The Lidcombe Program after 35 years: Empirical, theoretical, and social contexts

Mark Onslow,[a] Simone Arnott,[b] Brenda Carey,[a] and Elisabeth Harrison[c]

[a] University of Technology Sydney, Australian Stuttering Research Centre, New South Wales, Australia

[b] Speech Pathology Australia, Victoria, Australia

[c] Macquarie University, Department of Linguistics, New South Wales, Australia

Written in consultation with:

Véronique Aumont Boucand, France; Melissa C. Bruce, United States; Carla Di Domenicantonio, Canada; Bettina Freerk, Germany; Rosemarie Hayhow, United Kingdom; Anna Hearne, Australia; Gabrielle Hodes, Israel; Thomas Law, Hong Kong; Valerie P. C. Lim, Singapore; Wendy Lloyd, Australia; Verity MacMillan, Australia; Corinne Moffatt, United Kingdom; Rosalee C. Shenker, Canada; Stacey Sheedy, Australia; Gissella Santayana, Canada; Kylie Smith, Australia; Sabine Van Eerdenbrugh, Belgium.

* Corresponding Author: Mark Onslow, Australian Stuttering Research Centre, University of Technology Sydney, Building 1, 15 Broadway, Ultimo, NSW, 2007, AUSTRALIA

e-mail: Mark.Onslow@uts.edu.au

Keywords: Early stuttering, Lidcombe Program, neurodiversity

Abstract

Purpose: Thirty-five years ago, the Lidcombe Program was introduced as a new evidence-based treatment for early stuttering. This milestone presents an opportunity to examine the Lidcombe Program and its relevance today.

Method: Four Lidcombe Program developers, together with 17 members of the Lidcombe Program Trainers Consortium, reflected on the program's historic origins, early reception, current status, and future direction.

Conclusion: This review of the program explores its origins in the context of causal theories of stuttering, and its place in the modern clinical context. We point out that the Lidcombe Program intervention process incorporates social and medical perspectives of childhood stuttering. Empirical knowledge about stuttering and its effects early in life are considered. We consider the evidence base supporting the Lidcombe Program and its implementation in the current international speech-language pathology community. We also consider future directions for the treatment.

Empirical knowledge about early stuttering

During the 21st century, empirical knowledge has accumulated about stuttering and its impact: the median age of stuttering onset is confirmed to be well before children are 3 years old (Bloodstein et al., 2021), and stuttering is known to be associated with networking of brain regions involved with spoken language (Neef & Chang, 2024). It is now obvious that there is a neuroplastic change within the speech mechanism early in life (Chang et al., 2024); the brain anomalies of early stuttering become clinically intractable in 6–12-year-old children as cortical neuroplasticity decreases (Neef & Chang, 2024).

A lifetime of stuttering may impair quality of life as much as chronic illnesses such as diabetes, cardiovascular disease, and HIV, with significant cost of illness (Norman et al., 2023). That quality-of-life impairment involves mental health, with those who stutter being at extreme risk of clinically significant social anxiety, particularly social anxiety disorder (Craig & Tran, 2014; Iverach et al., 2009). Speech-related anxiety seems to be a consequence of stuttering rather than part of its cause (Packman, 2012). This is supported with evidence from a community cohort that showed no difference in anxiety-prone temperament between pre-school children who stutter and their peers (Kefalianos et al., 2014). The origins of quality-of-life impairments—including mental health issues—have been measured during the pre-school years. Quality-of-life impairment has been measured with health utility scores in pre-schoolers who stutter (Norman et al., 2023), and mental health problems have been measured in 3-year-olds who stutter (Briley et al., 2019; McAllister, 2016).

