Addressing Communication Disorders in Unserved and Underserved Populations

- RELEASE Collaborators. (2021). Predictors of poststroke aphasia recovery: A systematic review-informed individual participant data meta-analysis. *Stroke*, *52*, 1778–1787.
- Rose, T.A., Worrall, L.E., Hickson, L.M. & Hoffman, T.C. (2011). Aphasia friendly written health information: Content and design characteristics. *International Journal of Speech Language Pathology*, 13(4), 335–347.
- Sather, T.W. & Howe, T.J. (2021). The role of the environment: Supporting language, communication, and participation. In A.L. Holland & R.J. Elman (Eds), *Neurogenic Communication Disorders and the Life Participation Approach: The Social Imperative in Supporting Individuals and Families*, pp.81–104. Boston: Plural.
- Siyambalapitiya, S. & Davidson, B. (2015). Managing aphasia in bilingual and culturally and linguistically diverse individuals in an Australian context: Challenges and future directions. *Journal of Clinical Practice in Speech Language Pathology*, 17, 13–19.
- United Nations, Department of Economic and Social Affairs, Population Division. (2017). *World population ageing 2017 Highlights*. Available at https://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2017_High lights.pdf
- Uomoto, J.M. & Loughlin, J. (2016). Neuroepidemiology and racial disparities in neurorehabilitation care. In J.M. Uomoto (Ed.), *Multicultural Rehabilitation: Clinical principles for rehabilitation professionals*, pp.3–24. New York, NY: Springer.
- World Health Organization (2001). *International Classification of Functioning, Disability, and Health*. Geneva, Switzerland: Author.
- World Health Organization (2015). WHO Global Disability Action Plan 2014-2021: Better health for all people with disability. Available at https://www.who.int/publications/i/item/whoglobal-disability-action-plan-2014-2021
- Wylie, K., McAllister, L., Davidson, B., & Marshall, J. (2013). Changing practice: Implications of the World Report on Disability for responding to communication disability in underserved populations. *International Journal of Speech-Language Pathology*, 15, 1-13.

8 Supporting the Communication of Underserved Children in Viet Nam

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Key information for local and national policy and lawmakers

The purpose of this chapter is to provide a case study of work undertaken in Viet Nam to support underserved children with communication disabilities. This chapter focuses on collaborations between Viet Nam, Australia, and other countries to support children with communication disorders and to nurture the developing speech and language therapy profession in Viet Nam. The chapter also profiles research and initiatives that have focused on understanding children's speech and language acquisition to develop culturally and linguistically appropriate assessments and resources to support intervention.

Childhood communication disorders include difficulties with speech, language, hearing, communication and/or literacy. The following terms are frequently used to describe this population in English-speaking contexts.

- Communication disability, communication disorders
- Speech, language and communication needs (SLCN)

In Viet Nam, Rối loạn giao tiếp is the term used for a communication disorder, shown in Table 8.1.

Table 8.1 Common sub-groups of Childhood Communication Disorders.

- Developmental language disorder (DLD) = Rối loạn ngôn ngữ phát triển
- Language disability = Khuyết tật ngôn ngữ
- Language delay = Chậm ngôn ngữ
- Late talker = Châm nói
- Speech sound disorder (SSD) = Rối loạn âm lời nói
- Childhood apraxia of speech (CAS) = Mất điều khiển lời nói chủ ý ở trẻ em
- Dysarthria = Rối loạn vận ngôn
- Stuttering = Lắp
- Voice disorder = Rối loạn giọng

Most children do not have a known cause for their communication disorder. Some children who have communication disorder of a known origin may also have a hearing loss/impairment (Khiếm thính), cleft lip and palate (Khe hở môi và khe hở vòm), cerebral palsy (Bại não), intellectual disability (Khuyết tật trí tuệ), or an autism spectrum disorder (ASD) (Rối loạn phổ tự kỷ). Some children who have communication disorder require the use of alternative and augmentative communication (AAC) (Giao tiếp tăng cường và thay thế).

Incidence and prevalence of communication disorders

There are 96 million people in Viet Nam (General Statistics Office, 2020) and it is estimated that 13 million people are living with communication and swallowing difficulties (Trinh Foundation, 2015a), These numbers also include 7% of children with developmental language disorders (DLD) (Pham et al., 2019). In a recent survey of 54 health professionals and special education teachers across Vietnam, almost 90% reported at least a fifth of their caseload is comprised of people with complex communication needs, such as the inability to speak or having significant speech difficulties (Margetson, Huynh, & Webb, 2020). In contrast, the literacy rate for Vietnam is very high at 95% (World Population Review, 2021).

