefits. Three of the four surveys included a statement about their overall impression of the clinical value of the reflective questions:

> It is a great tool which helps in problem-solving around lack or slow progress in LP [Lidcombe Program] treatment and I will definitely use it again. (SLP 1)

> I felt it was a very useful tool and prompted to think about some aspects of therapy that may be

**Sue O'Brian (top) and Mark Onslow**

*overlooked. It helps you to reflect in more detail re treatment. (SLP 2)*

*Very good checklist – allowed me to pinpoint issues in the treatment which then gave the treatment more direction. Some questions difficult to answer, e.g.' in "Rate – did the number of verbal contingencies appear to be sufficient to decrease the stuttering during each day?" – sometimes hard to know. (SLP 3)*

## Discussion

Reflective practice is a desirable component of evidence-based clinical practice, and is regarded by many as essential for development of professional competence (Mann, Gordon, & MacLeod, 2009). Reflective clinical practice is associated with development of professional expertise (Mamede, & Schmidt, 2004) and is endorsed as an occupational competency standard for Australian SLPs (Speech Pathology Australia, 2011). Problem-solving by the treating SLP is inherent in the Lidcombe Program treatment process (Packman et al., 2016) and hence reflective clinical practices are a desirable component of the treatment process. However until now, there has not been an established method to support SLPs with their problem-solving throughout Lidcombe Program treatment. While the Swift et al. (2012) checklist focuses specifically on parent delivery of treatment in a practice session, the Lidcombe Program is implemented in many and varied settings beyond practice sessions. Therefore, a process was undertaken to develop and provide preliminary validation of a number of reflective questions to assist SLPs to detect variations in their clinical procedures from those recommended in the Lidcombe Program Treatment Guide.

The O'Brian et al. (2013) translational report found that SLPs who had formal clinical Lidcombe Program training had improved Lidcombe Program community outcomes. Therefore, the international Lidcombe Program Trainers Consortium, the body that runs the formal Lidcombe Program training, was actively involved in validating and refining each reflective question.

To explore whether the reflective questions had clinical applicability, four SLPs applied the questions to a client case and subsequently completed a short self-report survey about their clinical usefulness. These SLPs had varied experience in treating children who stutter, ranging from an SLP with less than one year of experience to a more specialist SLP with 12 years experience. All four reported that the reflective questions supported them to think about their clinical practice, problem-solve and modify their clinical practice with the Lidcombe Program in light of their reflections. This suggests that the reflective questions about the Lidcombe Program were useful for supporting SLPs of varying experience. All agreed that they identified one or more clinical practices to improve upon and that the benefits of the tool justified the time spent completing the questions, again suggesting positive clinical utility.

## Limitations

While this preliminary study found that SLPs with varying experience reported the reflective questions to be of clinical value, it is acknowledged that participant numbers in both the expert panel and the field study participant groups were small and constituted samples of convenience. Thus, these preliminary results should be interpreted cautiously. Future research is warranted to determine the heuristic value of the reflective clinical questions for a larger group of SLPs practising across a diverse range of settings. In addition, further studies are required to determine whether focused

reflection on Lidcombe Program procedures, as encouraged by the questions outlined in this study, ultimately leads to modification of clinical practice that enhances client outcomes. Future translational research about the Lidcombe Program could utilise the present set of reflective clinical questions as it directs attention to any departures from the documented Lidcombe Program process (Packman et al., 2016).

## Conclusion

Students and SLPs who are learning the Lidcombe Program and developing new clinical skills may particularly benefit from applying the reflective questions to their work with clients as they encourage reflective practice, appear to positively inform problem-solving and may help promote treatment fidelity. The reflective clinical questions have been added as an Appendix to the Lidcombe Program Treatment Guide (Packman et al., 2016). The Treatment Guide suggests that, in the event that a child may not be attaining clinical progressive benchmarks, SLPs use the reflective questions to facilitate problem-solving and refine practice; areas that the authors recommend are the focus of future, larger scale research studies.

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## Appendix. Lidcombe Program reflective clinical questions

(Give responses for the past month)

**Measurement**

| Rationale | Yes | No | | | |
|---|---|---|---|---|---|
| Did you explain rationale of speech measures is to monitor progress and guide treatment changes? | ❏ | ❏ | | | |
| Did you explain what 0, 1 and 9 are on the severity rating scale? | ❏ | ❏ | | | |
| Did you explain that the severity rating scale refers to all children who stutter, not just the child in question? | ❏ | ❏ | | | |
| Did you explain "unambiguous stuttering"? | ❏ | ❏ | | | |
| **Accuracy** | **Yes** | **No** | **NA** | | |
| Did you and the parent listen to the child's speech until the extent of the stuttering was apparent at the start of each session? | ❏ | ❏ | | | |
| After listening to the child's speech at the start of the clinic visits, did you ask for the parent severity ratings? | ❏ | ❏ | | | |
| Did you and the parent score severity ratings within one scale value for the child's speech at each session? | ❏ | ❏ | | | |
| If the parent severity ratings were not within one scale value of yours did you indicate and explain an appropriate score each time? | ❏ | ❏ | ❏ | | |
| Did the parent correctly identify any unambiguous stuttering? | ❏ | ❏ | ❏ | | |
| Did the parent correctly identify non-stuttered speech? | ❏ | ❏ | | | |
| **Validity** | **Yes** | **No** | | | |
| Were parent beyond clinic severity ratings consistent with parent description of beyond-clinic severity? | ❏ | ❏ | | | |
| **Compliance** | **Yes** | **No** | | | |
| Did the parent present a severity rating chart? | ❏ | ❏ | | | |
| Did the parent record severity ratings on all days? | ❏ | ❏ | | | |
| **Interpretation** | **Yes** | **No** | **NA** | | |
| Did you review the parent severity rating chart each week to identify whether there is a trend, which direction, and what it means clinically? | ❏ | ❏ | | | |
| Did you use the severity rating chart to guide discussion of progress? | ❏ | ❏ | | | |

| Appendix. Lidcombe Program reflective clinical questions (*continued*) | | | | | |
|---|---|---|---|---|---|
| **Interpretation** *(continued)* | Yes | No | NA | | |
| Did you collect and document detailed information about the child's stuttering: severity, type of stuttering, frequency of stuttering, and whether it is intermittent or continuous? | ❏ | ❏ | | | |
| If you are using percent syllables stuttered (it is an optional Lidcombe Program measure), did you collect and graph them each week within the clinic? | ❏ | ❏ | ❏ | | |
| (Give responses for the past month) **Verbal contingencies general** | | | | | |
| **Demonstration** | Yes | No | NA | | |
| Did the parent demonstrate the verbal contingencies used during the previous week? | ❏ | ❏ | | | |
| Did you suggest any improvements to the parent use of verbal contingencies? | ❏ | ❏ | ❏ | | |
| Did you demonstrate suggested improvements? | ❏ | ❏ | ❏ | | |
| Did the parent demonstrate the treatment change to your satisfaction? | ❏ | ❏ | | | |
| Did you conclude the session by summarising changes for the coming week? | ❏ | ❏ | | | |
| **Parent skill** | Yes | No | | Parent reported | You observed |
| Did the parent give verbal contingencies mostly for stutter-free speech? | ❏ | ❏ | | ❏ | ❏ |
| Did the parent give verbal contingencies in a positive manner? | ❏ | ❏ | | ❏ | ❏ |
| Did the parent vary the wording of the verbal contingencies? | ❏ | ❏ | | ❏ | ❏ |
| Did the parent use all of the seven verbal contingencies or those that were recommended by you? | ❏ | ❏ | | ❏ | ❏ |
| Did the child seem to enjoy parent verbal contingencies for stutter free speech? | ❏ | ❏ | | ❏ | ❏ |
| **Rate** | Yes | No | | | |
| Did the parent report using verbal contingencies as often as you directed? | ❏ | ❏ | | | |
| Did the parent report that verbal contingencies did not disrupt communication with the child? | ❏ | ❏ | | | |
| Did you suggest changes to the number of verbal contingencies used during each day? | ❏ | ❏ | | | |
| **Presentation** | Yes | No | | | |
| In the clinic when they were given, were parent verbal contingencies immediately after stutter-free or stuttered speech? | ❏ | ❏ | | | |
| In the clinic did the parent appear genuinely pleased when giving verbal contingencies for stutter-free speech? | ❏ | ❏ | | | |
| In the clinic did the child react in a positive or neutral manner to the verbal contingencies? | ❏ | ❏ | | | |
| Did the parent report that verbal contingencies were given only by those you trained to do so? | ❏ | ❏ | | | |
| In the clinic were verbal contingencies given in a manner so that they did not disrupt parent-child communication? | ❏ | ❏ | | | |
| (Give responses for the past month) **Verbal contingencies during practice sessions** | | | | | |
| **Presentation** | Yes | No | NA | Parent reported | You observed |
| Did the child appear to enjoy the activity? | ❏ | ❏ | | ❏ | ❏ |
| Did the parent manage the treatment activity while remaining focused on the child's speech? | ❏ | ❏ | | ❏ | ❏ |

| Appendix. Lidcombe Program reflective clinical questions (*continued*) | | | | | |
|---|---|---|---|---|---|
| **Presentation** (*continued*) | Yes | No | NA | Parent reported | You observed |
| Was the child's speech a low severity rating during the treatment conversation? | ❏ | ❏ | | ❏ | ❏ |
| Did the parent modify the interaction to retain a low severity rating? | ❏ | ❏ | | ❏ | ❏ |
| Did the parent keep the child's speech at a low severity rating whilst decreasing the structure during the practice session as much as possible? | ❏ | ❏ | | ❏ | ❏ |
| Did the parent report that activities were varied from day to day at home? | ❏ | ❏ | | | |
| Did the parent report that the time and place for the practice sessions varied? | ❏ | ❏ | | | |
| If tangible reinforcers were used, did they increase the impact of the verbal contingencies without distracting the child? | ❏ | ❏ | ❏ | ❏ | ❏ |
| If tangible reinforcers were used, was it because they were necessary? | ❏ | ❏ | ❏ | ❏ | ❏ |
| **Consistency** | Yes | No | | | |
| Did the parent report that practice sessions occurred each day? | ❏ | ❏ | | | |
| Did the parent report that the practice sessions occurred for 10–15 minutes once or twice daily? | ❏ | ❏ | | | |
| Did the parent report that practice sessions occur during the morning most days of the week? | ❏ | ❏ | | | |
| Did the parent who did most of the practice sessions attend most clinic visits? | ❏ | ❏ | | | |
| (Give responses for the past month) **Verbal contingencies during natural conversations** | | | | | |
| **Presentation** | Yes | No | NA | | |
| Did the parent report that time and place varied? | ❏ | ❏ | | | |
| Did the parent report that verbal contingencies were presented as often as you recommended? | ❏ | ❏ | | | |
| Did the number of verbal contingencies used result in improvement in severity ratings? | ❏ | ❏ | | | |
| **Consistency** | Yes | No | NA | | |
| Did the parent report that the verbal contingencies occurred throughout the day? | ❏ | ❏ | | | |
| Did the parent report that the verbal contingencies for stutter-free speech occurred more often than the verbal contingencies for stuttering? | ❏ | ❏ | | | |
| Did the parent report that the ratio of verbal contingencies for stutter-free speech and stuttering were given as recommended by you? | ❏ | ❏ | | | |
| (Give responses for the past month) **Parent issues** | Yes | No | NA | Parent reported | You observed |
| Did the parent express confidence with giving verbal contingencies when asked? | ❏ | ❏ | | | |
| Did the parent independently problem-solve? | ❏ | ❏ | | ❏ | ❏ |
| Did the parent independently make appropriate treatment adjustments? | ❏ | ❏ | | ❏ | ❏ |
| Did the parent seem positive about treatment? | ❏ | ❏ | | ❏ | ❏ |
| (Give responses for the past month) **Stage 2** | Yes | No | NA | | |
| Did the parent report continuing with verbal contingencies as recommended? | ❏ | ❏ | | | |
| Did the parent report withdrawing verbal contingencies systematically as recommended? | ❏ | ❏ | | | |
| Did the parent report increasing the number of verbal contingencies if severity increased? | ❏ | ❏ | ❏ | | |
| Did the parent report continuing to give verbal contingencies for stutter-free speech as recommended? | ❏ | ❏ | | | |
| Did the parent independently solve problems during Stage 2? | ❏ | ❏ | | | |