Children who stutter develop social anxiety disorder five times more often than their peers (Bernard et al., 2022). One report found that 24% of 7–12-year-olds who stutter received a diagnosis of social anxiety disorder compared with 4.6% of control children (Iverach et al., 2016), and this is consistent with findings that pre-schoolers are likely to be aware of their stuttering and that it can cause them distress (Bloodstein, 1960; Boey et al., 2009; Langevin et al., 2010). Peers recognise stuttering early in life and can react negatively

to it (Ambrose & Yairi, 1994; Langevin et al., 2009). Pre-school children who stutter may have poorer self-beliefs about their communication ability than controls (Clark et al., 2012; Groner et al., 2016). Shortly after the pre-school years, children who stutter are more likely to repeat a grade and have poorer academic outcomes than control children (Boyle et al., 1994). They may experience social isolation due to fear of speaking in the classroom, and they commonly avoid it (Daniels et al., 2012; Klompas & Ross, 2004). These early experiences seem related to the educational and occupational limitations that are extensively documented for adults who stutter (for a review, see Onslow, 2025, Lecture One).

The potential quality-of-life impairment of stuttering, and the prospect of neuroplastic change of the speech mechanism early in life, is consistent with a modern consensus for stuttering intervention as soon as possible (Lowe et al. 2021). Speech-language pathologists (SLPs) internationally prioritise intervention of childhood stuttering above all other developmental speech and language disorders (Erickson et al., 2022; McGill et al., 2021). This consensus was underscored by delegates from 29 countries at a 2019 conference (Lowe et al., 2021), who agreed that "current evidence. . . clearly tells us the risks of early stuttering are certain and that they can be serious and potentially lifelong" (p. 9) and that "delaying treatment will expose the vast majority of children to the risk of noxious social interactions for an extended period. This risk is too great. . ." (p. 3).

Empirical knowledge about the Lidcombe Program

The Lidcombe Program is a two-stage intervention, initially developed in Australia in the late 20th century for young children who stutter. The goal of the first stage is to achieve very low levels of stuttering or no stuttering. The goal of the second stage is to maintain that status. Parents learn to elicit stutter-free speech and then to occasionally provide comments to children following stutter-free speech and stuttered speech. This is done in ways that are supportive, comfortable, and not invasive for the child. Initially, parents comment during

daily 10–15-minute practice sessions, and then in naturally occurring conversations. The Lidcombe Program Treatment Guide (Onslow et al., 2025) outlines the program's procedures.

Thirty-five years ago, the Lidcombe Program was a new evidence-based intervention for early stuttering (Onslow et al., 1990). Since then, there have been 19 clinical trials of the program, which show it to be efficacious in standard clinical settings and in group and telehealth presentations. There are reports that the efficacy of the intervention translates to communities in Australia, Canada, and England (O'Brian et al., 2013, 2022; Koushik et al., 2011; Rappell & Schmidt, 2017). There is also evidence that the program is viable when delivered by SLP students under supervision (McCulloch et al., 2017). Clinical benchmarks are available based on 17 data-based reports of 995 children in 14 countries (Onslow, 2025, Lecture Seven). These benchmarks indicate the Lidcombe Program's efficacy in Australia and elsewhere, and when it is used in languages other than English. Reports also show that treatment time is typically longer in countries that are not English-language dominant, and that parents in those countries may require additional support to learn to do the program (Subasi et al., 2022).

Eleven independent reviews concluded that the Lidcombe Program has the strongest evidence of any early intervention for stuttering, and a Cochrane Review of randomised trials (Sjøstrand et al. 2021) showed it to be superior to no-treatment controls, with a large effect size of 0.92. A direct comparison with an early stuttering treatment developed in the Netherlands, the RESTART-DCM Method (Franken & Laroes, 2021), showed the Lidcombe Program to be as effective but more efficient (de Sonneville-Koedoot, Stolk et al., 2015), and more cost-effective (de Sonneville-Koedoot, Bouwmans et al., (2015). Despite the limitations of available evidence, as outlined by Sjøstrand et al., the Lidcombe Program is the only early childhood stuttering intervention that has been substantiated by independently replicated clinical trials.