Impact of childhood communication disorders

Throughout the world, the impact of childhood communication disorders is associated with literacy difficulties, lower academic achievement, poorer socialization, increased healthcare costs, increased representation in the criminal justice system, lower rates of employment, and a lifetime productivity loss (Cronin et al., 2020; McCormack, McLeod, McAllister, & Harrison, 2009; Wren et al., 2021). The impact of childhood communication disorders has not been specifically examined in Viet Nam. However, it is likely that there is a similar impact to the rest of the world. The potential influence on participation in the Vietnamese workforce impacts not only the individual but also their family who need to financially support people with communication and swallowing difficulties. Family income may further be affected if family members are forced to stay home to care for a person with communication and swallowing needs. The provision of speech and language therapy services can facilitate a person's ability to engage in education and/or employment, reducing their dependence on others, and empowering them to become autonomous participants in society.

Key information for professionals, social workers, community leaders, and education practitioners

In Viet Nam, children with visible communication disorders that are related to medical or severe disabilities (cleft palate, hearing loss, or cerebral palsy) have been supported by a range of professionals (e.g., doctors, physiotherapists, special educators, and teachers) and charities for many years. Interventions for these children have been provided by

a range of people in hospitals, schools, early intervention centres, and orphanages. However, few people, if any, have had specific training in speech and language therapy.

Children with less visible communication disorders and communication disorders of unknown origin (e.g., speech sound disorders, developmental language disorders, stuttering) traditionally received limited support, although some children with speech difficulties had their frenulum cut by ENT surgeons (a practice that is not supported by evidence, e.g., Salt, Claessen, Johnston, & Smart, 2020). The development of the speech and language therapy courses in Viet Nam in 2010 has resulted in Vietnamese speech and language therapists providing evidence-based services to a wide range of children with communication disorders.

The identification of childhood communication disorders

Tools have been developed that can be used by parents and other people to identify children with communication disorders and other developmental issues. A fact sheet in Vietnamese has been developed by Trinh Foundation and the University of Newcastle (2021) to provide information to parents and professionals about communication disorders. This fact sheet explains the definition of a communication disorder, examples of communication (e.g., following directions, word finding, and socialization), and examples of communication difficulties. It also explains that there is an estimate of a million people in Vietnam who present with a speech, language, voice or communication impairment.

The Intelligibility in Context Scale (ICS) (2012) presents parents with a 7-item questionnaire that has been translated and validated in Vietnamese. This scale, which is designed to be completed by parents, allows a clinical measurement approach to describe children's speech. Practitioners are requested to present parents with the version of the ICS that matches the language in which the child is most proficient. In addition, interpreters may assist parents in understanding directions. The goal of the ICS is to have parents identify the degree to which they and others understand the child's speech efforts using a Likert scale that ranges from never to always.

The Parents Evaluation of Developmental Status (PEDS) (2021) has been translated into Vietnamese. This evaluation is an evidence-based screening form that elicits parents' concerns regarding language, motor, self-help, academic attainment, behaviour, and social-emotional and mental health abilities for children from birth to 8 years of age. The scale requires minimal training and can be administered by professionals, paraprofessionals, and others. The PEDS has been used in studies of Vietnamese children (e.g., Pham & McLeod, 2019).

The Ages and Stages Questionnaire (2021) has been translated into Vietnamese and other languages to allow parents and professionals to detect risks of developmental and communication disorders early in young children.

The impact of childhood communication disorders

The ability to communicate is the very essence of what makes us social beings. The provision of speech and language therapy services to children with communication

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disorders will enable children with communication disorders to identify means of effectively communicating their needs, desires, dreams and aspirations by overcoming the barrier of their communication difficulties. This will increase their capacity to participate in society through education, employment and social activities.

Children with communication and swallowing needs often need to be cared for by the family. The burden of care falls disproportionately upon women, preventing them from participating in the workforce and gaining financial prosperity. By enhancing outcomes for children with communication and swallowing needs by facilitating their participation in education and employment, this burden of care is reduced to the benefit of carers.