# NUSpeech

## A model for international clinical placements in speech-language pathology

Sally Hewat, Joanne Walters, Thizbe Wenger, Annemarie Laurence, and Gwendalyn Webb

**Since 2008, final year students in the speech-language pathology program at the University of Newcastle (UON) have had the opportunity to gain clinical experience in Viet Nam. This paper will share the development and structure of NUSpeech, an international clinical placement model that has evolved over the past four years. The model incorporates key principles of clinical education to ensure students progress towards entry-level competency, while actively engaging in curriculum and implementing practices that highlight sustainability, partnerships, and capacity building for speech-language pathology practice in majority-world countries.**

Speech-language pathologists and speech-language pathology students have for some time now travelled internationally to provide services and undertake clinical placements in majority-world countries (e.g., McAllister et al., 2010; McAllister, Woodward & Nagarajan, 2016; Whiteford & McAllister, 2007; Wylie, McAllister, Davidson & Marshall, 2016). Speech-language pathology practice and training undertaken in these countries has been driven by the very real need for services internationally, as well as the well-documented benefits of international clinical placements for students' personal and professional learning and growth (Amery, 2011; Simonelis, Njelesani, Novak, Kuzma, & Cameron, 2011; Stevens, Peisker, Mathisen, & Woodward, 2010).

Since 2014, the University of Newcastle (UON) speech pathology discipline has obtained government support for students to engage in clinical practice internationally. This, combined with an increased number of commercially operated student mobility organisations, has improved opportunities available for students in this context. However, alongside these opportunities, concerns have arisen regarding the sustainability of services provided during international clinical placements and whether benefits extend to all stakeholders involved. Consideration of these factors in addition to the slow but sustained growth of speech-language pathology within majority-world countries has led to a change in the context of service provision. These contextual changes suggest that partnerships, sustainability, and capacity building are important considerations when establishing international clinical placement programs.

Between 2008 and 2010 speech-language pathology student volunteers from UON visited Viet Nam with Ms Sue Woodward to provide services, education and information at various organisations. Anecdotal feedback on the student experience was very positive (Amery, 2011; Stevens, Peisker, Mathisen, & Woodward, 2010) and stimulated further interest and opportunity for future clinical, education and research collaborations.

With the support of Ms Sue Woodward and Trinh Foundation Australia, throughout 2011 and 2012 academic staff members from the UON visited and worked in Viet Nam. During this time staff built trust, established relationships, formalised partnerships and eventually developed a clinical placement opportunity. In April 2013 the first three-week international clinical placement in Viet Nam was trialled in partnership with the Kianh Foundation Centre for the Development of Children with Disabilities located in Bien Dan province, Central Viet Nam, and graduate speech therapists from Pham Ngoc Thach University of Medicine (UPNT) in Ho Chi Minh City. AsiaBound and short-term mobility funding through the New Colombo Plan (Department of Foreign Affairs and Trade, 2017) have enabled continuity of the program and the Speech Pathology in Viet Nam (SPinVietNam) placement program was formally established.

An informal evaluation of SPinVietNam was carried out, involving key stakeholders – organisations in Viet Nam, Vietnamese speech therapy graduates, UON students and clinical educators. The results indicated that three components of the international placement were essential to its success: (a) adequate preparation (including careful student selection), (b) variety in placement experiences, and (c) opportunity for debrief and dissemination. The three phases of the placement formed the basis of the development of the early international placement model: preparation, placement and debrief/dissemination (PPD) model. Over four years, 47 final year speech-language pathology students and eight different faculty staff (as clinical educators) have been involved in assessable clinical placements in Viet Nam (SPinVietNam). Reflection in action (Schon, 1983, 1987), and a need to replicate the program with different partner organisations and in different countries, led to further development of the early PPD model into the current NUSpeech international clinical placement model for speech-language pathology (NUSpeech). A summary of the development of the NUSpeech model between 2008 and 2016 is provided in Figure 1.

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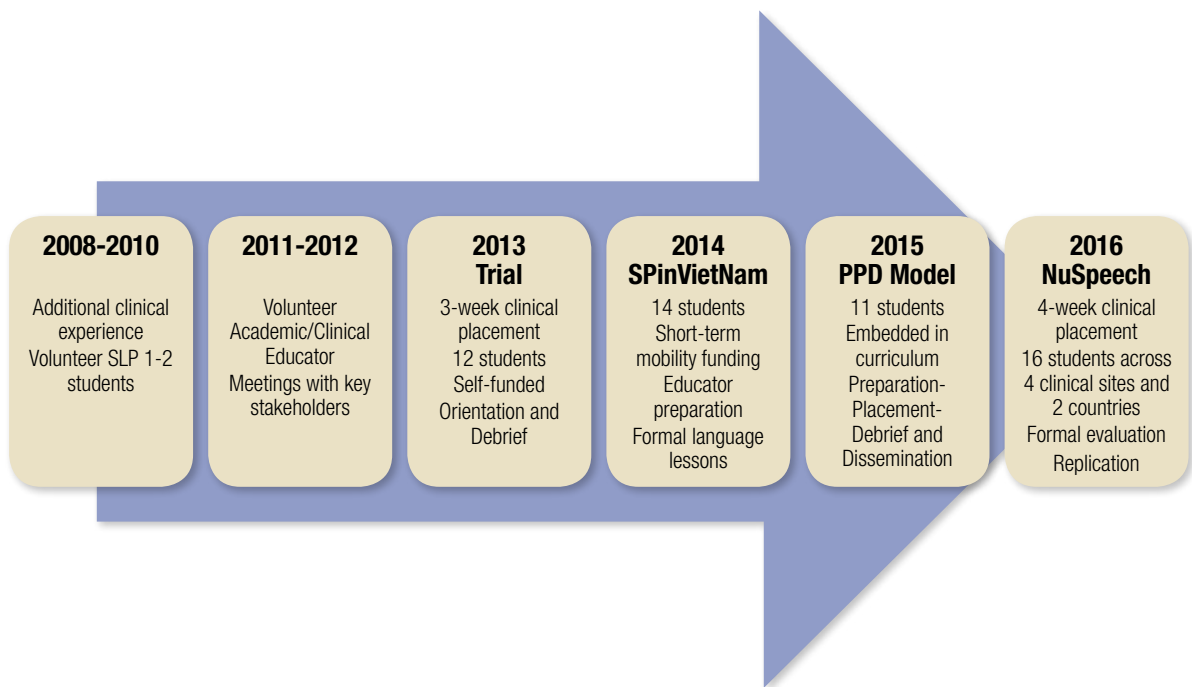
**Sally Hewat (top), Joanne Walters (centre) and Thizbe Wenger**

Figure 1. Summary of the development of NUSpeech international clinical placement model in Viet Nam, 2008–2016

The timeline shows the following stages:

**2008-2010** — Additional clinical experience; Volunteer SLP 1-2 students

**2011-2012** — Volunteer Academic/Clinical Educator; Meetings with key stakeholders

**2013 Trial** — 3-week clinical placement; 12 students; Self-funded; Orientation and Debrief

**2014 SPinVietNam** — 14 students; Short-term mobility funding; Educator preparation; Formal language lessons

**2015 PPD Model** — 11 students; Embedded in curriculum; Preparation-Placement-Debrief and Dissemination

**2016 NuSpeech** — 4-week clinical placement; 16 students across 4 clinical sites and 2 countries; Formal evaluation; Replication

## NUSpeech international clinical placement model

Consistent with literature in the area of cross-cultural speech pathology in international, majority-world contexts (Atherton, Dung, & Nhân, 2013; Hopf, 2014; Wylie, McAllister, Davidson, & Marshall, 2016), the NUSpeech model is grounded in knowledge gained over the past eight years of collaboration with partners in Viet Nam. The three phases of preparation, placement and debrief/dissemination forming the basis of the model ensure that students are prepared, supported and provided with a learning environment to enable personal growth and develop required professional skills and competencies. Equally, the core of the model ensures that the needs of all key stakeholders are met (see Figure 2).

In this paper, the essential components of each phase of the NUSpeech model are described, illustrating the need to carefully consider partnerships, capacity building, and sustainability to ensure success. Key principles of clinical education including reflection and supervision are also discussed.

### Phase 1. Preparation

The need for adequate preparation prior to commencing work in another culture has been highlighted previously (e.g., Trembath, Wales & Balandin, 2005; Balandin, Lincoln, Sen, Wilkins, & Trembath, 2007). The NUSpeech model acknowledges the importance of adequate preparation and during phase 1 important philosophies and skills underlying clinical practice in culturally and linguistically diverse contexts are examined with the speech-language pathology students. Since 2013, NUSpeech has been embedded in the curriculum of the bachelor honours program. Eligible students enrol in a specific learning stream: Speech Pathology in South East Asia. In addition to the international clinical placement, they also complete a 20-unit online elective course designed to allow for advanced level study in areas of relevant research, including social inequalities and determinants of health status, access to health care and education, volunteering, working with interpreters, working with families and communities, health promotion, digital health, and working with cultural and linguistic