There is also evidence that the Lidcombe Program may benefit some school-age children who stutter. While the evidence is less compelling than for younger children, meaningful stuttering reductions have been reported in four case studies (Bakhtiar & Packman, 2009; Hewat et al., 2020; Lincoln et al., 1997; Yandeau et al., 2021) and two clinical trials (Johnson, Onslow et al., 2024; Koushik et al., 2009). The demonstrated efficacy of the Lidcombe Program with school-age children is clinically salient because of the reducing tractability of stuttering (Neef & Chang, 2024) and increasing psychosocial impact on children (Guttormsen et al., 2015) during the school years.

The Lidcombe Program in historical theoretical context

Nearly 100 years ago, Charles Bluemel's (1932) idea of stuttering was that it is "an impediment of thought, and not primarily a speech defect" (p. 196) and that "the speech disturbances and emotional reactions of the confirmed stammerer are symptoms far removed from the basic speech disorder with which the impediment begins" (p. 200). Subsequently, Wendell Johnson drew on these notions in developing the extensively influential Diagnosogenic Theory (Johnson, 1942), with its famous axiom that stuttering begins not in the mouth of the child but in the ear of the parent: "stuttering in its serious forms develops after the diagnosis rather than before and is a consequence of the diagnosis" (p. 257).

Johnson's (1942) theory was eventually proven wrong and relegated to the scientific history of our field (for a review, see Packman & Attanasio, 2017). However, the theory's clinical influence remained alive. Wingate's (1971) paper "The fear of stuttering" documented the pervasive clinical influence of the theory:

> These theoretical notions have persuaded speech clinicians to be afraid that what they do might in some way psychologically harm the stutterer, particularly the young stutterer. . . . A legacy of the past two decades has left many people with

> the quasi superstition that there is some kind of black magic in the use of the label of stuttering. (p. 3)

Twenty-five years later, St. Louis (1997) noted the persistence of this influence, and today it is reflected in public health recommendations about what parents should do if their child begins to stutter (Whelan, 2019; Whittington Health NHS Trust, 2020). Some of that advice is essentially a reiteration of Johnson's (1949) advice to parents (Garbarino & Bernstein Ratner, 2022).

There are reports that contemporary students and clinicians believe that parents cause stuttering and that the word "stuttering" should be avoided during clinical practice (Byrd et al., 2020; Lee, 2014), and there is evidence of parent guilt about their children's stuttering (Goodhue et al., 2010; Hayhow, 2009). An international SLP symposium with clinicians, scholars and researchers from 29 countries (Lowe et al., 2021) revealed concerns that direct early stuttering intervention causes children to become anxious. Despite evidence to the contrary, discussion among the authors of the Lowe et al. paper—specialist scholars and clinicians from 11 countries—conveyed a paradoxical unease that early treatment of a disorder that causes anxiety might itself cause anxiety. Bloodstein et al. (2021) documented this situation:

> there is still a certain degree of distrust, perhaps the legacy of Johnson's diagnosogenic theory, in direct behavioral intervention with very young children, particularly any that calls specific attention to the child stuttering moments, the basic tenet of the Lidcombe approach. As we have noted, this reservation is unsupported by any research but remains a concern for some practitioners and parents. (p. 452)

Indeed, in the 1990s, the Lidcombe Program challenged the clinical community because it focused directly on stuttering using routine procedures of clinical psychology. The

Lidcombe Program involves usual parent techniques for assisting children to change childhood behaviors. Despite the treatment's positive focus on fluent speech, this was unsettling for some professionals and prompted apprehension (Cook, 1996; Cook & Rustin, 1997; Stewart, 1996): it "differs from other treatment approaches in its emphasis on speech correction with the implicit notion that stuttering is unacceptable" (Cook, 1996, p. 14) and "we would be keen to learn what the exact 'cognitions' are that the child must adopt, perhaps they would be *'I must not stutter'* or *'I must be fluent'* or *'I must control my speech'*"[authors' italics] (Cook & Rustin, 1997, p. 255).

