

**Speech Pathology Australia's Submission to  
the Legislative Council of Western Australia's  
Inquiry into child development services**

**24 October 2022**



Hon Dr Sally Talbot MLC  
Chair Legislative Council Committee  
18-32 Parliament Place  
West Perth WA 6005

Submitted electronically:  
[www.parliament.wa.gov.au/subportal](http://www.parliament.wa.gov.au/subportal)

Dear Dr Talbot,

Speech Pathology Australia welcomes the opportunity to provide comment to the Legislative Council's inquiry into child development services. Speech Pathology Australia is the national peak body for speech pathologists in Australia, representing over 13,000 members. Speech pathologists are university-trained allied health professionals with expertise in the diagnosis, assessment, and treatment of speech, language and communication difficulties, and swallowing disorders.

Oral and written communication skills underpin the majority of our interactions with other people and the world around us. The impact of communication and swallowing difficulties can be considerable.<sup>i</sup> Speech, language and communication needs (SLCN) are often considered to be a 'hidden' disability, and when not recognised and treated, can negatively affect an individual's educational and academic achievement, employment opportunities, mental health, social participation, ability to develop relationships, and overall quality of life. Speech Pathology Australia advocates for children and young people to ensure access to speech pathology services. This is to ensure speech, language and communication needs can be appropriately identified and addressed.

We have structured our feedback in response to the terms of reference of the consultation, and preface our remarks and recommendations with background information on SLCN and the role of speech pathologists.

We hope the Inquiry finds our feedback and recommendations useful. If we can be of any further assistance or if you require additional information please contact Ms Jane Delaney Senior Advisor Education and Early Childhood on 03 9642 4899, or by email [jdelaney@speechpathologyaustralia.org.au](mailto:jdelaney@speechpathologyaustralia.org.au).

Thank you for the opportunity to contribute to this important piece of work.

Yours faithfully,



**Tim Kittel**  
**National President**

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# Speech Pathology Australia's Submission to the Inquiry into child development services in WA

Speech Pathology Australia welcomes the opportunity to provide comment to the Legislative Council's inquiry into child development services. We have structured our feedback in response to the terms of reference of the inquiry. We preface our remarks and recommendations with background information on speech, language and communication needs and swallowing disorders and the role of speech pathologists.

## About Speech Pathology Australia

Speech Pathology Australia is the national peak body for speech pathologists in Australia, representing over 13,000 members. Speech pathology is a self-regulated health profession through Certified Practising Speech Pathologist (CPSP) membership of Speech Pathology Australia.

The CPSP credential is recognised as a requirement for approved provider status under a range of funding programs including Medicare, some Commonwealth aged care funding such as the Commonwealth Home Support Programme (CHSP), Department of Veteran Affairs (DVA) funding, the National Disability Insurance Scheme (NDIS) and all private health insurance providers.

As the national body regulating the quality and safety of speech pathology practice in Australia, Speech Pathology Australia manages the formal complaints process for the profession and can, if necessary, place sanctions on practice for any member who is demonstrated to contravene the Association's Code of Ethics.

## About speech, language and communication needs (SLCN)

Individuals with speech, language and communication needs (SLCN) have difficulties communicating effectively with other people without support or interventions. The terms 'speech', 'language' and 'communication' are often used interchangeably, but they refer to different skills, all of which are required to have successful interactions with other people in various domains of everyday life:

- Speech requires the ability to pronounce sounds in words accurately and clearly, in a way that can be understood by other people. It also includes speaking fluently, without stumbling or stuttering, and speaking at an appropriate rate, pitch, volume and intonation to add meaning and expression to the words.
- Language refers to both receptive language or comprehension (i.e. understanding what people say) and expressive language (i.e. combining appropriate words into sentences to exchange information and express thoughts, feelings, and ideas and to build conversations). Verbal language may be oral (spoken) or written (reading and writing).
- Communication refers to how we talk with other people, for example modifying how we talk depending on the situation and navigating often complex and unpredictable social interactions. It includes unwritten rules of social communication, such as taking turns or staying on topic in conversations, as well as nonverbal communication, for example the understanding and use of eye contact, gestures and facial expressions. Successful communication also requires the ability to consider another person's perspective and intentions, and to understand the wider social and environmental context.