diversity. The students also undertake a significant independent learning project in collaboration with international partner organisations.
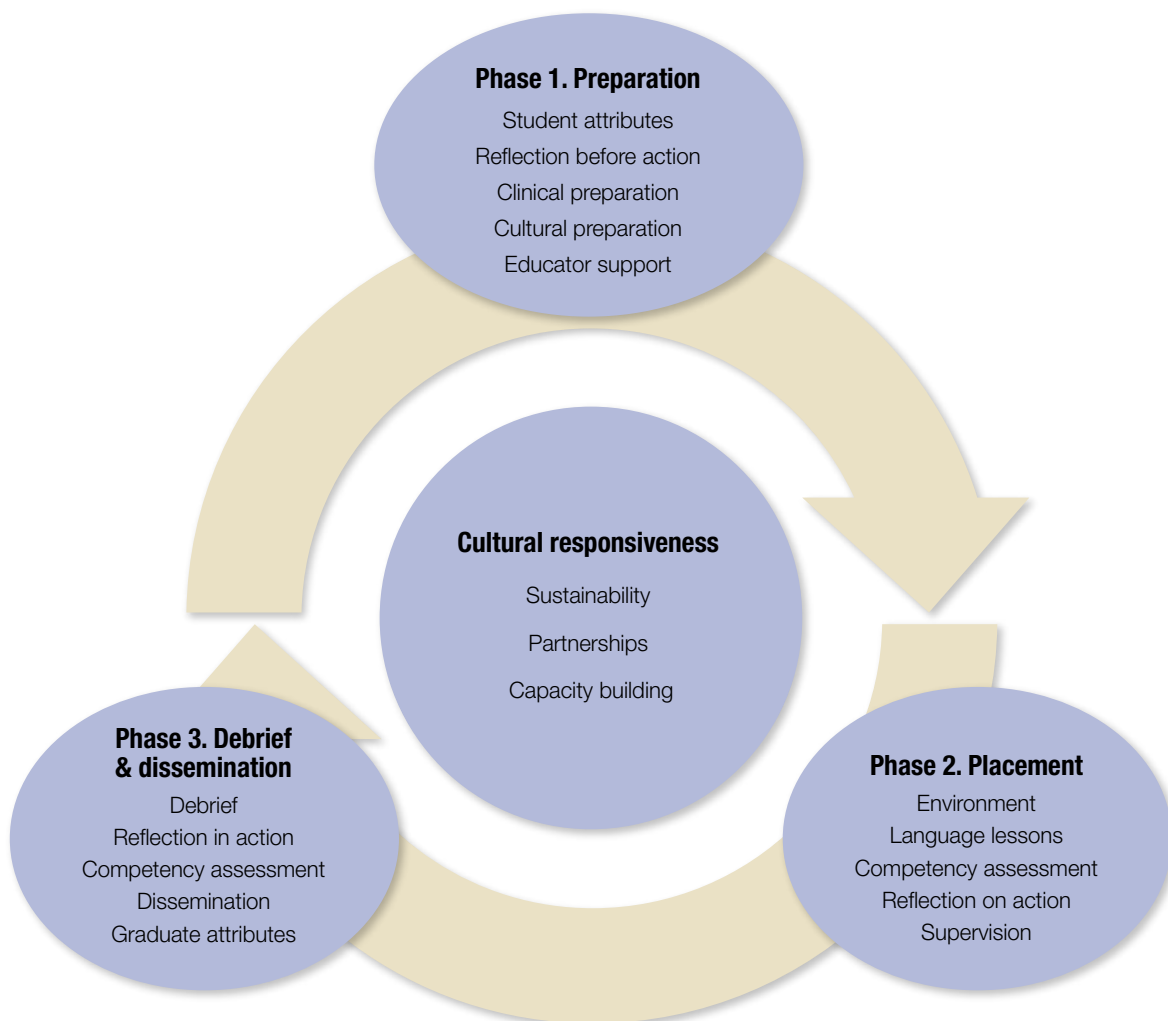
### Student attributes

The NUSpeech selection process requires students complete an expression of interest and an interview. The process is designed to explore students' reasons for wanting to undertake an international placement experience, as well as identify opportunities, contributions and possible challenges that might be associated. Applicants who demonstrate a high level of clarity, initiative, flexibility and understanding of how the placement and associated learning contributes to the development of desirable graduate attributes of professionalism, community responsiveness and scholarship are prioritised.

### Reflection before action

Following selection, students are required to reflect on the attributes that they bring to the experience. This occurs during the selection process and group reflection activity in the orientation program. Students undertake a 4-day orientation program. Two days are spent on campus problem-solving and exploring the challenges of travelling and working in another country, learning and understanding the language and culture, team-building activities, and planning for specific cases the students will work with in Viet Nam.

### Clinical preparation

As part of the orientation program students also complete a two-day clinical placement in school settings and non-government organisations working with school-aged children and individuals with disability before departing for their international experience. These onshore clinical experiences help to prepare the students for similar cases and situations they are likely to encounter on their international placement. The clinical educators who supervise these days provide feedback to the NUSpeech clinical educator in relation to the professional and clinical competencies outlined in COMPASS® (McAllister, Lincoln, Ferguson & McAllister, 2013). This information helps guide and establish clinical goals for the student during the international placement.

**Annemarie Laurence (top) and Gwendalyn Webb**

**Phase 1. Preparation**
Student attributes
Reflection before action
Clinical preparation
Cultural preparation
Educator support

**Cultural responsiveness**
Sustainability
Partnerships
Capacity building

**Phase 3. Debrief & dissemination**
Debrief
Reflection in action
Competency assessment
Dissemination
Graduate attributes

**Phase 2. Placement**
Environment
Language lessons
Competency assessment
Reflection on action
Supervision

*Figure 2. NUSpeech: A model for international clinical placements in speech-language pathology*

### Cultural preparation and language lessons

During the orientation program students complete four hours of language and cultural lessons by native Vietnamese speakers. This allows the students to begin to familiarise themselves with the culture, learn common greetings and key words, and focus on understanding the segmental and suprasegmental (tones) features of the language. Students experience the complexities of learning about communicating in a foreign language, interpretation and translation. Students also begin to learn about the culture of Viet Nam and the importance of delivering a culturally appropriate service. This is vital if the work delivered by the students is to be meaningful, accepted and sustainable (Atherton et al., 2013; Wylie et al., 2016).

### Clinical educator training and support

The university clinical educators are an important stakeholder in the model, to maintain relationships, build trust and enhance the sustainability of the placement and practices. Therefore, preparation, extensive handover and debrief on-shore and off-shore is essential. It is the observation of the authors that local introduction to key stakeholders, the environment, and the caseload are integral to the creation and maintenance of partnerships. Therefore, in the NUSpeech model, in each placement one experienced clinical educator is involved to easily manage transfer of knowledge, maintain relationships, and understand the organisational needs. One of our partner organisations has changed remarkably since the

partnership was established and many of the intervention practices that the placement has promoted over the past four years are now considered routine. The sustainability of practices is very strong, and there is clear indication that the organisation values the partnership.

*The importance of partnerships*

Key features of a sustainable activity, according to the World Health Organization (2016), include integration into available services, community ownership, and use of resources mobilised by community and government. Establishing trust, developing relationships and building meaningful partnerships are processes essential to the success of NUSpeech. Academic staff, clinical educators and students alike spend specific time and energy developing relationships and connecting with key stakeholders, including organisational directors, teaching staff, clinical staff, caregivers, the children and other members of the local communities (hotel staff, taxi drivers, restaurant owners) and government departments.

For international placements to be successful it is important to have at least one in-country "champion". This person is the linchpin to all other key stakeholders; they provide knowledge and support for managing local politics, processes and paperwork, as well as assisting to establish new relationships and nurture existing ones.

## Phase 2. Placement

### Environment and learning opportunities

Students commence their placement in Ho Chi Minh City, Viet Nam, where the UON has developed partnerships with Pham Ngoc Thach University of Medicine (PNTU) and Trinh Foundation Australia (TFA). The students (supported by a clinical educator from UON) attend hospitals, centres and schools over four days to observe a varied caseload of adult and paediatric clients and provide education through discussion and structured workshops. This part of the placement allows both the Vietnamese speech-language pathologists and UON students to develop networks of support, build professional relationships, reflect on their own practice and develop skills in their supervision of others.

Students then travel to Hoi An where the UON has also developed a strong partnership with the Kianh Foundation and staff at the Kianh Foundation Day Centre (Kianh). Students attend Kianh each day for three weeks, supervised directly by clinical educators affiliated with the UON. The focus of service delivery at Kianh is determined by the needs, wants and goals of key stakeholders (children, special education teachers, support teachers, interpreters, and other volunteers).

Intervention has been provided individually, in small groups, and in whole class sessions and has targeted a range of communication skills including: speech, intelligibility, pre-linguistic skill development, language development, comprehension, use of visual support systems, sign language and AAC devices. There has also been a focus on oral and pharyngeal dysphagia.

### The importance of capacity building

Trust, relationships and partnerships are often formed through mutual understanding and working together (Hoy et al., 2010). The NUSpeech model focuses on working in collaboration with the host organization to capacity build, whereby teachers and therapists are included and integrated into all individual, group or class sessions, discussion groups and workshops. Ongoing professional development for all key stakeholders is a key aspect of the placement and new learning needs to be culturally appropriate, meaningful and valued by the local communities. Unsolicited feedback from one of our new partners in Viet Nam highlights the benefits of the placement to their organisation:

> One of my most treasured connections has been the introduction to Dr Sally Hewat, Senior Lecturer and Head of Speech Pathology at the University of Newcastle. Thanks to Sally we were blessed to have 2 final-year Speech Pathology Students … & their Clinical Educator … spend time with us at our school this year. They assessed all our students speaking abilities, provided training for our teachers & set up programs for our teachers to follow when we have no "Speechies". This pilot project was a huge success for everyone involved & I'm thrilled to announce, it looks as if this will be an ongoing collaboration …. Again, our students' lives have been so enriched by the generosity of others.

### Language lessons, interpreters and translation

An innovative feature of the placement is the opportunity for students to engage in learning the language on-site.

Students attend informal, interactive, fun language lessons at the end of each day to continue their immersion in the local language and build on their understanding of speech, language, and the culture of the local and broader community.

### Competency assessment

Students are supervised by experienced clinical educators from the university throughout the placement and formally assessed using COMPASS®: Competency Assessment in Speech-language Pathology (McAllister et al., 2013). Mid-placement evaluation and feedback occurs early in the placement to allow for the modification and extension of the student's learning goals to support continuing skill development.

### Reflection in and on action

A key aspect of skill development, and the care of the attending students, is to allow frequent opportunities to debrief and to reflect on action. Reflection, as widely acknowledged throughout the health professions, is vital to allow active learning from experience (Mann, Gordon, & MacLeod, 2009). However, reflection is also an opportunity to resolve interpersonal conflict (Epstein, 1999) which becomes vital in a complex setting that challenges students' notions of culture, values, and practice. Further, the opportunity to both debrief and reflect as a group and individually becomes vital when the stress of travelling away from home, in a hot unfamiliar setting, with unfamiliar language and food, is added. Reflection not only provides active learning for the students but also enables pastoral care and development of professional skills.

Students engage in individual reflection following each clinical session, and in a group at the end of each clinical day and on their return to Australia. Each student also provides written journal style reflections at least once to their clinical educator during their clinical placement and as part of their final portfolio assessment on return to Australia.

### Supervision and pastoral care

As Balandin and colleagues observe (2007), the physical and mental well-being of students on international placements is critical to the success of these placements. The complex caseload often requires a high level of supervision initially, and understanding from clinical educators that modelling, joint sessions, and provision of supporting literature and resources may be required in order to facilitate learning and high-quality service delivery in a short amount of time.

These scaffolds can also, typically, be faded out in a relatively short amount of time. On a sheer practical level, students have also required pastoral care taking the place of additional support and guidance in relation to a range of physical and emotional needs while on placement in Viet Nam. As adult learners the students are expected to take responsibility for their own mental and physical well-being. However, circumstances do arise, (typhoons, heat stroke, food poisoning, bag snatching, long distance break-ups to name a few) that can require the clinical educator to provide emotional support in these situations which involves assisting students to alleviate feelings of stress, anxiety and inadequacy.

Clinical educators stay in the same location as the students to allow this to occur more easily. Again, the familiarity of clinical educators with the environment due to repeat visits to the same placement sites also facilitates provision of pastoral care. Experience in clinical education

and in counselling students is also useful with respect to provision of supervision and pastoral care in an international setting.

## Phase 3. Debrief and dissemination

An essential component of NUSpeech in phase 3 is the opportunity to debrief, and/or reflect on action, following sessions and each evening with the UON clinical educator. The importance of opportunity to debrief is also recognised following students' return to Australia.

### Debrief, reflection after action, and competency assessment

After returning to Australia all students are required to attend a one-day post-placement debrief which involves formal and informal reflection activities and an externally facilitated focus group. This allows students to discuss their experiences, skill development, complete end placement COMPASS® (McAllister et al., 2013) and to reflect after action on their clinical practice.

### Dissemination

From 2015 students have been required to inform and share their experience with the wider student cohort and local speech pathology community. This dissemination of the experience took place via information sessions to students interested in undertaking an international placement and development of promotional resources. Information and projects were also formally presented to university staff, students, and local and interstate speech-language pathologists at the inaugural showcase of the University of Newcastle Speech Pathology (Honours) Innovation Flagship. It is important that this information is disseminated to the wider community of speech-language pathologists to highlight the value of international placements, enforcing the development of graduate attributes for students and recognising skill development.