In response to those early critiques, data emerged showing that the intervention is not only safe, but psychologically beneficial (de Sonneville-Koedoot, Stolk et al., 2015; Woods et al., 2002). After pre-school children were treated with the Lidcombe Program, improvements relating to anxiety, aggression, withdrawal, and depression were reported, as measured by the Child Behaviour Checklist (de Sonneville-Koedoot et al., 2014; Woods et al., (2002) and the Attachment Q-Set (Woods et al., 2002). Similarly, Johnson, Onslow et al. (2024) reported post-Lidcombe Program intervention improvements in 7–12-year-olds for anxiety, communication attitudes, and impact of stuttering. Contrary to the speculations of Cook (1996) and Cook and Rustin (1997), there is no evidence of any adverse psychological outcomes. Of course, that does not imply that the Lidcombe Program will suit every child who stutters or be wanted by every parent of a pre-schooler who stutters. Indeed, the Lidcombe Program Treatment Guide (Onslow et al., 2025) advises SLPs to be alert to the possibility that the treatment may not be suitable for some children, and to ensure that they teach parents to first use comments for stutter-free speech only. This enables the SLP to monitor the child's responses before proceeding further. For the SLP, "it is essential to identify when [the comments] are not a positive experience or, even better, to anticipate when this might occur and prevent it." (Onslow et al., p. 8). Reports have shown that—in a minority of cases—children can react negatively to some aspect of the Lidcombe Program, or

parents may react negatively to the expected role of parents in the program (Goodhue et al., 2010; Hayhow, 2009). If either occurs, SLPs sensitively explore the difficulty, and collaborate with parents to develop and implement solutions.

The Lidcombe Program in a social context

In recent years, the influence of neurodiversity-affirming practices has added to the range of perspectives on stuttering and intervention (Constantino et al., 2022; Gerlach-Houck & Constantino, 2022; Gerlach-Houck et al., 2023; Mori, 2024; Prabhat et al., 2022; Reeves et al., 2023; Shenker et al., 2023; Sisskin, 2023). This perspective regards stuttering as a variation of typical speech that, as such, does not need to be changed; it reflects a social model of disability. Of course, the Lidcombe Program is consistent with a medical model of early stuttering intervention, being designed to reduce the frequency and severity of stuttered speech. The two contrasting perspectives were raised during a discussion by Shenker et al. (2023):

> some speech therapy approaches do harm by teaching kids nothing more than how to conceal stuttering. . . . Simultaneous messages of "it's ok to stutter" and "let's change how you talk" may be confusing to clients. … perhaps early intervention with young stutterers isn't about pushing fluency but, rather, helping them experience that stuttering is really OK, so that they can grow with stuttering without struggle (pp. 2–3).

However, with early intervention for stuttering, medical and social models can—and should—coexist (Mori, 2024; Shenker et al., 2023). As Shenker et al. have noted:

> Adequate clinical practice with pre-school children who stutter obviously requires both models. No responsible clinician would overlook the need to deal clinically with an interaction between early childhood stuttering and the society in which it occurs. (p. 4).

Naturally, if parents or caregivers choose intervention with the Lidcombe Program—or any other early stuttering intervention that proposes to reduce stuttered speech—then the impact of stuttering on the child and family needs to be managed clinically during that clinical process. This routinely occurs within a supportive counselling relationship between the clinician, child, and parents: the *therapeutic alliance* or *working alliance* (Asay et al., 1999; Wampold et al., 1997). Clinician-researchers representing RESTART-DCM, the Lidcombe Program, and Palin-PCI (Franken et al., 2022) noted that each of those interventions was built on foundations of a supportive counselling relationship with parents.[1] Those relationships ensure that SLP management practices are carefully adapted to the needs of the parents and children. Furthermore, the Lidcombe Program does not restrict the parent or the SLP in their roles as child advocate, or as activists for change in community attitudes to stuttering. Creating accepting and compassionate environments for all clients is a professional responsibility of SLPs.