The Australian Bureau of Statistics' 2015 Survey of Disability, Ageing and Carers (SDAC), estimated that 1.2 million Australians have some level of communication disability, ranging from those who function

without difficulty in communicating every day but who use a communication aid, to those who cannot understand or be understood at all<sup>ii</sup>.

Speech, language and communication needs can affect people of any age and can arise from a range of conditions. Difficulties in childhood may be present from birth (e.g. in the case of fetal alcohol spectrum disorder, intellectual disability, or Autism), or become apparent during childhood or early adolescence (e.g. severe speech sound disorder, developmental language disorder, or early onset mental illness). There are also a number of factors that increase the risk someone may experience SLCN, such as adverse childhood experiences or social disadvantage, and of course these factors are also associated with a greater risk of educational disengagement, social/emotional/behavioural difficulties, and future contact with justice services. People with speech, language and communication needs, which may or may not be associated with other physical or cognitive disabilities, frequently require interventions and supports from multiple areas of public service, including health, disability and education sectors and mental health services.

Individuals with SLCN who do not receive appropriate intervention services, delivered in a timely manner at an adequate dose, are more likely to experience life-long problems<sup>iii</sup>, such as challenges associated with:

- increased risk of psychological and social wellbeing difficulties<sup>iv</sup>
- increased likelihood of experiencing anxiety and depression<sup>v</sup>
- limited attention/concentration/self-regulation skills<sup>vi</sup>
- increased risk of developing social/emotional/behavioural difficulties and conduct disorders<sup>vii</sup>
- increased risk of justice involvement in adolescence/early adulthood<sup>viii</sup>
- poorer emotional engagement in close relationships<sup>ix</sup>.

## **The role of speech pathologists in prevention & early intervention**

There is very strong evidence to indicate that early identification of speech, language and communication needs and access to appropriate interventions during the pre-school years can have a profound effect on a child's health, development, educational and wellbeing outcomes in the longer term<sup>x</sup>. Early intervention provided by a speech pathologist is critical for identifying, assessing and addressing problems in speech and language for young children and ideally occurs prior to school entry.

Speech pathologists play a vital role in the identification and management of SLCN at a population health promotion/prevention level, through early intervention for those identified as having/being at increased risk of speech, language and communication needs (e.g. those with a history of adverse childhood experiences, including those in out-of-home care, and/or those with other neurodevelopmental disabilities), within schools (especially when behaviours of concern or mental health issues have been identified), and at an individual level.

### ***The impact of unidentified and/or unmet speech, language, and communication needs***

Oral and written communication skills underpin the majority of our interactions with other people and the world around us. Speech, language and communication needs are often considered to be a 'hidden' disability, and when not recognised and treated, can negatively affect an individual's educational engagement and academic achievement, employment opportunities, mental health, social participation, ability to develop relationships, and overall quality of life. It is known, for example, that unmet speech, language and communication needs can contribute to specific psychological and behavioural consequences e.g. irritability and aggression (in part due to frustration and/or a limited repertoire of appropriate behavioural responses), limited attention, concentration and/or self-regulation, reduced

responsiveness/lack of spontaneity, increased risk of anxiety or depression and self-harm, reduced self-esteem and reduced quality of life.<sup>xi</sup>

Young children entering school with oral communication difficulties are more likely than their typically-developing peers to struggle to acquire literacy skills, which in turn negatively impacts the development of more complex oral language and academic skills.<sup>xii</sup> This has the potential to start a cycle which can increase the likelihood of behavioural difficulties, disengagement from school, and engagement in anti-social behaviour, a well-documented trajectory termed the school-to-prison pipeline.<sup>xiii</sup> In addition to contributing to poorer educational outcomes, speech, language and communication needs are also associated with reduced employment opportunities and restricted choice of career prospects, increased social stress and peer relationship problems, social miscommunications and misinterpretations, and difficulties establishing positive peer, professional, and romantic relationships (due to the underlying need for complex communication skills such as conflict resolution, problem-solving, and empathy) resulting in social isolation and subsequent risk of participation in antisocial peer groups.<sup>xiv</sup>