### Recognition of skills development and graduate attributes

By 2015, the benefits to all key stakeholders of this international clinical placement experience for students enrolled in the Bachelor of Speech Pathology (Honours) at the UON were well recognised. Many of the previous graduates attribute much of their employability and success in the workplace to skills and knowledge gained during their international placement. Unsolicited comments included:

*Just letting you know that I had two job interviews last week and I was offered both positions but I chose to accept a full time position at a school for children with Autism in Melbourne. My experience in VietNam was a massive positive for the interviews and both panels seemed very impressed with my experience and the skills that I was able to develop through the Kianh Foundation School. Thank you for all your support and assistance over the past year, without the South East Asian Stream I might not have been successful for this position.*

### The importance of sustainability

The World Health Organization (2016), in relation to evaluation of a specific health project, defined sustainability as the ability of a project to continue to function effectively into the future. Sustainability is an issue for all organisations and stakeholders involved in international clinical placements.

Placements need to be viable and cost effective for the universities, able to provide valuable teaching and learning opportunities, and accessible to all students. Further, any services provided as part of an international clinical placement need to be beneficial to the partner organisation and therefore must be meaningful, effective and sustainable in the long-term. Hence, the service delivery models used should promote capacity building including mentoring, collaborative intervention practices, education and training. The services provided should continue in some capacity after university staff and students leave the placement site and return home.

Short-term mobility (STM) funding provided through the Australian government's New Colombo Plan has ensured viability of the placement over the past three years and enabled equitable access for any students enrolled in the Bachelor of Speech Pathology (Honours) program at the UON. In addition, it has provided the opportunity to enhance relationships between the partner organisations, and further develop the placement and service delivery models that are sensitive to the environment (location, setting, culture, language, stage of development, etc.). The STM funding also provided opportunity for expansion on student and supervisor preparedness including formal language lessons.

## Future directions

The next stage of the NUSpeech international clinical placement model is to conduct formal evaluation exploring the perspectives of all key stakeholders as well as continue to develop and support culturally responsive, locally driven and sustainable international clinical placements for the future. In 2016 NUSpeech was replicated and expanded to include interdisciplinary learning across the speech-language pathology and occupational therapy disciplines in Fiji (aka SPOTinFiji). The NUSpeech team will also seek to further explore evidence-based practice and applicability to working in majority-world context. The 2015 United Nations Sustainable Development Goals seek to achieve sustainable economic, social and environmental development, everywhere (UN-DESA, 2015). It is hoped that through continuous improvement of a model of clinical education for international placements, formal evaluation, and further research into sustainable health practice in a majority-world context, NUSpeech may contribute in a small way to major initiatives such as this.

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# What's the evidence?

## Speech-language pathology intervention to improve the social communication skills of individuals with schizophrenia

Mary Woodward and Kirsten McCosker

## Clinical scenario

Ellie has been working as a speech-language pathologist (SLP) for three years, and has just taken her first position in an adult psychiatric hospital. She has received a referral to assist with communication with a patient, Mark, a 29-year-old man with schizophrenia. Mark has had multiple hospital admissions and has been in his current hospital for seven months. Ellie has met Mark and observed that when trying to have a conversation he stands very close to the other person, makes minimal eye contact and facial expression, and talks at length about topics which are difficult to follow. He is easily distracted and often does not answer questions accurately but he seems to focus better when looking at pictures. He often mumbles or shouts even when there is no-one in the room with him, and laughs at unknown stimuli. Nursing staff are finding it extremely difficult to communicate effectively with him.

## Response

Ellie takes Mark's case to supervision with Lucy, who has been working as a SLP in mental health for over 10 years. Ellie wonders what impact speech-language pathology might have for Mark and his treating team, and what aspect of his communication she might prioritise for intervention. Ellie and Lucy discuss the three components of evidence-based practice (research evidence, clinical experience/data, and informed client choice/preferences). Ellie poses the following clinical questions:

- can speech-language pathology intervention improve the social communication skills of people with schizophrenia?
- if so, what are the recommended methods of intervention?

Lucy discusses her own experiences and outcomes with patients with similar presentations. She tells Ellie about the successful outcomes she has seen in social communication groups she has run previously in several of the mental health wards, with individualised treatment targets for each patient, as well as the 1:1 therapy she has offered to those who were unable to benefit fully from group intervention. She explains that in her clinical experience, she has seen a positive impact for many of her patients, and for their families/carers, but that progress is more modest when a patient has had limited insight into their difficulties and/or motivation to modify their communication. Lucy suggests that Ellie attempt to obtain Mark's views about his own communication and possible treatment goals using the

Talking Mats® approach which provides a non-verbal means of expressing opinion and choice and has been used with a wide range of individuals including those with intellectual disability (Cameron & Murphy, 2002), mental health difficulties (Macer & Fox, 2010), dementia (Murphy, Gray, van Achterberg, Wyke, & Cox, 2010) or those in custody (Boardman, Crichton & Butterworth, 2016). Talking Mats® has also been widely used to enable individuals with communication difficulties to engage in goal-setting (Bornman & Murphy, 2006; Murphy & Boa, 2012).

Lucy and Ellie discuss what is known about the communication skills and deficits of those with schizophrenia, including considering published research papers they have already read. They know that it is well-established in mental health literature that communication impairment is a core diagnostic feature of schizophrenia and other psychotic disorders (Boudewyn et al., 2017; Colle, Angeleri, Vallana, Sacco, Bara, & Bosco, 2013; Marini et al., 2008). Much of the literature related to this topic aims to identify the neurological mechanisms underlying what is often described as the semantically and syntactically "disorganised" verbal output of people with schizophrenia. This communication disturbance suggests a verbal manifestation of formal thought disorder (Ayer et al., 2016); however, it is unclear whether this is caused by higher level semantic processing deficits (Dwyer, 2014), linguistic sequencing deficits (Docherty, 2005) or is related to social cognitive impairment (Docherty, McCleery, Divilbliss, Schumann, Moe & Shakeel, 2013).

Lucy and Ellie discuss the fact that, in addition to language difficulties, people with schizophrenia, as in Mark's case, overwhelmingly present with significant pragmatic deficits i.e., difficulties with the social and contextual use of interpersonal communication. This may include difficulties with conversational turn-taking, understanding or using appropriate non-verbal communication, relevant and appropriate topic choice and maintenance, use of appropriate social register, extent of verbal elaboration in conversation and difficulty considering and estimating a listener's level of prior knowledge. Mazza, Di Michele, Pollice, Roncone, and Casacchia (2008) and Langdon, Coltheart, Ward, and Catts (2002) refer to deficits in theory of mind (ToM) as the ultimate cause of pragmatic language deficits in people with schizophrenia. Whatever the cause, communication difficulties undoubtedly impact significantly on the functionality and quality of life of people with schizophrenia (Bambini et al., 2016; Tan, Thomas, & Rossell, 2014).

*Mary Woodward (top) and Kirsten McCosker*

In order to inform her management of Mark's pragmatic difficulties, Ellie decided to conduct a literature search to review the published research on the effectiveness of speech-language pathology interventions in remediating social communication impairments. She and Lucy agreed to focus on studies documenting intervention by SLPs, rather than those by other disciplines addressing communication goals, as the approaches are likely to be different. Searches were conducted in Medline, Embase, PsycInfo and SpeechBITE, between the years 2000 and 2017, using the following keyword combinations: (schizo* OR psychotic OR psychosis) AND (speech patholog* OR speech-language OR speech therap* OR language therap*) AND (pragmat* OR social communication OR language OR communicat*). Ellie read the titles and abstracts of the 134 articles that were identified, and discarded duplicate papers. She also discarded papers based on the following exclusion criteria:

- not written in English;
- not involving human subjects;
- not including individuals with a diagnosis of schizophrenia;
- not reporting the outcomes of an intervention study;
- intervention not addressing social communication difficulties;
- intervention not carried out by a speech-language pathologist.

Ellie requested the full text of 7 papers, and subsequently discarded another 4 articles which were not relevant to the specific clinical question regarding social communication. Three unique papers were retained (see Figure 1), comprising a single case study (Clegg, Brumfitt, Parks, & Woodruff, 2007), a description of two single case studies



*Figure 1. Flowchart of the literature search process*

(Kramer, Bryan, & Frith, 2001) and a systematic review (Joyal, Bonneau, & Fecteau, 2016). None of the articles were given a quality rating by SpeechBITE.

Ellie read all three papers in detail. Kramer et al. (2001) reported the outcomes of single case studies in which a language therapy program, targeting narrative discourse skills, was conducted with two patients with schizophrenia. The article reports the pre- and post-test results for these participants, both of whom demonstrated improved skills in narrative structure and content after the program. Clegg and colleagues (2007) reported the case study of a man with schizophrenia presenting with severe poverty of speech. His communication skills were targeted via a combination of a cognitive behavioural therapy (CBT) and impairment-based language therapy. They reported mixed results, with the CBT being unsuccessful in changing the participant's "negative attitude to communication" (p. 93) while the language therapy was successful in increasing verbal output. Ellie decided to critically appraise the systematic review (Joyal et al., 2016), using the Critical Appraisal Skills Programme (Systematic Review) checklist (Critical Appraisal Skills Programme, 2017).

Lucy and Ellie also re-read the relevant documents from Speech Pathology Australia:

- *Clinical Guideline: Speech Pathology in Mental Health Services* (Speech Pathology Australia [SPA], 2010a);
- *Position Statement: Speech Pathology in Mental Health Services* (SPA, 2010b);
- *Factsheet: Speech Pathology in Mental Health Services* (SPA, n.d.).

These documents emphasise the role that a speech pathologist can play in the assessment and treatment of the communication difficulties associated with mental health disorders, including schizophrenia, and confirm that this might involve providing intervention to improve an individual's social functioning.

## Implications for practice

Despite the numerous and well-documented communication difficulties encountered by those in mental health settings (not to mention the significantly higher rates of dysphagia in this population), speech-language pathology remains comparatively under-represented as a profession in this field. This is likely to be both a contributing factor to, and a result of, the paucity of evidence on the benefits of specific speech-language pathology interventions for individuals with schizophrenia. Thus, there is not enough published evidence to answer either of Ellie's clinical questions fully. However, lack of published evidence does not necessarily show that speech-language pathology interventions are ineffective or harmful, rather that more controlled studies are needed to investigate treatment effect thoroughly. Speech-language pathologists working with people with mental health difficulties therefore may need to draw on the work from other disciplines in the field, such as psychology and occupational therapy, as well as evidence-based theories and practice in related fields, such as dementia and autism spectrum disorders. In addition, SLPs need to be rigorous in demonstrating and documenting their value to the individual patient and their carers, the wider mental health team, and to the profession itself.