Importance of the identification of a communication disorder

The Vietnamese Government recognizes the importance of children's communication. For example, in the Developmental Standards for 5-year-old children, Standard 65 is "to speak clearly" and Standard 70 is "to narrate intelligibly to others" (Viet Nam Ministry of Education and Training, 2010). This focus on speech as an outcome does not include alternative methods of communication available for people with significant speech difficulties such as using pictures, written words, or technology to communicate. Some children with a communication disorder can be mislabelled as disobedient, naughty, and disruptive because they do not follow instructions or misunderstand information whereas this can be due to their communication disorder. The positive impact of receiving intervention and support for a communication disorder will have far-reaching benefits for Vietnamese society by reducing poverty, enhancing lifelong outcomes for people with disability, enhancing social cohesion by breaking down communication barriers, reducing the burden of care upon families, and increasing the ability to participate in the workforce for prosperity of the Vietnamese communities and the economy.

What to do when a communication disorder has been identified

In Viet Nam, parents who are concerned about their children's development bring their children to see a doctor in a hospital. The doctor may advise families to attend sessions with relevant professionals, including speech and language therapists and special educators. Parents and families may be provided with activities or a home programme to complete to support their child's communication development.

Many schools, hospitals and clinics do not employ speech and language therapists given how relatively new the profession is in Viet Nam. Therefore, in settings such as hospitals some professionals hold dual roles (i.e., they work in physiotherapy positions but also apply their skills as speech and language therapists). Some graduates from the recently established speech therapy course have set up their own private practice clinics to provide speech and language therapy services, while in education settings the role that would be played by a speech and language therapist in other countries is often fulfilled by special education teachers. Some teachers have had specific training in supporting communication disorders while others have not.

The Vietnamese healthcare system typically requires that parents pay for speech and language therapy services. In mainstream schools there is an inclusive education policy for children with communication disorders. Further work is needed to increase community awareness of communication disorders, the speech and language therapy profession, evidence-based assessment and intervention, and resources that are available.

Resources for therapists are available at various sites. For example, the Trinh Foundation Australia (2015b) website includes fact sheets, pamphlets and handouts with resources for therapists. The Paediatric Special Interest Group for Speech Therapists in Vietnam created twelve patient handouts that include strategies to facilitate language development in children: (1) Sit on the floor, (2) Do it again, (3) Let him be the boss, (4) Talk simply, (5) Teach don't test, (6) My turn your turn, (7) Don't bug me with questions, (8) Copy your child, (9) Play like a child, (10) Say what happens, (11) Give her time, and (12) Make time for play. These resources are available at the Trinh Speech Therapy for Vietnam (2015c) website.

Information for professionals working with children with communication disorders

Over the past decade, there has been significant work undertaken in Viet Nam, Australia and the US to create information, knowledge, research and resources regarding childhood communication disorders to support speech and language therapy and educational professionals working with Vietnamese children.

Assessment approaches for children with communication disorders

The following assessments have been created to be used by speech and language therapists with Vietnamese children with communication disorders and for diagnosis, description, planning of intervention goals and determining intervention outcomes. Whilst most of the following assessments have undergone significant research involving conceptualization and operationalization and some have been created as standardized assessments, most have been created as criterion referenced assessments. Some examples include the following:

- Vietnamese Speech Assessment (VSA; Phạm, McLeod, & Le, 2016). The VSA is a 77-item single word speech assessment that examines all consonants, vowels, semi-vowels, tones in Vietnamese and is designed for Standard, Northern, Central and Southern dialects. It has been validated with typically developing Vietnamese-speaking children in Northern Vietnam (*n* = 182; Phạm & McLeod, 2019), Southern Vietnam (*n* = 132; Le, McLeod, & Phạm, 2021), and Australia (*n* = 61 children, 77 adults; McLeod et al., 2021).
- Vietnamese Language Assessment (VLA; Ivey, Verdon, & Pham, 2019). The VLA is the first tool designed to identify Vietnamese-speaking children who are at risk of language difficulties and may require assistance in developing and strengthening their language capabilities. The tool contains

12 pictures; for each picture the child is asked to answer questions that provide information about their comprehension, vocabulary and grammar. It has been validated for children aged between 3;0 and 7;9 with typically developing Vietnamese-speaking children in Northern Vietnam (n = 127), and Central Vietnam (n = 200).