### ***Complex and challenging behaviour***

People with SLCN are more likely to exhibit challenging behaviours as well as emotional and social difficulties.<sup>xv</sup> People who have difficulty with comprehension of verbal instructions or the communication of their concerns to others in a socially acceptable manner, are more likely to exhibit challenging behaviour leading to offending behaviour.<sup>xvi</sup> Both males and females with poor receptive language are more likely to be physically aggressive, and females with poor expressive language are more likely to show higher levels of relational aggression, i.e. causing harm to others by damaging their relationships or social status.<sup>xvii</sup> Children with language disorders are twice as likely to demonstrate externalising problem behaviours.<sup>xviii</sup>

## **(a) the role of child development services on a child's overall development, health and wellbeing**

Speech pathologists are a vital member of the allied health team and have a specialist role in the assessment and treatment of children with feeding, swallowing and communication disorders. There is currently poor community understanding of the role of speech pathologists, with the Child Development Service being in a strong position to support public awareness and education on the role and impacts of speech pathology intervention.

The Child Development Service has a role in supporting the speech pathology profession to operate as part of an integrated allied health team for the benefit of the WA public. Whilst the child development service plays an important role in supporting the health of WA children, currently there is no universal healthcare management in place within WA related to feeding and communication development for children.

Feeding difficulties are often the first indicator of developmental difficulties. Feeding difficulties affect up to 80% of children with severe developmental difficulties, 50% of children with medical conditions, and 25 to 45% of typically developing children<sup>xix</sup>. Children with acute or chronic paediatric feeding disorders are at risk of feeding, nutritional, psychosocial, and medical compromise, correlated with more caregiver-related stress<sup>xx</sup>.

Universal access to early assessment and intervention is critical. If feeding, swallowing and communication disorders are not addressed, there are known long-term impacts on cognitive, developmental, social, emotional and academic performance<sup>xxi</sup>. Individuals with unmet speech, language and communication needs (SLCN) are more likely to experience life-long problems including increased risk of social, emotional or behavioural difficulties, mental health problems, relationship difficulties, poorer

educational and vocational outcomes, and contact with the justice system as both victims and offenders.<sup>xxii</sup>

### **(b) the delivery of child development services in both metropolitan and regional Western Australia, including paediatric and allied health services**

At present in WA, the Child Development Service is seen as responsible for government health services for children. However, services are restricted for children who are considered school-age, and severely restricted for children above the age of eight. There are large waiting lists to see a speech pathologist through this service. In August 2022 it was identified that more than five thousand children were waiting to receive services from a speech pathologist through the Child Development Service, with children experiencing an average wait time of eight and a half months<sup>xxiii</sup>.

Young children identified as being 'at risk' at 18 months of age are also reported to have a significant waiting time to see a paediatrician through child development services. The majority if not all of the private paediatricians in Perth and WA are reported to have closed their books, and are not permitting patients to be placed on a waiting list for appointments.

Child development services in Greater Perth are predominantly clinic-based and delivered one-on-one. Whilst some services in Greater Perth are delivered via parent training, caregivers report that this parent training is not individualised to their needs. There are parent reports of some offices of the Child Development Service delivering initial appointments via telephone. These occasions of service can be quite limited in their scope and some families report only discovering later that this telephone appointment counted as a session of their block of therapy. It is reported that regions within the Child Development Service have had great success with education/school-based services being delivered within public schools, however, this mode of delivery is not widespread.

#### ***Fee for service & private services***

At present services in the disability sector in WA provide access to allied health supports under a fee for service model, frequently under the National Disability Insurance Scheme (NDIS). It should be noted that there are significant difficulties experienced by those with communication specific disabilities (such as developmental language disorder, stuttering, or childhood apraxia of speech) in being able to access the NDIS, and/or receive consistent funding. This has a direct impact upon their access to speech pathology services.

Some families utilise Chronic Disease Management (CDM) plans to subsidise access to private/not-for-profit service while on the waitlist for public child development services, however, these subsidies are underutilised in WA, and there is a poor understanding of how these programs (MBS AN.0.47) can be used to best support families to access services, as well as the existence of the Follow-up Allied Health Services for people of Aboriginal or Torres Strait Islander descent (MN.11.1).