In the clinical scenario described above, Ellie took baseline assessments of Mark's language and social communication skills and then, taking into account his self-identified goals, planned a block of individual therapy followed by repeat assessments, and follow-
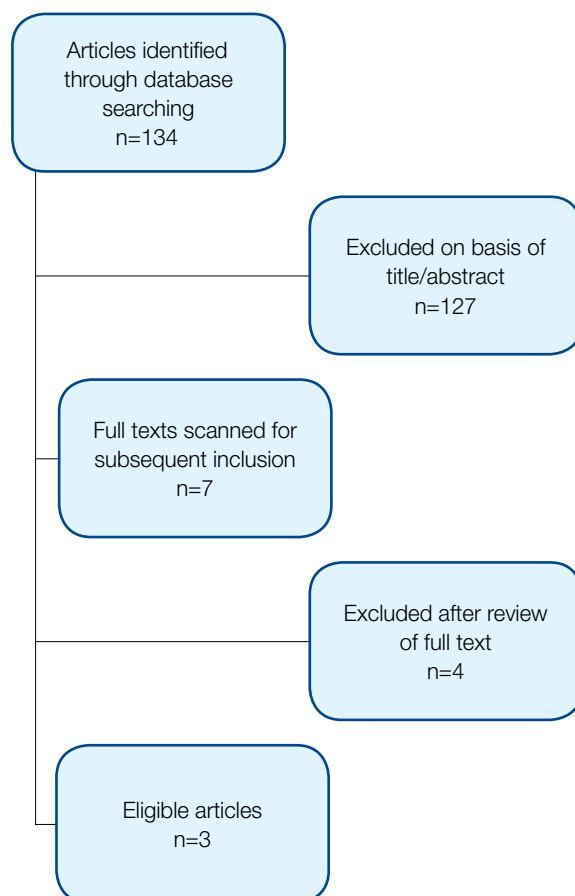
## Table 1. Critical appraisal of Joyal et al. (2016)

Joyal M., Bonneau, A., & Fecteau, S. (2016). Speech and language therapies to improve pragmatics and discourse skills in patients with schizophrenia. *Psychiatry Research*, *240*, 88–95.

| Question | Y/N | Comments |
|---|---|---|
| 1. Did the review address a clearly formulated question? | Y | A clinical question is clearly stated, but the wording of it is potentially misleading. The question aims to "identify the importance of speech and language therapy (SLT) as part of rehabilitation curriculum for patients with schizophrenia"; however, the review considers interventions targeting a range of cognitive parameters which happen to include areas of speech or language, not necessarily conducted by a speech and language therapist/speech-language pathologist. |
| 2. Did the authors look for the right type of papers? | Y | Articles reporting original data were included, regardless of the type of study. No randomised control trials were available for inclusion. Four articles reported outcomes of single case studies. |
| 3. Do you think all the important, relevant studies were included? | Unsure | Difficult to answer given the possible ambiguity of the question. Whether the selected articles actually address the clinical question depends on how the term "speech and language therapy" is defined. Articles that were discarded based on exclusion criteria are not listed, though Ellie is aware at least one additional article (Arntzen et al., 2006) that appears to match the inclusion criteria but was not included in the review. |
| 4. Did the review's authors do enough to assess the quality of the included studies? | N | The authors did not include a measure of quality (e.g., PEDro scale) for any of the studies. Given that there were three single case studies included and no randomised control trials, a qualitative score would have provided more information about the level of validity of the selected studies. |
| 5. If the results of the review have been combined, was it reasonable to do so? | N/A | Results have not been combined as the authors recognised that the broad term "speech and language therapies" could refer to a variety of different aspects of communication that cannot be compared (e.g., speech versus language versus pragmatics). Therefore, results have been divided into three main categories (see below). |
| 6. What are the overall results of the review? | | Results are mixed and multifaceted because the authors examined three key areas of each intervention:<br>1. Therapeutic approach → The most common approach was "operant conditioning" which presented mixed results.<br>2. Speech and language abilities → The authors report that "pragmatics and discourse skills" can be successfully targeted and that improvements can be "retained over time". With only 5/12 studies targeting these areas including follow-up measures post study, further evidence is needed to substantiate that claim.<br>3. Therapy setting → Mixed results. Benefits were reported for both individual and group therapy settings but without enough data to draw any solid conclusions. |
| 7. How precise are the results? | | Effect sizes (Glass's delta) are provided for 6 studies but no confidence intervals are provided. Only 6/18 studies provided quantitative data (means and standard deviations), thus meta-analysis of the studies is not possible. |
| 8. Can the results be applied to the local population? | Y | Yes, because studies included participants over the age of 18 with a diagnosis of schizophrenia. |
| 9. Were all important outcomes considered? | N | According to the authors, 9/18 studies had no follow-up measure, so it is unclear whether positive results were consistently maintained post intervention. Authors state pragmatic and discursive skills can be successfully targeted and maintained, but only 5/12 studies targeting these areas had follow-up post study. |
| 10. Are the benefits worth the harms and costs? | Unsure | There is no perceived harm to receiving speech and language therapy intervention; however, further research is needed regarding the financial cost and potential benefits. |
| Summary | | Low-level systematic review due to paucity of high-level and/or quantitative studies, so unable to do meta-analysis. The heterogeneity of the speech and language therapy areas being studied and the different design and methods of each study make comparison between studies difficult. For single case studies and small cohort studies, the authors did not provide a measure of research quality. |

up assessments at 3 and 6 months post intervention to establish retention of skills. With the necessary consent in place, Ellie is hoping to document Mark's response to intervention in the form of a single case design and submit for publication in order to add to the evidence base.

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# Mental health and illness

## What are our ethical duties toward clients and colleagues?

Belinda Kenny, Patricia Bradd, and Noel Muller

**M**ental health issues have significant impact on the lives of many Australians. Here, we will explore some of the ethical issues that speech pathologists may need to consider when they manage clients or interact with colleagues who have mental health concerns. We aim to facilitate conversations regarding mental health to help speech pathologists identify and respond appropriately to signs that clients or colleagues may benefit from support.

## Ethical considerations with clients

From a speech pathologist who is endeavouring to work with an adult who has depression and declining therapy following a stroke, to those who are employed by specialist forensic and mental health service agencies, to the therapist who is working with young people who have experienced trauma, many of us have been touched by mental illness in the therapeutic sense.

The World Health Organization (2017) has defined mental health as "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to her or his community". Mental health illness and mental health issues can affect any person across their lifespan, either continuously or episodically. Speech pathologists have an important role in both the prevention and remediation of clients with mental ill health (Murray, 2009). Speech pathologists also have ethical responsibilities when managing clients with mental health concerns. The Speech Pathology Code of Ethics (Speech Pathology Australia, 2010) calls us to conduct our practice by upholding the principles of beneficence and non-maleficence. Keeping this in mind, consider the following scenario:

*A general practitioner has referred an 18-month-old child to your clinic for review of his communication as the child has not yet begun to talk. You send a pre-clinic questionnaire to the family to complete, to bring along to the first appointment, which seeks details about both the child and the family situation. The mother discloses through this questionnaire that she has experienced significant and sustained postnatal depression following the birth of her little boy.*

*You meet mum and the toddler at the initial assessment. Mum's affect is flat and she is barely engaging with the child. During a play task, he seeks her attention by touching her face and showing her a toy, but she fails to make eye contact or respond to his efforts.*

What ethical considerations do we need to consider in the above situation?

In relation to the Speech Pathology Australia Code of Ethics (2010), we have "duties to our clients and to the community" (section 3.1). What are our duties to the child in this context? What are our duties to the mother? Are there safety or welfare considerations (clause 3.1.7) that we may need to consider?

The Speech Pathology Code of Ethics (Speech Pathology Australia, 2010) provides some guidance in relation to our responsibilities to our clients and the community (section 3.1) as part of our *Standards of Practice.* This along with our values of respect and care require us to consider the ethical principles of autonomy (section 2.4) for the mother while ensuring the safety and welfare of the child (clause 3.1.7). This scenario also raises the issue of the safety and welfare of the mother, which may require the speech-language pathologist to pro-actively address her underlying mental illness support needs along with the child's communication needs by assisting the family to engage with appropriate support services.

## Ethical considerations with colleagues

Many practising health professionals successfully manage mental health issues and provide competent, quality services to the community. However, speech pathologists are employed in demanding clinical environments. They manage complex clients within resource constraints. An inverse relationship exists between stress and self-care, and there are links between stress-induced job dissatisfaction and perceptions of professional competence (Ayala, Ellis, Grudev, & Cole, 2017). Hence, recognising and responding appropriately to staff members experiencing mental health issues is important for individuals, colleagues and managers. Yet knowledge and confidence in deciding when and how to respond may be a barrier to speech pathologists accessing support. The following scenario highlights potential ethical issues that may arise when mental health issues are not addressed in the workplace.

*Jess[1] enjoys speech pathology practice but this has been a challenging year. Staffing changes have required her to cover a new caseload and manage increased administrative responsibilities. It has been a difficult year, personally, with distressing family issues*

**Belinda Kenny (top), Patricia Bradd (centre) and Noel Muller**

*demanding her time and attention. Jess perceives herself as a competent speech pathologist but feels anxious and overwhelmed by workload and family pressures. Jess finds it increasingly difficult to manage client care and complete administrative tasks. She frequently arrives late following problems sleeping, but works through lunch and takes incomplete tasks home. Jess avoids discussing her experiences with her manager because she perceives she will be "judged" as not coping, and it is difficult to find permanent positions in her local area.*

*Kate notices concerning changes in her colleague's behaviour. Jess avoids interacting with team members, professionally and socially. She appears tired and frequently complains of headaches. Jess is constantly busy but not productive. When Kate commences intervention, with two clients Jess assessed, she finds an incomplete report and no record of a recommended referral to occupational therapy. However, Kate understands that Jess has a demanding family situation and overall Jess is a great therapist. Kate wants to help but has her own busy caseload to manage.*

Reflect upon the following questions when considering your response to the scenario:

1. What are key ethical concerns for Jess and Kate?
2. What potential consequences may result from not addressing these concerns?
3. What steps can Jess and Kate take to respond ethically in this scenario?

Our Code of Ethics (Speech Pathology Australia, 2010) states that respect and care for ourselves and colleagues is a core professional value: "We maintain our personal health and well being to effectively fulfil our professional responsibilities" (section 1. Values, Respect and Care). For Jess, it is important to reflect upon ethical principles of beneficence, non-maleficence and professional integrity. Is her health status impacting her skills to provide quality intervention? What are potential risks to her clients? Is she currently functioning as a competent team member who can meet professional commitments and fulfil her "Duties to clients and her employer"?

Kate has equally important ethical considerations. The Code specifically addresses our duties to the profession and ourselves with an obligation to "identify and act on concerns we may have about colleagues' competence or conduct" (clause 3.3.1). Furthermore, Kate may reflect upon her duties to "uphold the reputation of the profession" (clause 3.3.3) and support her colleagues to "develop professional integrity, identity and ethical behaviours" (clause 3.3.6). It is also important to note that speech pathologists have obligations under the National Code of Conduct for Healthcare Workers (COAG, 2015) to report colleagues who have health concerns that may compromise the safety or quality of client care. Herein may lie conflict for Kate. How can Kate address her ethical concerns in a supportive manner that acknowledges Jess as an autonomous decision-maker and focus on positive outcomes for her colleague, clients and employer? An Ethics of Care framework may provide a helpful approach to such an issue.

Ethics of care is grounded in the concept of caring as both being "receptive to" and "responsible for" others (Branch, 2000). A receptive speech pathologist listens with attentiveness and empathy and then takes responsibility for translating empathy into appropriate actions. In Jess and Kate's workplace, a culture of care may be facilitated by modelling effective care behaviours, including showing concern for others, demonstrating that colleagues are valued by the way we speak with them and about them, and by openly discussing strategies for self-care. Opportunities for face-to-face contact with colleagues, team collaboration, and the perception that contributions are valued by others, may mediate speech pathologists' work stressors (McLaughlin, Lincoln, & Adamson, 2008). Frequent interactions demonstrating care may also make it a little easier for Jess to approach a colleague or her manager for support and for Kate to initiate a conversation regarding observed professional behavioural changes and concerns. Kate may also benefit from accessing specific resources available for developing mentally healthy workplaces (National Mental Health Council, 2013). Importantly, Jess as a caregiver is ethically responsible for providing competent intervention by taking active steps to monitor and maintain her health. Kate is ethically responsible for taking actions that will facilitate her colleague's efforts to address issues that may have harmful consequences for clients or the workplace.