- Intelligibility in Context Scale (ICS; McLeod, Harrison, & McCormack, 2012). The ICS a free 7-item parent questionnaire that has been validated in 14 languages (McLeod, 2020) and is available in 63 languages (available at https://www.csu.edu.au/research/multilingual-speech/ics). The ICS has been translated into Vietnamese (ICS-VN), has been validated on 182 children in Northern Viet Nam (Pham, McLeod, & Harrison, 2017) and 132 children in Southern Viet Nam (Le et al., 2021), and is correlated with the VSA.
- Focus on the Outcomes of Communication Under Six has been translated into Vietnamese (available at https://slhs.sdsu.edu/bdc/files/2019/04/FOCUS-34_Parent_Final-Vietnamese-version.pdf) and has been used in studies of Vietnamese children (e.g., Pham et al., 2019).
- Speech Participation and Activity Assessment of Children (SPAA-C; McLeod, 2004). The free SPAA-C provides interview questions for children, parents and significant others to understand children's participation (e.g., McLeod, Daniel, & Barr, 2013). The Vietnamese translation (http://www.csu.edu.au/research/multilingual-speech/spaa-c) has been used as an outcome measure within the VietSpeech SuperSpeech study.
- Multilingual Assessment for Narratives (MAIN; available at https://main. leibniz-zas.de/en/research/publications/). The Vietnamese version of the MAIN has been tested with Vietnamese children (Dam, Pham, Potapova, & Pruitt-Lord, 2020; Pham et al., 2019).
- Dr Giang Pham from San Diego State University has developed a parent survey as well as Vietnamese assessments of receptive vocabulary (picture identification), expressive vocabulary (picture naming), grammatical knowledge (sentence repetition), short-term phonological knowledge (nonword repetition), rapid naming, phonological awareness, and word and nonword reading. Permission to freely access these tools can be requested from VietSLP (available at https://vietslp.sdsu.edu/).

Research has been undertaken to identify Vietnamese consonants that are difficult for English-speaking speech-language pathologists to transcribe (Masso, McLeod, Cronin, & Pham, 2020) and a tutorial has been written by the International Expert Panel on Multilingual Children's Speech to support speech-language pathologists to assess children who do not speak the same language (McLeod et al., 2017).

Currently, there are no speech and language interventions that have been validated within research studies in Viet Nam. However, there are several interventions that have been validated within formal research studies in other countries which are available for use with Vietnamese children with careful attention to cultural and linguistic

similarities and differences. McLeod and Baker (2017) provide examples of the use of minimal pairs therapy for Vietnamese children (pp.440-443) including the importance of matching vowels and tones within minimally contrastive words. They also provide a suggested core vocabulary therapy list for Vietnamese children that is transcribed using the International Phonetic Alphabet (pp.480-481). Additional information about undertaking phonological intervention with multilingual children is provided (McLeod & Baker, 2017, pp.472-475; Williams, McLeod, & McCauley, 2021).

The use of augmentative and alternative communication and digital technology in speech and language therapy in Vietnam has been examined in depth (Margetson et al., 2020). Vietnamese speech and language therapists frequently use picture-based communication methods (such as photographs or symbols). Communication apps with different features need to be developed in Vietnamese as there is not a 'one-appfits-all' solution for every individual's needs. Communication apps currently available in Vietnamese to support people unable to speak or with significant speech difficulties include Talk Tablet, Avaz, Articuloud and VidaTalk. Humanity & Inclusion are currently providing Talk Tablet apps, tablets and training to speech and language therapists working in hospitals in Vietnam and pursuing translation of more apps (Alphatopics and Talking Mats apps). Boardmaker (2021) can be used to create culturally appropriate symbol resources in Vietnamese. Key Word Sign (based on Vietnamese Sign Language) is used but more resources and training are required. Training professionals and families in evidence-based practices and how to use resources, particularly digital technology solutions (such as communication apps), is essential to their successful use. Mentoring, networking with other speech and language therapists, the development of clinical interest groups and sharing of resources will support ongoing professional development and the growth of the speech and language therapy profession in Vietnam.

To avoid ethical dilemmas, Speech Pathology Australia has developed a three-stage Ethics Education programme for speech and language therapists in Viet Nam, Cambodia and Ghana. Stage 1 involved an online ethics seminar, stage 2 involved ethical problem-solving workshops and stage 3 involved creating an ethical problem-solving booklet (Speech Pathology Australia, 2021).