#### ***Other public services & limitations***

Perth Children's Hospital (PCH) & other secondary or regional hospitals provide inpatient care but their services are limited to children considered high priority, or they are provided with particular services only. It must be noted that outpatient services are limited to patients under a consultant or second opinion only, they do not allow for ongoing allied health service.

Language development centres (LDC) provide dedicated speech pathology services to a small number of children (~1,200) in WA. Due to the cap on numbers, children must meet the strict eligibility criteria and the demand for places in the LDCs is significantly higher than the number of places available. Given the extensive wait times to access Child Development Services, it may be worthwhile to consider extending

these services to allow for greater supports to be provided and lessen the impacts of these long wait times on young children.

The Department of Education has restrictions in supporting the management of children's communication needs and building the capacity of educators to address childhood health and wellbeing are seen as within the purview of the Child Development Service *only*. Subsequently, non-Independent Public Schools (IPS) within the Department of Education are unable to support their communities through the employment of speech pathologists and other allied health professionals. Additionally, the link currently provided for families to access Resources for Parents (Fact sheets) is broken<sup>1</sup>.

Currently there are no free local or community support services for paediatric feeding and swallowing by speech pathologists and lactation consultants in WA. Families of infants with feeding and swallowing challenges therefore report feeling lost in the system. Families report that they seek out support online through social media (Facebook and YouTube) resulting in inconsistent and potentially incorrect information.

### **(c) the role of specialist medical colleges, universities and other training bodies in establishing sufficient workforce pathways**

At present the only pathways to working as a certified practising speech pathologist are through an accredited course at an Australian University, or through the completion of an accepted equivalent degree and completion of the requirements of the Overseas Qualification Competency Assessment or Mutual Recognition Agreement through Speech Pathology Australia<sup>xxiv</sup>. There are widespread reports of workforce shortages for speech pathologists, and according to the Association's data, there are currently an estimated 52 speech pathologists per 100,000 people in WA.

Universities have a role to play in supporting sufficient numbers of students to enrol in speech pathology courses within WA, however the incentive for the Curtin and Edith Cowan Universities to support sufficient enrolment in these courses is limited by the existing cap on Commonwealth-Supported Placements in these courses.

Concurrently universities are also facing challenges in building a speech pathology workforce of a size that addresses current demand as there are barriers in place that limit the number of placements (particularly hospital and acquired injury setting placements) for students. This can create a bottle-neck around placements which impacts on WA's capacity to supply experienced local speech pathology graduates across a range of sectors.

### **(d) opportunities to increase engagement in the primary care sector including improved collaboration across both government and non-government child development services including Aboriginal Community Controlled Organisations**

With regard to the Perth Children's Hospital and other external agencies, there is an opportunity for collaboration that would also assist in supporting workforce pathways. A funded system to relieve speech pathologists from clinical duties to offer clinical placements, build capacity and train local and regional speech pathologists would be of significant benefit to the current and future workforce.

In addition, shifting the limitation of responsibilities between Department of Health and other departments such as Department of Education would allow the employment of allied health clinicians in broader

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<sup>1</sup> <https://www.education.wa.edu.au/resources-for-parents>



contexts beyond the Department of Health. This would allow a more robust and continuous system of service through early childhood and beyond.

It is important to note that there are currently separate sources of funding services for children within the juvenile justice population and the broader WA population. Given that people who have had experiences with the justice system are more likely to have communication needs, the provision of proactive speech, language and literacy support for children within a juvenile justice setting, with clear funding pathways would likely result in a better-connected system of healthcare support.

### **(e) other government child development service models and programs operating outside of Western Australia and the applicability of those programs to the State.**

A school-based speech pathology model is used in several other Australian states including South Australia, Victoria, Queensland and Tasmania. In these states, health and education services, including speech pathology, are provided at a universal level through the education system. In WA, the strict responsibility of health and wellbeing belonging to the Department of Health is limiting to the implementation of this and similar models. Within a school-based model (or a model with a universal access tier) referrals and services would still be the responsibility of the Child Development Service, however, universal services would be delivered by other departments (either with or without the direct involvement of the Department of Health).