## Ethical considerations from a health care consumer's perspective

Health care consumers may expect that health professionals, including speech pathologists, have a reasonable understanding of mental health conditions they may be dealing with in daily practice – for example, understanding the incidence of postnatal depression in mothers, and that this disorder may be impacted by complications at the time of birth or by other complex medical or social issues for the family.

A challenge for speech pathologists is to tread that fine line between "normalising" a mental health condition e.g., being sensitive to the possibility that depression may accompany a major change in health status (e.g., CVA or TBI), and trivialising or putting aside the profound impacts of such conditions on clients and families. Consider, for example, the potential outcomes of referring to postnatal depression as "baby blues". Sometimes we may avoid using a mental health term, for example, a depressive illness in Jess's case, and this may be a sign of discomfort in talking openly about mental health. However, acknowledging mental health issues in a more open way can assist professionals overcome the perception that "this only happens to someone else"; that "someone else" may be my client, my colleague or myself as a practising clinician.

Speech pathologists working with clients who have mental health issues need to understand not only what mental health "looks like" by identifying a list of symptoms but also what it "feels like", by listening to consumers' stories of lived experiences with mental health and well-being. New initiatives in this area include recovery colleges where people with lived experience may share insights with practising health professionals. For example, South Eastern Sydney Recovery College (http://www.seslhd.health.nsw.gov.au/Recovery_College/) offers education and training programs, developed and delivered by people with lived experience of mental health concerns and health professionals to help carers and professionals acquire better understanding of mental health concerns and to support people during their recovery.

Reticence around acknowledging mental health issues may be a consequence of real or perceived stigma in workplaces. A safe working environment is a key to overcoming such stigma regarding mental health. Workplaces must negotiate that same fine line between normalising and not trivialising mental health issues and by having resources in place to support speech pathologists who are managing mental health issues. For example, the National Medical Health Commission (2013) and Australian Human Rights Commission (2010) provide resources for mental health in the workplace.

## Conclusion

We have raised ethical issues related to mental health in client care and health care practice for the purposes of reflection and to facilitate conversations around developing safe cultures in workplaces. Mental health is a complex topic and may not be addressed in work places until a significant incident occurs involving a client or health professional. Can we as speech pathologists, colleagues and managers develop a more proactive approach to mental health in our workplaces?

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1   The case studies have been created by the authors to stimulate discussion of mental health issues. If these cases have raised concerns for you, the following services may offer support:

Beyond Blue https://www.beyondblue.org.au/get-support/national-help-lines-and-websites

SANE Australia https://www.sane.org/

Black Dog Institute https://www.blackdoginstitute.org.au/

If you have concerns regarding the ethical implications of your own or a colleague's health concerns with impacts upon competence to practice, you may seek advice from Trish Johnson, Senior Advisor, Ethics and Professional Issues, Speech Pathology Australia, tjohnson@speechpathologyaustralia.org.au.

**Dr Belinda Kenny** is an elected member of the Board of Ethics. Belinda is an academic at Work Integrated Learning, University of Sydney, with learning, teaching and research interests in ethical reasoning and ethical practice. **Trish Bradd** is a Senior Board appointed member of the Ethics Board and a Fellow of Speech Pathology Australia. With tertiary qualifications in speech pathology and management, Trish has extensive experience in the public health care sector. **Noel Muller** is a consumer from Queensland. As a consumer, he has a passion for consumer rights and equity, particularly in the provision of health and community services for all. Noel strongly believes that the community must be involved in all aspects of the decision process and the provision of services.

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# Webwords 59

## Mental health: How are they now?

Caroline Bowen

Remember the *Australian Communication Quarterly* and *ACQ*, the forerunners of *JCPSLP*? Exactly eight years ago, *ACQ*'s November theme was Mental Health, and it contained Webwords 35: Wednesday's child (Bowen, 2009). The child was my 4-year-old client Tim, who attended many of his Wednesday sessions with his maternal grandmother Sylvia, because his mother Val was either receiving help as a psychiatric unit in-patient or was too unwell to venture from home. Revisiting Tim's story, and the sad story of Alison (d) and Lindsay, and their children Ben aged four – my client in 1976 – and baby Jessica (d), coincided with the August 2017 first screening of **The Bridge**[1] in the ABC's reality TV series *Australian Story*. Together, the three stories evoked vivid memories of all the players in Tim's and Ben's stories, one of whom was Alison's psychiatrist, with whom I shared professional rooms. In the days following Alison and Jessica's murder-suicide, he volunteered one of the best, and most acted upon, pieces of advice about screening adults for depression that I received in over four decades of clinical practice.

"*Ask*," he said, "when you take a history, ask each Mum, or Dad, or other primary caregiver who accompanies new clients, as a matter of routine, about his or her state of mind. Don't try to look for tell-tale signs or red flags in a history. Just simply *ask* [two basic questions that may lead to appropriate referrals]:

1. Over the past two weeks, have you felt down, depressed or hopeless? and
2. Over the past two weeks, have you felt little interest or pleasure in doing things?"

I wondered if anyone asked Donna Thistlethwaite those, or similar questions in the two weeks before her Australian story unfolded, and how she might have replied. Or was everyone just telling her she was fabulous, encouraging her not to be silly, or employing **the wrong kind of kindness**[2], when she tried to confide her fears and insecurities?

## A confluence of miracles

The Bridge is an unsettling portrayal of Donna Thistlethwaite's 7-to-10-day plummet from an apparently confident high-achiever in HR, to the depths of self-doubt and hopelessness, culminating in a desperate, suicidal 40-metre leap into oblivion from the Story Bridge on the Brisbane River. Her partner, son, work colleagues, and the world in general, she thought bleakly, would be better off without her, with her floundering attempts to return to the workforce after 14 months' maternity leave, to lead a team, and come to grips with an intimidating new IT system. Oblivion was not the outcome. Her fortuitous rescue, by two decisive Brisbane CityCat crew while responsible for a full load of passengers – in 2012, a year that saw 15 other people die because of the same fall – was described in the program as "a confluence of 'miracles'", and a new chance at life.

A key theme of the story was that destructive, depressing anxious thinking can lead to suicidal thoughts, even in people, like Donna, with no history of the types of mental illness generally associated with suicide risk. In the telling, there was no suggestion that she might have had postpartum depression or perinatal mood disorder, which are in the DSM-5 and the ICD, but not as diagnoses that are separate from depression; or **imposter syndrome**[3], which, although it generates fascinating **research**[4] activity, is neither a syndrome nor a diagnostic entity.

## The imposter phenomenon

Impostor syndrome, or the less fancifully, the imposter phenomenon, is observed in high-achieving individuals who dismiss or minimise their obvious accomplishments self-deprecatingly as unworthy flukes, and pale imitations of what others in the same field have achieved, while fearing being exposed as fakes, undeserving of any admiration and accolades for their outward successes. Unlike real imposters, who practise deception as assumed characters, or under false identities, names or aliases, an individual experiencing the imposter phenomenon has chronic feelings of self-doubt, genuinely dreading being found out as an intellectual fraud.

In his **blog**[5], Hugh Kearns defines it as, "The thoughts, feelings and behaviours that result from the perception of having misrepresented yourself despite objective evidence to the contrary". Like Kearns, Dr Amy Kuddy – she of the second-most viewed TED Talk of all time – has experienced the phenomenon. In this **excerpt**[6] from her book, *Presence* (Kuddy, 2015), she writes,

*Impostorism causes us to overthink and second-guess. It makes us fixate on how we think others are judging us (in these fixations, we're usually wrong), then fixate some more on how those judgments might poison our interactions. We're scattered – worrying that we underprepared, obsessing about what we should be doing, mentally reviewing what we said five seconds earlier, fretting about what people think of us and what that will mean for us tomorrow.*

Investigators who conducted an American pilot study of 138 medical students, Villwock, Sobin, Koester, and Harris (2016) demonstrated, via a self-administered questionnaire (The Young Imposter **Quiz**[7]), a significant association between imposter syndrome and the burnout components of physical exhaustion, cynicism, emotional exhaustion, and **depersonalisation**[8], with 49.4% of the female students,

and 23.7% of the males experiencing the imposter phenomenon.

The phenomenon, much discussed in Reddit by SLPs/SLTs and students (e.g., Reddit: [Seeking Advice] Sometimes **I feel like a bad clinician**[9] and Reddit: [Seeking Advice] How did you get over **imposter syndrome in graduate school?**[10]), goes hand-in-hand with maladaptive levels of perfectionism (Beck, Seeman, Verticchio, & Rice, 2015) and stress. In a related study, Beck, Verticchio, Seeman, Milliken, and Schaab (2017) looked at the effects of a mindfulness practice, comprising yoga and simple breath and body awareness techniques, over the course of a university semester, on participants' levels of self-compassion, perfectionism, attention, and perceived and biological stress. The 37 volunteer participants (19 undergraduate CSD students and 18 SLP graduate students) were all females, and aged between 18 and 26 years. Comparing the mindfulness group with a control group, the investigators found that their perceived stress levels and potentially negative aspects of perfectionism decreased and biological markers of stress and self-compassion improved. Experimental participants' reflective writings indicated they perceived the sessions to be beneficial, but no significant effect was found for attention. Beck et al. concluded:

> College life can be stressful, and the belief that one needs to be perfect might exacerbate stress. To best assist our students, instructors and supervisors must be aware of students whose behaviors are indicative of high stress levels and maladaptive aspects of perfectionism. Although some students might require intervention from mental health professionals, there are steps that instructors and supervisors can take to facilitate students' overall well-being... (pp. 12–13)

## Overall well-being: Are Val and Tim ok?

Towards the end of 2010, Timothy was discharged from SLP intervention with age-typical speech and language skills. Val brought him to most of his sessions that year, appearing happier, more settled, and more able to enjoy his company all the time. Sylvia was a rock for both, remaining supportive and involved, minding Tim when Val had psychiatry and clinical psychology sessions and peer-support meetings organised through the former NSW Depression and Mood Disorders Association (DMDA), which was active from 1981 and 2012, then becoming **Bipolar Australia**[11].

I asked her whether there had been a distinct turning-point. "Two things", she said. "First, getting a definite diagnosis after all that chopping and changing. And this...". She reached into her bag and drew out a small card on which she had written: "Recovery is possible for anyone affected by Bipolar Disorder, when they are empowered to help themselves and others through person-to-person centred communication".

"I read that in a DMDA pamphlet and it gave me so much hope that I've carried around ever since. There's no magic formula; I miss the highs and I still have the odd dark day, but with the psychs, peer support from friends in the same boat and the members of my support group, family education – especially for Tim, mum and dad, and my ex – and taking the meds – I'm good, really quite good."

"And Sylvia, how is she?"

"Well, that's where I feel guilty. I wouldn't say my illness broke mum and dad, but it put a huge strain on their marriage. The problem was that mum 'got it' and dad didn't really believe in bipolar and resented the time she devoted to **caring**[12] for us when they could have been enjoying their retirement, going for trips together, and that sort of thing. But they have all that sorted now I'm better. And we're all terribly proud of the way Tim is doing at school and everything."

"Everything?"

"Yes, everything."

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## Links

1. http://www.abc.net.au/austory/content/2017/s4711347.htm
2. https://joannacannon.com/2017/08/03/the-wrong-kind-of-kindness/
3. https://en.wikipedia.org/wiki/Impostor_syndrome
4. http://impostersyndrome.com.au/index.php/the-research/
5. http://impostersyndrome.com.au/
6. https://leanin.org/news-inspiration/overcoming-imposter-syndrome-to-reveal-your-presence/
7. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5116369/bin/ijme-7-364-S1.pdf
8. http://www.mayoclinic.org/diseases-conditions/depersonalization-derealization-disorder/symptoms-causes/dxc-20318902
9. https://www.reddit.com/r/slp/comments/4t5hfd/seeking_advice_sometimes_i_feel_like_a_bad/
10. https://www.reddit.com/r/slp/comments/6sxi8k/how_did_you_get_over_imposter_syndrome_in/
11. http://www.bipolaraustralia.org.au/
12. http://www.bipolarcaregivers.org/feedback

Webwords 59 and Webwords 35 are at www.speech-language-therapy.com with live links to featured and additional resources.