Discussion

The speech and language therapy profession (ngôn ngữ trị liệu; also known as speech-language pathology profession in other countries) supports people living with communication and swallowing difficulties by providing life-changing and lifesaving prevention, assessment, intervention, advocacy and support. The Viet Nam Government's National Plan for Rehabilitation Development (2014–2020) supports the development of the speech and language therapy profession.

Prior to 2009, Viet Nam had no speech and language therapy profession to service the estimated 13 million people with communication and swallowing disorders. International volunteers as well as local health, education, and community members supported Vietnamese children with communication disorders. Two recent surveys indicated under half of the professionals treating people with complex communication needs (unable to speak or significant speech difficulties) have received formal training

in evidence-based treatments for this population (Dinh, 2020; Margetson et al., 2020). Since 2009, Trinh Foundation Australia (TFA), an Australian not-for-profit organization with expertise in speech and language therapy, has partnered with Vietnamese universities and Australian Volunteers International (AVI) to spearhead the development of the speech and language therapy profession in Viet Nam by providing high-quality, innovative and culturally sensitive training and clinical practice (Trinh Foundation Australia, 2021). Between 2009 and 2020, TFA worked with Pham Ngoc Thach University in Ho Chi Minh City to commence a 2-year postgraduate training programme in speech and language therapy. Two speech and language therapy degree programmes began in Viet Nam in 2020:

- Bachelor in Rehabilitation Techniques with Speech and Language Therapy Specialization (BSALT) (Cử nhân Kỹ thuật Phục hồi chức năng, chuyên ngành Ngôn ngữ trị liệu) at Da Nang University of Medicine, Technology and Pharmacy (DUMTP).
- Master of Rehabilitation Techniques with specialization in Speech and Language Therapy (MSALT) degree (Thac sĩ Kỹ thuật Phục hồi chức năng, chuyên ngành Ngôn ngữ trị liệu) at the University of Medicine and Pharmacy (UMP) in Ho Chi Minh City.

These degrees have been developed via collaboration with TFA, USAID, Medical Committee Netherlands-Vietnam (MCNV) and VietHealth. The MSALT degree programme is a train-the-trainer model postgraduate degree, where all participants within the course will return to their respective universities to become the speech therapy educators of the future in Rehabilitation Departments of universities in Ho Chi Minh City, Hanoi, Hai Duong, and Hue, thereby generating a sustainable and continuously expanding speech therapy profession for Viet Nam.

The Vietnamese speech and language therapy profession is in its infancy with 65 speech and language therapists (33 generalists; 32 paediatric specialists) (Trinh Foundation Australia, 2020). TFA aims to develop a self-sufficient profession that will no longer be dependent on international volunteers. The speech and language therapy profession is female dominant with 89% of current certificate level graduates in Viet Nam being female. The provision of training for women to become speech and language therapists provides a professional path for economic security and leadership opportunities. Speech and language therapy services will positively impact the Vietnamese economy by giving people the power to communicate and thus engage in the workforce and participate more fully in society.

Resources for professionals

Resources for professionals can be found at the following sites:

 Trinh Foundation Australia: Available at https://trinhfoundation.org/ our-resources/for-therapists/ includes resources developed by speech and language therapists in Australia and Viet Nam.

- VietSLP: Available at https://vietslp.sdsu.edu/ (Giang Pham, Ph.D., San Diego State University, USA) includes assessment tools for the Vietnamese language and learning modules on how to work with Vietnamese American children.
- Multilingual Children's Speech: Available at https://www.csu.edu.au/ research/multilingual-speech/home (Sharynne McLeod, Ph.D., Charles Sturt University, Australia) includes information about speech acquisition and assessments in over 63 languages (including Vietnamese).
- VietSpeech: Available at https://www.csu.edu.au/research/vietspeech/ overview (Charles Sturt University, Australia) includes research and resources developed during a large-scale research programme to support home language maintenance for Vietnamese-English speaking children in Australia.