There is a need for clear referral pathways to speech pathologists by GPs and paediatricians for children with feeding, swallowing and communication delays or disorders. Referral pathways for Paediatric Feeding Disorders and Speech Language and Communication Needs (SLCN) could be included within the HealthPathways process. Integration of this information into the WA Primary Health Alliance's HealthPathways would support timely and accurate referral to government services for WA families. Additionally, it would be beneficial to incorporate speech pathologists within child development clinics to build the capacity of child health nurses to identify children at risk for SLCN or feeding disorders and link them with an appropriate speech pathology service.

## Recommendations

Speech Pathology Australia urges the inquiry to consider the following recommendations:

- That existing public services be extended, to enable children and young people in WA to have access to publicly funded speech pathology services for assessment and supports for speech, language, communication and swallowing difficulties.
- Clear referral pathways to speech pathologists by GPs and paediatricians to be established for children with feeding, swallowing and communication delays or disorders.
- The current limitation of responsibility for the provision of services to young children to be partially shifted from the Department of Health and extended to the Department of Education, with the provision of speech pathology services in schools and education settings in WA.
- That the extremely high rates of speech, language and communication needs in populations at risk of, or already in, contact with the justice system, are recognised and addressed through the inclusion of speech pathology services.
- The inclusion of referral pathways for 1) Paediatric Feeding Disorders and 2) Speech Language and Communication Needs within the WA Primary Health Alliance's HealthPathways.
- Speech pathologists to be incorporated within child development clinics to build the capacity of child health nurses.
- The development of the future speech pathology workforce be supported by a funded system of placements, and provision of time release for existing clinicians, particularly within health settings.

If Speech Pathology Australia can assist the Legislative Council's inquiry in any other way or provide additional information please contact Ms Jane Delaney Senior Advisor Education and Early Childhood on 03 9642 4899, or by email [jdelaney@speechpathologyaustralia.org.au](mailto:jdelaney@speechpathologyaustralia.org.au).

## References

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<sup>i</sup> See:

Clegg, J., Hollis, C., Mawhood, L., & Rutter, M. (2005). Developmental language disorders-a follow-up in later adult life: cognitive, language and psychosocial outcomes. *Journal of Child Psychiatry*, 46(2), 128-149. doi: 10.1111/j.1469-7610.2004.00342.x

Conti-Ramsden, G., Mok, P.L.H., Pickles, A., & Durkin, K. (2013). Adolescents with a history of specific language impairment (SLI): Strengths and difficulties in social, emotional and behavioral functioning. *Research into Developmental Disability*, 34(11), 4161–4169. doi: 10.1016/j.ridd.2013.08.043

Eadie, P., Conway, L., Hallenstein, B., Mensah, F., McKean, C., & Reilly, S. (2018). Quality of life in children with developmental language disorder. *International Journal of Language and Communication Disorders*. Early online version. doi: 10.1111/1460-6984.12385

Snowling, M., & Hulme, C. (2012). Annual Research Review: The nature and classification of reading disorders-a commentary on proposals for DSM-5. *Journal of Child Psychology and Psychiatry*, 53, 593–607. doi: 10.1111/j.1469-7610.2011.02495.x

<sup>ii</sup> Australian Bureau of Statistics (2017) Australians living with communication disability,

<http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4430.0Mainpercent20Features872015?opendocument&tabname=Summary&prodno=4430.0&issue=2015&num=&view>

<sup>iii</sup> Clegg, J., Hollis, C., Mawhood, L., & Rutter, M. (2005). Developmental language disorders-a follow-up in later adult life: cognitive, language and psychosocial outcomes. *Journal of Child Psychiatry*, 46(2), 128-149. doi: 10.1111/j.1469-7610.2004.00342.x

<sup>iv</sup> Lyons, R., & Roulstone, S. (2018). Well-being and resilience in children with speech and language disorders. *Journal of Speech, Language and Hearing Research*, 61, 324-344. doi: 10.1044/2017\_JSLHR-L-16-0391

<sup>v</sup> See:

Conti-Ramsden, G., & Botting, N. (2008). Emotional health in adolescents with and without a history of specific language impairment (SLI). *Journal of Child Psychology and Psychiatry*, 49(5), 516-525. doi: 10.1111/j.1469-7610.2007.01858.x.

