# Answer to question on notice – Health Services Union

## Response to:

Mrs Helen Dalton: Often these children who do not have speech pathology or whose diagnosis is not done go into the school system. Then, eventually, they opt out because they can't cope. Are there any longitudinal studies or is there any sort of connection with those figures to understand how important it is?

## Longitudinal studies for outcomes of communication difficulties

There are many longitudinal and research studies that demonstrate the long-term impacts of communication difficulties, in particular Developmental Language Disorder (DLD), on education and academic achievement, employment outcomes, and mental health. The benefits, impact and necessity of early speech pathology intervention to mitigate and reduce these long-term difficulties is clear. Please see below for a selection of studies to refer to.

 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(6), 1401–1416. https://doi.org/10.1044/1092-4388(2009/08-0142)

Early language difficulties are clearly linked with poor reading mental health, and employment (Law et al. 2009).

- St Clair, M. C., Pickles, A., Durkin, K., & Conti-Ramsden, G. (2011). A longitudinal study of behavioral, emotional and social difficulties in individuals with a history of specific language impairment (SLI). *Journal of Communication Disorders*, 44(2), 186–199. <u>https://doi.org/10.1016/j.jcomdis.2010.09.004</u>
- Johnson, C. J., Beitchman, J. H., & Brownlie, E. B. (2010). Twenty-Year Follow-Up of Children with and without Speech-Language Impairments: Family, Educational, Occupational, and Quality of Life Outcomes. American Journal of Speech-Language Pathology, 19(1), 51–65. https://doi.org/10.1044/1058-0360(2009/08-0083)

#### **Education and employment outcomes**

4. Conti-Ramsden, G., Durkin, K., Toseeb, U., Botting, N., & Pickles, A. (2018). Education and employment outcomes of young adults with a history of developmental language disorder. *International Journal of Language & Communication Disorders*, *53*(2), 237–255. https://doi.org/10.1111/1460-6984.12338

"Conclusions & Implications: At the group level, young people with a history of DLD more commonly have less skilled employment and more rarely achieve professional roles. At the individual level there is considerable variation with smaller but not trivial proportions of young adults with a history of DLD showing good educational and employment outcomes. There are positive aspects to early adult outcomes for some young people with a history of DLD" (Conti-Ramsden et al. (2018).

 Ziegenfusz, S., Paynter, J., Flückiger, B., & Westerveld, M. F. (2022). A systematic review of the academic achievement of primary and secondary school-aged students with developmental language disorder. *Autism & Developmental Language Impairments*, 7, 23969415221099397-. <u>https://doi.org/10.1177/23969415221099397</u> As reported by Ziegenfusz et al. (2022) in their systematic review, children with Developmental Language Disorder (DLD) are at increased risk of academic failure and perform lower than their typically developing peers in literacy, numeracy and broad academic achievement. DLD has lifelong implications (Ziegenfusz et al. 2022).

 Botting, N. (2020). Language, literacy and cognitive skills of young adults with developmental language disorder (DLD). *International Journal of Language & Communication Disorders*, 55(2), 255–265. https://doi.org/10.1111/1460-6984.12518

# Employment and psychosocial outcomes

 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 Psychology and Psychiatry*, 46(2), 128–149. <u>https://doi.org/10.1111/j.1469-7610.2004.00342.x</u>

Clegg et al. found a striking breadth of social difficulties in adults with Developmental Language Disorder (DLD). Employment was a significant area of difficulty with employment histories often being unstable, most roles being unskilled and manual labour occupations, and two-thirds of the adults with DLD experiencing prolonged periods of unemployment (Clegg et al. (2005). A high proportion of the Adults with DLD had sustained problems with establishing successful relationships and had socially restricted lives which impacted on employment and independent living (Clegg et al. 2005).

 St. Clair, M. C., Forrest, C. L., Yew, S. G. K., & Gibson, J. L. (2019). Early Risk Factors and Emotional Difficulties in Children at Risk of Developmental Language Disorder: A Population Cohort Study. *Journal of Speech, Language, and Hearing Research*, 62(8), 2750–2771. https://doi.org/10.1044/2018\_JSLHR-L-18-0061

Children at risk of Developmental Language Disorder (DLD) have increased rates of emotional difficulties throughout early and middle childhood (St Clair et al. 2019).

"Social difficulties with peers: Being able to express oneself fluently and to quickly grasp what others are saying can have a big impact on social relationships. The Manchester Language Study found that by 16 years of age, 40% of individuals with DLD had difficulties in their interaction with peers (St. Clair, Pickles, Durkin & Conti-Ramsden, 2011), 50% of 16 year olds recall being bullied in childhood (in comparison to less than 25% of typically-developing teenagers) and 13% have experienced persisting bullying since childhood. (Knox & Conti-Ramsden 2003). Better understanding of DLD by adults and peers could help avoid these negative outcomes" (Raising Awareness of Developmental Language Disorder)".

 Snowling, M. J., Bishop, D. V. M., Stothard, S. E., Chipchase, B., & Kaplan, C. (2006). Psychosocial outcomes at 15 years of children with a preschool history of speechlanguage impairment. *Journal of Child Psychology and Psychiatry*, 47(8), 759–765. https://doi.org/10.1111/j.1469-7610.2006.01631.x

"Results: Overall the rate of psychiatric disorder was low in the clinical sample and children whose language delay had resolved by 5.5 years had a good outcome. For those whose language difficulties persisted through the school years, there was a raised incidence of attention and social difficulties" (Snowling et al. 2006).

#### **Mental Health**

- Bao, L., Brownlie, E. B., & Beitchman, J. H. (2016). Mental health trajectories from adolescence to adulthood: Language disorder and other childhood and adolescent risk factors. *Development and Psychopathology*, 28(2), 489–504. https://doi.org/10.1017/S0954579415001054
- 11. Forrest, C. L., Gibson, J. L., Halligan, S. L., & St Clair, M. C. (2018). A longitudinal analysis of early language difficulty and peer problems on later emotional difficulties in adolescence: Evidence from the Millennium Cohort Study. *Autism & Developmental Language Impairments*, 3. https://doi.org/10.1177/2396941518795392

#### **Quality of Life**

 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 & Communication Disorders*, 53(4), 799–810. https://doi.org/10.1111/1460-6984.12385

At 9 years of age, children with developmental language disorder had a lower quality of life compared to their typically developing peers. Differences in Quality of life were not associated with DLD severity, however co-occurring social-emotional difficulties were an important contributor (Eadie et al. 2018).

Summarising Fact Sheet:

The Developmental Language Disorder (DLD) Fact Sheet by the 'Raising Awareness of Developmental Language Disorder provides a summary of DLD and its associated difficulties (DLD-Fact-Sheet.pdf).