References

- Ages and Stages Questionnaire (2021). Available at https://agesandstages.com/resource/asq-3-16-month-questionnaire-vietnamese/
- Atherton, M., Davidson, B., & McAllister, L. (2017). Exploring the emerging profession of speech-language pathology in Vietnam through pioneering eyes. *International Journal of Speech-Language Pathology*, 19(2), 109–120. Available at https://doi.org/10.3109/17549507.2016.1159335
- Boardmaker (2021). Available at https://goboardmaker.com/
- Cronin, P., Reeve, R., McCabe, P., Viney, R., & Goodall, S. (2020). Academic achievement and productivity losses associated with speech, language and communication needs. *International Journal of Language and Communication Disorders*. Advance online publication. Available at https://doi.org/10.1111/1460-6984.12558
- Dam, Q.D., Pham, G., Potapova, I., & Pruitt-Lord, S. (2020). Grammatical characteristics of Vietnamese and English in developing bilingual children. *American Journal of Speech-Language Pathology*, 29, 1212–1225. Available at https://doi.org/10.1044/2019_AJSLP-19-00146
- Dinh, P.T. (2020). Thực trạng sử dụng phương tiện giao tiếp tăng cường và thay thế cho trẻ tự kỷ [Using alternative and augmentative communication for children with autism]. Bachelor program thesis. Faculty of Special Education, Hanoi National University of Education.
- General Statistics Office [Tổng cục Thống kê]. (2020). Kết quả toàn bộ Tổng điều tra dân số và nhà ở năm 2019 [Completed results of the 2019 Viet Nam population and housing census]. Available at https://www.gso.gov.vn/en/data-and-statistics/2020/11/completed-results-of-the-2019-viet-nam-population-and-housing-census/.
- Intelligibility in Context Scale (ICS) (2012). Available at https://www.csu.edu.au/research/multilingual-speech/ics
- Le, X.T.T., McLeod, S., & Pham, B. (2021). Consonant accuracy and intelligibility of Southern Vietnamese children. Speech, Language and Hearing. Advance online publication. Available at https://doi.org/10.1080/2050571X.2021.1888195
- M-CHAT (2021). Available at https://mchatscreen.com/mchat-rf/translations/
- Margetson, K., Huynh, T.B., & Webb, G. (2020). Digital technology and augmentative and alternative communication in speech and language therapy in Vietnam: Needs assessment, current practices and recommendations. Technical report. USAID, Humanity & Inclusion, Trinh Foundation Australia.