Botting, N., Toseeb, U., Pickles, A., Durkin, K., & Conti-Ramsden, G. (2016). Depression and anxiety change from adolescence to adulthood in individuals with and without language impairment. *PLoS ONE*, 11(7), 1-13. doi: 10.1371/journal.pone.0156678

<sup>vi</sup> Cohen, N., Vallance, D., Barwick, M., Im, N., Menna, R., Hordezyk, N., & Isaacson, L. (2000). The interface between ADHD and language impairment: An examination of language, achievement, and cognitive processing. *Journal of Child Psychology and Psychiatry*, 41, 353-362. doi: 10.1111/1469-7610.00619

<sup>vii</sup> See:

Ripley, K., & Yuill, N. (2005). Patterns of language impairment and behaviour in boys excluded from school. *British Journal of Education*, 75(1), 37-50. doi: 10.1348/000709905X27696

Özcebe, E., Erbas, A. N., & Tiğrak, T. K. (2019). Analysis of behavioural characteristics of children with developmental language disorders. *International Journal of Speech-Language Pathology, Early Online*, 1-7, doi: 10.1080/17549507.2019.1571631

<sup>viii</sup> Snow, P., & Powell, M. (2012). Youth (in)justice: Oral language competence in early life and risk for

engagement in antisocial behaviour in adolescence. *Trends and Issues in Crime and Criminal Justice*, 435, 1-6. Retrieved from: <https://aic.gov.au/publications/tandi/tandi435>

<sup>ix</sup> Wadman, R., Durkin, K., & Conti-Ramsden, G. (2011). Close relationships in adolescents with and without a history of specific language impairment. *Language, Speech, and Hearing Services in Schools*, 42(1), 41-51. doi: 10.1044/0161-1461(2010/10-0003)

<sup>x</sup> Conti-Ramsden, Nicola Botting Zoësimkin, Emma Knox, G. (2001). Follow-up of children attending infant language units: Outcomes at 11 years of age. *International Journal of Language & Communication Disorders*, 36(2), 207-219.

---

<sup>xi</sup> See:

Law, J., Rush, R., Schoon, I., & Parsons, S. (2009). Modeling developmental language difficulties from school entry into adulthood: Literacy, mental health and employment outcomes. *Journal of Speech, Language and Hearing Research*, *52*, 1401-1416. doi: 10.1044/1092-4388(2009/08-0142)

Clarke, A. (2006). Charting a life: Analysis of 50 adolescents in a long-stay mental health unit. In *Proceedings of 17th World congress of the International Association for Child and Adolescent Psychiatry and Allied Professionals Conference*. Melbourne: Australia

Jerome, A. C., Fujiki, M., Brinton, B., & James, S. L. (2002). Self-esteem in children with specific language impairment. *Journal of Speech Language and Hearing Research*, *45*, 700-714. doi: 10.1044/1092-4388(2002/056)

Eadie, P., Conway, L., Hallenstein, B., Mensah, F., McKean, C., & Reilly, S. (2018). Quality of life in children with developmental language disorder. *International Journal of Language and Communication Disorders*. Early online. doi: 10.1111/1460-6984.12385

<sup>xii</sup> Snow, P. (2014). Oral language competence and the transition to school: Socio-economic and behavioural factors that influence academic and social success. *International Journal on School Disaffection*, *11*(1) 3-24. doi: 10.18546/IJSD.11.1.01

<sup>xiii</sup> Christle, C.A., Jolivet, K., & Nelson, C.M. (2005). Breaking the School to Prison Pipeline: Identifying School Risk and Protective Factors for Youth Delinquency, *Exceptionality: A Special Education Journal*, *13*(2), 69-88. doi: 10.1207/s15327035ex1302\_2

<sup>xiv</sup> See:

Conti-Ramsden, G., Mok, P.L.H., Pickles, A., & Durkin, K. (2013). Adolescents with a history of specific language impairment (SLI): Strengths and difficulties in social, emotional and behavioral functioning. *Research into Developmental Disability*, *34*(11), 4161–4169. doi: 10.1016/j.ridd.2013.08.043

Wadman, R., Durkin, K., & Conti-Ramsden, G. (2008). Self-esteem, shyness, and sociability in adolescents with Specific Language Impairment (SLI). *Journal of Speech, Language and Hearing Research*, *51*, 938-952. doi: 10.1044/1092-4388(2008/069)