# Around the journals

Chojenta, C. L., Lucke, J. C., Forder, P. M., & Loxton, D. J. (2016). **Maternal health factors as risks for postnatal depression: A prospective longitudinal study**. *PLOS ONE*, *11*(1), e0147246. doi:10.1371/journal.pone.0147246 open access

Jane Bickford

This article reports a subset of survey data from the Australian Longitudinal Study of Women's Health. This prospective, population-level study examined short- and long-term risk factors for postnatal depression (PND) in 5219 child-bearing women, aged between 31–36 years. Over 15% of the women reported experiencing PND with at least one child. Multivariant analyses indicated strong positive associations with postnatal anxiety and antenatal depression. Positive associations with PND and a history of depression, low SF-36 Mental Health Index, emotional distress during labour and breastfeeding for more than six months were also found. The data suggest that birth order or first births were no more likely to be associated with PND.

The results confirm the coexistence of anxiety and depression in the postnatal period. Contrary to previous findings, this study did not find a significant relationship between levels of social support and demographics such as SES, education level, single/marital status or age (younger vs older) and PND. These results indicate that there is no evidence to support an association between these factors and PND once other predictors are taken into account. Longitudinal data collection, use of multiple surveys to reduce recall bias and multivariate mixed model approach all contributed to a strong study design and reliable results. The authors conclude that understanding a woman's mental health history is important in predicting those women most vulnerable to PND and that treatment and management of depression and anxiety earlier in life and during pregnancy may be protective of later PND. This robust study is relevant to clinicians working with infants and young children who may be affected by issues related to maternal mental health.

Iverach, L., Jones, M., McLellan, L. F., Lyneham, H. J., Menzies, R. G., Onslow, M., & Rapee, R. M. (2016). **Prevalence of anxiety disorders among children who stutter**. *Journal of Fluency Disorders*, *49*, 13–28. doi: 10.1016/j.jfludis.2016.07.002

Michelle C. Swift

It is known that adults who stutter and seek treatment have higher rates of anxiety disorders than non-stuttering controls, but results concerning the comorbidity of stuttering and anxiety in children have been inconsistent. This study reports on a large sample of 75 children (aged 7–12 years old) who had a history of stuttering and 150 age- and gender-matched peers. Participants completed a computerised structured diagnostic interview and a range of questionnaire-based measures of symptoms. The diagnostic interview indicated that the children who stuttered had four-fold increased odds of having any anxiety disorder, six-fold increased odds of having social anxiety disorder and seven-fold increased odds of having subclinical generalised anxiety disorder than their non-stuttering peers. Results on the questionnaire measures

also showed significant differences between groups; however, both groups had mean scores within the normal range.

Overall the results suggest that children who stutter primarily experience social anxiety and teasing/bullying related specifically to speaking. While some of this anxiety may be subclinical, the level of distress is still strong and appropriate treatment is needed to prevent this continuing into adulthood. This study emphasises the importance of a comprehensive assessment of anxiety for school-aged children who stutter and appropriate treatment, including a psychology referral, when required.

Boyes, M. E., Leitão, S., Claessen, M., Badcock, N. A., & Nayton, M. (2016). **Why are reading difficulties associated with mental health problems?** *Dyslexia*, *22*, 263–266.

Kate Desborough

A team of Australian researchers are starting to explore why children with reading difficulties are at increased risk of mental health problems. Difficulty with reading is considered a risk factor for developing both emotional (internalising) and behavioural (externalising) problems. There is little evidence though, to suggest why this might be the case. Boyes and his team have provided four potential avenues for future research into the topic.

1. Identifying a list of potential risk- and resilience-promoting factors for mental health in children with reading difficulties. Qualitative research in the population group, as well as review of child psychology literature, were identified as sources for this information.
2. Collating children's assessment records and parent reports of their socio-emotional development from service providers. The authors considered reviewing existing data, or generating new data for longitudinal follow-up of children who were previously assessed.
3. Collaborating on trials of universal school-based mental health promotion programs to identify whether they are effective for particular subgroups, such as children with reading difficulties.
4. Making children's mental health an additional focus of trials into reading intervention programs. The authors advocated using mental health outcome measures, such as the Strengths and Difficulties Questionnaire, in these trials.

The paper claimed that these four lines of research could provide the basis for examining why children with reading difficulties are at greater risk of mental health problems and to help guide the development of mental health-promoting interventions for them.

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# Resource review

Bowen, C. & Snow, P. (2017). *Making sense of interventions for children with developmental disorders: A guide for parents and professionals.* J&R Press: Surrey, UK. AU$45.00 http://www.sandpiperpublications.com.au/Making-Sense-of-Interventions-scp100568.html; £24.99 http://www.jr-press.co.uk/making-sense-of-interventions-for-childrens-developmental-disorders.html

Suze Leitão

Increased access to the internet and social media means families (and clinicians) are often bombarded by adverts and information about possible treatments for their child. It has become increasingly difficult to "make sense" of everything we hear and read about. Thank goodness for the recently published guide for parents and professionals from Caroline Bowen and Pamela Snow which provides us with a road map.

In this on-line world, it is easy to find "evidence" for anything and everything. However, as the authors caution "there is no binary distinction between 'evidence-based' and 'non evidence-based' practice" (p. 10), rather it is a case of having levels of evidence. The text is book-ended by useful general chapters on understanding science and research. I like the way it promotes scientific literacy and critical thinking, but also reminds us to keep an open mind. The text is readable, written in plain English with an often humourous style. Towards the end, a 7-point "safety check" is provided for parents to use as they navigate the market place.

The second chapter takes a side road into the booming business of accelerating the development of typically developing babies. Read this chapter in the privacy of your own home or clinic as you will gasp, gulp, and at times find yourself laughing out loud in incredulity at some of the products on offer!

The remaining chapters cover the well-worn paths of executive control, working memory and attention; autism spectrum disorders; behaviour and social development;

AAC, voice, speech, language and fluency; auditory processing; reading; and diet. The authors present a little bit about each of these areas of practice, and discuss criteria that identify a recommended intervention (in other words, a theoretical underpinning that make sense in explaining *why* a treatment should work and evidence of a reasonable level that has shown it *does*).

Each chapter then winds its way through a description of a range of moderate to non- evidence-based approaches. Some you may have heard of but there will be times when readers will find it hard to believe the authors haven't made some of these up. To list a few, and in no particular order:

- "psychological astrology" which uses birth charts to understand the inner world of those who cannot communicate (seriously, this exists);
- "kill your stutter" and "kill your lisp" (apparently in just minutes… but of course, after you have downloaded a program at some considerable expense); and
- "facilitated communication" which has a strong evidence base that it is "not an efficacious means of accessing the wants, needs, thoughts and ideas of people with severe communication impairment" (p. 165).

Many of these non-EBP programs do not just come with an absence of evidence (which might suggest we watch with caution if there is at least some solid underlying theory, and hence face validity), but rather have clear evidence that they do not work. Clinicians need to consider that the interventions they provide should not only aim to do good, but also to do no harm. Our ethical obligations include the notion of "opportunity cost" – so every minute wasted on a non-EB approach is one that hasn't been used to a child's advantage. Everyone involved in working with a child should ensure their program is based in the best science.

The twitter handle associated with this book (@Tx choices) summarises its purpose – a critically important one: to provide parents, carers, families, and professionals with access to the information and tools which are needed to make informed choices for and with their children. There should be a copy in every clinic.
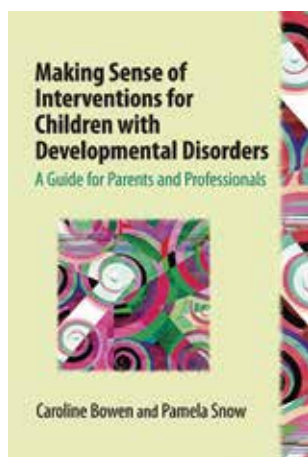
# Top 10 resources

## Supporting individuals who have emotional behavioural disorders, attention deficit disorders and oppositional defiant disorders.

Karen James

**Karen James**

Karen James is a speech pathologist who works with clients (particularly teenagers) who have emotional behavioural disorders (EBD), attention deficit disorders (ADD/ADHD) and oppositional defiant disorders (ODD). Karen has compiled a list of her Top 10 ideas and resources for working with this population including useful assessment ideas, ideas to help focus clients who have problems attending to tasks, and strategies that have proven effective in overcoming defiant and resistant behaviours.

Poor communication can be one of many contributions to disruptive behaviour as is seen in emotional behavioural disorders (EBD), attention deficit disorders (ADD/ADHD), and oppositional defiant disorders (ODD). Individuals may have difficulties with: (a) understanding what is being asked of them, (b) explaining themselves and the actions of others, (c) relaying the story around a single or series of events, and (d) understanding interpersonal relationships and social cues. Individuals may also have challenges with supplying sufficient or specific information, higher level executive functioning for problem-solving, planning and expressing ideas (particularly in writing), auditory processing difficulties, making inferences, and thinking about abstract ideas. Social communication difficulties are also prevalent.

### 1   A focus on oral language

Narrative production can be difficult for individuals with EBD, ADHD and/or ODD. They may be literal in their interpretations and explanations, may omit important information, and may be unable to take alternate perspectives and adjust their message accordingly. Problems commonly occur in narrative microstructure (e.g., amount and variety of vocabulary; length of utterances; specificity; unnecessary repetition of information) and macrostructure (e.g., story introduction, event sequencing, identifying emotions, problems and possible solutions; providing a clear conclusion). Oral language skills are usually stronger than written language and therefore provide the strongest platform for learning.

### 2   A focus on social communication

For those with EBD, ADHD and ODD, language and social communication problems are often masked by the presence of difficult behaviours. Receptive and expressive components involved in social communication may be impaired. Most individuals may be able to state social conventions, however are less successful at demonstrating them. Emotional vocabulary frequently requires development, with students often unable to distinguish the difference between feeling "bored" versus feeling "anxious" or "confused". Ideally teaching needs to happen in the "here and now" to allow for maximum impact.

### 3   A focus on problem-solving/cause-and-effect reasoning

It is common to find difficulties in higher level language skills especially problem-solving and reasoning (e.g., identifying consequences of actions). Impulsiveness, brain development or simply not knowing how to approach problems or unfamiliar situations can underpin some of these difficulties. Points 5 and 8 outline some ideas about how to target these areas.

### 4   A focus on literacy skills

Literacy is a common difficulty seen in individuals with EBD, ADHD, and/or ODD. Poor spelling, reading fluency and comprehension means that students may try to avoid tasks involving these skills. It is not uncommon to observe a student reluctantly start a written task and suddenly stop and refuse to proceed because they come to a word they can't spell. To help, have a pre-prepared vocabulary list with simple common words for them to refer to, including words such as *there*, *because*, *they*, *which*, etc. Read the words to them and point out that they can choose to use this to help if they want. Encourage them to ask you to add other words they need help with during written tasks. Emphasise the fact that the bigger the list the better it is, because it shows that they are recognising words that they need help with.