- Masso, S., McLeod, S., Cronin, A., & Pham, B. (2020). Transcription of Vietnamese adults' and children's consonants by English-speaking speech-language pathologists. *Folia Phoniatrica et Logopaedica*, 72(2), 92–107. Available at https://doi.org/10.1159/000500245
- McCormack, J., McLeod, S., McAllister, L., & Harrison, L.J. (2009). A systematic review of the association between childhood speech impairment and participation across the lifespan. *International Journal of Speech-Language Pathology*, 11(2), 155–170. Available at https://doi.org/10.1080/17549500802676859
- McLeod, S. (2004). Speech pathologists' application of the ICF to children with speech impairment. *International Journal of Speech-Language Pathology*, 6(1), 75–81. Available at https://doi.org/1 0.1080/14417040410001669516
- McLeod, S. (2020). Intelligibility in Context Scale: Cross-linguistic use, validity, and reliability. *Speech, Language and Hearing*, 23(1), 9-16. Available at https://doi.org/10.1080/2050571X.2020.1718837
- McLeod, S., Daniel, G., & Barr, J. (2013). "When he's around his brothers ... he's not so quiet": The private and public worlds of school-aged children with speech sound disorder. *Journal of Communication Disorders*, 46(1), 70-83. Available at https://doi.org/10.1016/j.jcomdis.2012.08.006
- McLeod, S., Verdon, S., & International Expert Panel on Multilingual Children's Speech (2017). Tutorial: Speech assessment for multilingual children who do not speak the same language(s) as the speech-language pathologist. *American Journal of Speech-Language Pathology*, 26(3), 691–708. Available at https://doi.org/10.1044/2017_AJSLP-15-0161
- Parents Evaluation of Developmental Status (PEDS) (2021). Available at https://pedstest.com/ AboutOurTools/LearnAboutPEDS/IntroductionToPEDS.html
- Phạm, B. & McLeod, S. (2016). Consonants, vowels and tones across Vietnamese dialects. *International Journal of Speech-Language Pathology*, 18(2), 122–134. Available at https://doi.org/10.3109/17 549507.2015.1101162
- Phạm, B. & McLeod, S. (2019). Vietnamese-speaking children's acquisition of consonants, semivowels, vowels, and tones in Northern Viet Nam. *Journal of Speech, Language, and Hearing Research*, 62(8), 2645–2670. Available at https://doi.org/10.1044/2019_JSLHR-S-17-0405
- Phạm, B., McLeod, S., & Harrison, L.J. (2017). Validation and norming of the Intelligibility in Context Scale in Northern Viet Nam. *Clinical Linguistics and Phonetics*, *31*(7-9), 665-681. Available at https://doi.org/10.1080/02699206.2017.1306110
- Phạm, B., McLeod, S., & Le, X.T.T. (2016). Development of the Vietnamese Speech Assessment. Journal of Clinical Practice in Speech-Language Pathology, 18(3), 126-130.
- Pham, G. & Ebert, K. (2020). Diagnostic accuracy of sentence repetition and nonword repetition for Developmental Language Disorder in Vietnamese. *Journal of Speech, Language, and Hearing Research*, 63, 1521–1536. Available at https://doi.org/10.1044/2020_JSLHR-19-00366
- Pham, G.T., Pruitt-Lord, S., Snow, C.E., Nguyen, Y.H.T., Pham, B., Dao, T.B.T., Tran, N.B.T., Pham, L.T., Hoang, H.T., & Dam, Q.D. (2019). Identifying developmental language disorder in Vietnamese children. *Journal of Speech, Language, and Hearing Research*, 62(5), 1452–1467. Available at https://doi.org/10.1044/2019_JSLHR-L-18-0305
- Salt, H., Claessen, M., Johnston, T., & Smart, S. (2020). Speech production in young children with tongue-tie. *International Journal of Pediatric Otorhinolaryngology*, *134*, 110035. Available at https://doi.org/10.1016/j.ijporl.2020.110035
- Speech Pathology Australia (2021). Ethics. Available at https://www.speechpathologyaustralia.org. au/SPAweb/Members/Ethics/spaweb/Members/Ethics/Ethics.aspx
- Tang, G. (2007). Cross-linguistic analysis of Vietnamese and English with implications for Vietnamese language acquisition and maintenance in the United States. *Journal of Southeast Asian-American Education and Advancement*, 2, 1–33.

- Tang, G. & Barlow, J. (2006). Characteristics of the sound systems of monolingual Vietnamese-speaking children with phonological impairment. *Clinical Linguistics and Phonetics*, 20(6), 423-445. Available at https://doi.org/10.1080/02699200500100910
- Trinh Foundation Australia (2015a). What we do. Available at https://trinhfoundation.org/about-us/what-we-do/
- Trinh Foundation Australia (2015b). Available at https://trinhfoundation.org/our-resources/for-therapists/
- Trinh Foundation Australia (2015c). Speech language therapy for Vietnam. Available at http://trinhfoundation.org/contact-us/
- Trinh Foundation Australia (2020). Annual report 2020. Available at https://trinhfoundation.org/wp-content/uploads/2020/12/TFA-Annual-Report-2020.pdf
- Trinh Foundation Australia (2021). History and achievements. Available at https://trinhfoundation.org/about-us/history-achievements/
- Trinh Foundation and University of Newcastle (2021). Available at https://trinhfoundation.org/wp-content/uploads/2015/01/Communication-Impairment-Vietnamese-Version.pdf
- Viet Nam Ministry of Education and Training. (2010). Thông tư ban hành quy định về Bộ chuẩn phát triển trẻ em năm tuổi [Circular decision promulgating the regulations on the developmental standards for children aged five]. Available at http://vbpl.vn/bogiaoducdaotao/Pages/vbpqtoanvan.aspx?ItemID=25561&Keyword=23/2010/TT-BGDDT
- World Population Review. (2021). Literacy rate by country 2021. Available at https://worldpopulationreview.com/country-rankings/literacy-rate-by-country
- Wren, Y., Pagnamenta, E., Peters, T.J., Emond, A., Northstone, K., Miller, L.L., & Roulstone, S. (2021). Educational outcomes associated with persistent speech disorder. *International Journal of Language and Communication Disorders*, 56(2), 299–312. Available at https://doi.org/10.1111/1460-6984.12599