Cohen, N. J., Farnia, F., & Im-Bolter, N. (2013). Higher order language competence and adolescent mental health. *Journal of Child Psychology and Psychiatry*, *54*(7), 733-744. doi: 10.1111/jcpp.12060

<sup>xv</sup> See:

Lindsay, G., Dockrell, J. E., & Strand, S. (2007). Longitudinal patterns of behaviour problems in children with specific speech and language difficulties: child and contextual factors. *British Journal of Educational Psychology*, *77*(4), 811-828. doi: 10.1348/000709906X171127

Winstanley, M., Webb, R. T., & Conti-Ramsden, G. (2018). More or less likely to offend? Young adults with a history of identified developmental language disorders. *International Journal of Language and Communication Disorders*, *53*(2), 256-270. doi: 10.1111/1460-6984.12339

<sup>xvi</sup> See:

Hopkins, T.K., Clegg, J., & Stackhouse, J. (2016). Young offenders' perspectives on their literacy and communication skills. *International Journal of Language and Communication Disorders*, *51*(1), 95- 109. doi: 10.1111/1460-6984.12188

Snow, P.C., & Powell, M. B. (2008). Oral language competence, social skills and high-risk boys: what are juvenile offenders trying to tell us? *Children and Society*, *22*(1), 16-28. doi: 10.1111/j.1099-0860.2006.00076.x

Sanger, D., Moore-Brown, B.J., Montgomery, J., Rezac, C., & Keller, H. (2003). Female incarcerated adolescents with language problems talk about their own communication behaviors and learning. *Journal of Communication Disorders*, *36*(6), 465-486. doi: 10.1016/S0021-9924(03)00034-0

<sup>xvii</sup> Estrem, T. L. (2005). Relational and physical aggression among pre-schoolers: The effect of language skills and gender. *Early Education and Development*, *16*, 207-231. doi:10.1207/s15566935eed1602\_6

---

<sup>xviii</sup> Yew, S. G. K., & O’Kearney, R. (2013). Emotional and behavioural outcomes later in childhood and adolescence for children with specific language impairments: meta-analyses of controlled prospective studies. *Journal of Child Psychology and Psychiatry*, 54(5), 516-524. doi:10.1007/s10802-016-0241-x

<sup>xix</sup> See:

Arvedson, J. C. (2008). Assessment of pediatric dysphagia and feeding disorders: clinical and instrumental approaches. *Developmental disabilities research reviews*, 14(2), 118-127.

Nadon, G., Feldman, D., & Gisell, E. (2013). Feeding issues associated with the autism spectrum disorders. *Recent Advances in Autism Spectrum Disorders-Volume I*. IntechOpen.

<sup>xx</sup> Goday, P. S., Huh, S. Y., Silverman, A., Lukens, C. T., Dodrill, P., Cohen, S. S., ... & Phalen, J. A. (2019). Pediatric feeding disorder: consensus definition and conceptual framework. *Journal of pediatric gastroenterology and nutrition*, 68(1), 124.

<sup>xxi</sup> See:

Conti-Ramsden, Nicola Botting Zoësimkin, Emma Knox, G. (2001). Follow-up of children attending infant language units: Outcomes at 11 years of age. *International Journal of Language & Communication Disorders*, 36(2), 207-219.

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 & Communication Disorders*, 56(2), 299-312.

<sup>xxii</sup> See :

Beitchman, J., Wilson, B., Johnson, C., Young, A., Atkinson, L., Escobar, M., & Taback, N. (2001). Fourteen year follow-up of speech/language-impaired and control children: Psychiatric outcome. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(1), 75-82. doi:https://doi.org/10.1097/00004583-200101000-00019

Cronin, P., & Addo, R. (2021). Interactions with youth justice and associated costs for young people with speech, language and communication needs. *International Journal of Language & Communication Disorders*, 56(4), 797-811.

<sup>xxiii</sup> [C41+S1+20220811+p3440b-3440b.pdf \(parliament.wa.gov.au\)](#)

<sup>xxiv</sup> [Skills Assessment \(speechpathologyaustralia.org.au\)](#)