With respect to generation of written texts, students can often recite the parts required in a written text but either an inability or lack of confidence in generating ideas prevents them from doing so. They need help drafting ideas and determining appropriate vocabulary to use. A basic *Wh* scaffold can help. Once the basic *Wh* elements are completed, you can ask the student to expand on each idea by providing scaffolds for specific information to include, for example: "What does the boy look like?" "Think about his size" (introduce list vocabulary related to size); "What is he wearing?"

Oral texts may be easier to produce than written. For this reason, consider using a voice to text program (e.g., Dragon Naturally Speaking) to get the student started on a story. Once the student sees their story in writing, they are more likely to attempt editing or adding details.

### 5   Games!

Games are powerful tools in both assessment and therapy, irrespective of a student's age. Even the most "defiant" and "toughest" child/teenager will, more often than not, agree to "have a look" and then participate in a game. A game can be perceived as non-threatening and therefore non-stressful. Games are interactive which means students are more likely to attend for longer than during pen and paper

or listening exercises. Games facilitate a focus on comprehension skills (following instructions), problem-solving, planning, expressive language (including seeking clarification), and social and literacy skills (reading instructions). Three great multipurpose games are:

1. **Man bites dog** – Construct a "news worthy" headline using a hand of cards. This targets literacy skills (reading and comprehending written information and sentence construction), language skills (vocabulary development, inferencing) and social communication (humour, irony, factual/ inferential interpretations). Ask for a story to attach to the headline to extend the game into an oral or written language exercise.

2. **Bop It** – A game requiring players to follow a series of verbal instructions, used to address processing and comprehension skills. It also has the "active component" for those who have attentional difficulties and has the added benefit of a competitive element (either against the clinician or others).

3. **JENGA** – Players take turns removing one block at a time and placing it back onto the tower. Jenga can help with problem-solving, impulsiveness (cause–effect relationships), attention to details, and planning skills. It can be adapted to target vocabulary/semantics whereby the SP sticks names linked to different categories onto the blocks. The student rolls a dice and, depending on the number it lands on, they are asked to remove a block linked to that category.

## 6    Formal assessment tools

It can be challenging to complete formal assessment with this population due to high refusal rates and difficulty attending and concentrating. If a formal assessment is required and deemed to be of value, use a test that is short and appears non-confrontational. A few to try are:

- *The Expression Reception and Recall of Narratives Instrument* (ERNNI) (Bishop, 2004);
- *Test of Language Competence – Expanded* (TLC – E) (Wiig & Secord 1989);
- *Social Emotional Evaluation* (SEE) (Wiig, 2008);
- Student version of the *Functional Assessment of Verbal Reasoning and Executive Strategies* (S-FAVRES) (MacDonald, 2013; 2016).

## 7    Screening questionnaires

As many children/teenagers spend much of their time in school or at home, the use of questionnaires to collect information is an important part of the assessment process. In fact, with disorders such as ADHD the assessment is considered incomplete without this information. A number of questionnaires can be used with individuals who have behavioural issues to gather information about functional activities and behavioural attributes. One that can be freely downloaded is the *Strengths and Difficulties Questionnaire (SDQ)* (Goodman, 1997). This tool is suitable for children aged 3–16 years. The SDQ includes questionnaires for parents, teachers and a self-report version for adolescents (11–16 years). Another questionnaire commonly used in research to screen for language impairment, particularly pragmatic impairment, is the *Children's Communication Checklist – CCC-2* (Bishop, 2003).

## 8    Fun activities for assessment and therapy

Having a collection of fun and engaging activities suitable for different age groups is an essential element of a

speech-language pathologist's clinical tools kit. When working with children and adolescents who have EBD, ADHD and/or ODD, a wide range of engaging resources are a must.

1. **Mr Bean clips:** are effective for both assessment and therapy, covering a range of language and communication areas. Mr Bean is great for working on social communication skills including reading body language and facial expressions, developing emotional vocabulary, interpreting situations and looking at cause and effect relationships.

2. **Comic strips:** are an effective way to encourage written language. Students perceive comics to be "less demanding" because written language is limited and there are pictures to facilitate story ideas. To access a range of comic strips try www.Pixton.com (however, there are also a range of free options on the internet).

3. **Spider web:** the concept of a spider web representing the "trouble" and "problems faced" is a strong visual scaffold that students can use when trying to address cause and effect relationships and problem-solving skills. An example of how it may be used is as follows:
   - The student makes a spider web from string including a spider in the middle.
   - The student identifies the behaviours that get them into trouble or the problems they face as well as when these behaviours/problems happen.
   - Write the problem behaviours onto flies and stick the flies around the spider web. The riskier or more dangerous the behaviour the closer to the spider it is placed.
   - On a separate piece of paper the student lists positive consequences that occur when they don't carry out the negative behaviour or think before acting.

   The web is continuously referred back to, with the emphasis being that they DON'T want the consequences of their actions to "get them stuck in the web".

4. **Pen pals:** one of the best tools for literacy involving social communication skills is introducing pen pals (https://www.penpalschools.com/). Pen pals allow students to engage in monitored written exchanges whereby they need to think about grammar, sentence construction, and type and specificity of vocabulary and information. They learn that people's experiences may be different to theirs because of where they live. It is a novelty for students when they find themselves taking on the role of teacher, as the person they are sharing the information with often states that they want help to learn how to read and write in English.

## 9    Books

Despite the known importance of books in learning environments, they may be considered "taboo" by individuals with EBD, ADHD and/or ODD as they can represent a culmination of the difficulties that a student experiences with communication, literacy and higher level problem solving. It is therefore important to find books that students are prepared to engage with. Pick a path/ adventure books (also known as choose your own adventure) or Treasure Quest Magical Adventure Mazes by Bob Beeson are interactive as well as short and easily adapted in order to develop a range of age groups and literacy levels.

## 10 Useful journal articles

Korrel, H., Mueller, K. L., Silk, T., Anderson, V., & Sciberras, E. (2017). Research review: Language problems in children with attention-deficit hyperactivity disorder – A systematic meta-analytic review. *Journal of Child Psychology and Psychiatry*, *58*(6), 640–654.

Pickles, A., Durkin, K., Mok, P. L., Toseeb, U., & Conti-Ramsden, G. (2016). Conduct problems co-occur with hyperactivity in children with language impairment: A longitudinal study from childhood to adolescence. *Autism & Developmental Language Impairments*, *1*, doi: https://doi.org/10.1177/2396941516645251

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# *JCPSLP* notes to authors

The *Journal of Clinical Practice in Speech-Language Pathology* is the major clinical publication of Speech Pathology Australia. Each issue of *JCPSLP* aims to contain a range of high quality 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) | Theme* |
|---|---|---|
| Number 2, 2018 | 1 December 2017 | Entrepreneurship in speech-language pathology |
| Number 3, 2018 | 13 April 2018 | Swallowing, nutrition, mealtimes: Recipes for success |
| Number 1, 2019 | 1 August 2018 | The roles of speech-language pathologists in the justice system |
| Number 2, 2019 | 1 December 2018 | Measurement and evaluation in practice |
| Number 3, 2019 | 13 April 2019 | Multimodal communication |
| Number 1, 2020 | 1 August 2019 | 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.

## Ethical approval

All manuscripts in which information about a person and/or organisation is presented must be accompanied by evidence of approval by an authorised ethics committee. This includes clinical insights, ethical conversations, manuscripts presenting the results of quality assurance and improvement activities within workplace settings, and research manuscripts.

## Themes

Each issue of *JCPSLP* contains a set of articles relating to a particular theme, as well as a selection of articles reflecting broader speech pathology practice. The Editorial Board selects a theme for each journal, and these themes can be suggested by members of Speech Pathology Australia at any time. Manuscripts on any topic relevant to speech pathology practice can be submitted to *JCPSLP* at any time.

## Length

Manuscripts must not exceed 3500 words (including tables and a maximum of 30 references). Longer manuscripts may be accepted at the discretion of the editor. It is highly recommended that authors contact the editor prior to submitting longer manuscripts.

## Types of submissions

When submitting your article to *JCPSLP*, please indicate the type of submission:

- Clinical insights: These are papers that describe clinical programs, and innovative clinical services. Clinical insight papers do not have a traditional research format. However, these submissions should include details of the purpose and objectives of the program/service, information about similar programs and a description of the value/significance of the current work. In addition, papers should provide an evaluation of the program/service and recognition of the limitations.
- Research: These are papers that describe research studies with clear clinical relevance. Research papers should include a review of the literature, aims/purpose of the study, outline of the method (including participants, data collection tools and analysis), and a clear discussion directed to a clinical readership.
- Literature reviews: These are papers that provide detailed reviews of literature relating to topics of clinical relevance. Literature reviews should include a description of the significance of the topic, an outline of the methods used to identify papers, a comprehensive critique of the literature, and a discussion of clinical implications (including directions for future research if applicable).

## Peer review

Manuscripts submitted to *JCPSLP* undergo a double blind peer-review process. Regular columns (e.g., Webwords, Top 10, resource reviews) undergo editorial review. The authors are provided with information from the review process. Often, authors are invited to revise and/or resubmit their work, as indicated by the reviewers. Occasionally, the reviewers request to re-review the revised manuscript. In some instances, a paper will be rejected for publication. The editor's decision is final. The sentence "This article has been peer-reviewed" will appear after the title for all peer-reviewed articles published in *JCPSLP*.

## Format and style

All submissions must be Word documents formatted in accordance with the following guidelines:

- All text should be 12 point Times New Roman, double spaced (except figures and tables), left justified.
- A maximum of five levels of heading (preferable 2–3 levels) should be used:
  1. Centered, boldface, uppercase and lowercase heading
  2. Left-aligned, boldface, uppercase and lowercase heading
  3. Indented, boldface, sentence case heading with a period. Begin body text after the period.
  4. Indented, boldface, italicised, sentence case heading with a period. Begin body text after the period.
  5. Indented, italicised, sentence case heading with a period. Begin body text after the period.
- Please use the terms "speech-language pathology" and "speech-language pathologist" (abbreviated to SLP) throughout article.
- Do not include images within the text of the article – send photos as separate attachments, digital images should be of high quality and preferably be sent as uncompressed TIF or EPS images.
- Use only one space after punctuation, including full stops.
- Use a comma before "and" in a series of three or more items (e.g., "The toys included a ball, bucket, and puzzle)
- Clear and concise writing is best. Use short sentences and paragraphs and plain English. Please reduce bias in language as much as possible (i.e., avoid stereotypical terms, refer to participants, rather than subjects, and be sensitive to racial and ethnic identity).
- 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 key references only, must follow the American Psychological Association (APA, 6th edition) (2009) style. For further details on correct referencing, visit http://owl.english.purdue.edu/owl/resource/560/01/
- Tables and figures: If there are to be tables or figures within your article, these should be presented on separate pages with a clear indication of where they are to appear in the article (in text indicate where the figure or table should be inserted). All tables and figures should be numbered. Figures should be presented as camera-ready art. Please ensure figures and tables appear at the end of your article with each table or figure on a separate page.

## Documents to be submitted

1. Manuscript featuring:
   a. Title
   b. Author names and affiliations (will not be forwarded for peer review)
   c. Up to 6 key words
   d. Abstract (maximum 150 words)
   e. Main body of text (**main body must not include any identifying information**)
   f. Reference list (maximum 30)
   g. Tables (if relevant)
   h. Figures (if relevant)
   i. Appendixes (if relevant)
   j. Acknowledgements if relevant (will not be forwarded for peer review)
2. Author submission form (to be downloaded from *JCPSLP* website)
3. A colour photograph of each author (to be included in manuscript if accepted for publication)

## Submitting your manuscript

Articles should be submitted electronically to the Editor, Leigha Dark at jcpslpeditor@gmail.com or online via the Scholastica site https://scholasticahq.com