The Lidcombe Program in the current international SLP community

In response to initial apprehensions about the Lidcombe Program (Cook, 1996; Cook & Rustin, 1997; Stewart, 1996), some of its developers conceded that it might prove to be a "transient and maverick" idea that would soon be forgotten (Onslow et al., 1997, p. 265). As we have outlined above, it was not, and today the Lidcombe Program is endorsed by professional SLP associations with clinical guidelines for English-speaking countries (United States [Frymark et al 2010], Australia [Speech Pathology Australia, 2021], and United Kingdom [https://www.rcslt.org/members/clinical-guidance]) and non-English speaking countries (Finland [Laiho et al., 2022], Japan [Mori et al. 2021], Netherlands

[1] Recently we amended the Lidcombe Program Treatment Guide (Onslow et al., 2025) to describe this relationship in more detail.

[Nederlandse Vereniging Voor Stottertherapie, 2024; NVLF (2020)], and Germany [Neumann et al., 2017]).

For the international SLP community, the Lidcombe Program has websites containing freely available clinical materials (https://lidcombeprogram.org; https://www.uts.edu.au/asrc/resources/lidcombe-program), which include a guide for clinicians, a brochure, a child stuttering severity chart, treatment activity guides, and considerations for problem solving. At the time of writing, there have been over 85,200 international downloads of materials from the latter website, with a mean of 60 downloads per day. Since 2022, there have been 27,800 views and 13,100 regular users of these materials. Clinical translation of the Lidcombe Program's evidence base is facilitated by the Lidcombe Program Trainers Consortium, with members in 14 countries. For the past decade, to February 2025, that Consortium has trained 4,083 SLPs in 33 countries to use the Lidcombe Program.

Although the Lidcombe Program's efficacy has been demonstrated repeatedly, revealing its mechanism of action has been more challenging. Investigation into the role of the parental verbal contingencies has not clarified the matter (Donaghy et al., 2015; Hayhow, 2011; Swift et al., 2016), nor has analysis of parent language (Imeson et al., 2018; Latterman et al., 2005), inter-turn speaker latency (Amato Maguire et al., 2023), or acoustic changes (Onslow et al., 2002). It has been speculated that the Lidcombe Program induces changes to neural speech processing at a time of neural plasticity (Neef & Chang, 2024) or that it may be the features that the Lidcombe Program shares with other efficacious treatments that are responsible for its efficacy (Asay et al., 1999; Zebrowski & Arenas, 2011). Because the Lidcombe Program's mechanism, or mechanisms, of action are not understood, critiques have emerged (e.g., Ratner, 2005, 2018). In that respect, the Lidcombe Program shares a characteristic with common medical treatments that clearly are effective, but for which the mechanisms of action are not fully understood, such as lithium for bipolar disorder (Malhi et al., 2013).

We have mentioned critiques of the Lidcombe Program, but we note that there have also been endorsements over the years, including mention of "a fresh breeze from Australia to clean out the cobwebs that coated the then contemporary thinking on the treatment of early stuttering" (Attanasio, 2003, p. 2007). And, as a contemporary end to our essay, when describing the Lidcombe Program, Barry Guitar (2025) notes that

> There have been recent concerns about Lidcombe's emphasis on stutter-free speech— given the popularity of accepting stuttered speech as "normal" because of neurodiversity. However, in my experience, when Lidcombe is carried out by a trained clinician, children and parents feel great relief when stuttering is eliminated. The children I have treated with Lidcombe beam with pride when they announce, as treatment is ending, "I'm a good talker!" and their parents glow with the satisfaction that they have been a major factor in this change. (p. 55).

Conclusion

Thirty-five years ago, the Lidcombe Program was introduced as a new evidence based treatment for early stuttering. It now has the strongest evidence base of any early intervention for stuttering, and it is the only early intervention with superiority over no-treatment controls. As it begins its journey into the next 35 years, the Lidcombe Program and what we understand about it will continue to evolve. As it is used by speech pathologists and clinical researchers in a wider range of countries and cultures, new insights will be gleaned. Researchers will investigate issues related to treatment dosage and treatment fidelity. Clinical trials of the program will include children with comorbidities and concomitant speech and language difficulties. A standalone internet Lidcombe program will be empirically tested. As a result of all of that research, we predict that further clarity about the mechanisms of change with the Lidcombe Program

will emerge, and that clarity will prompt the development of other effective, and possibly simpler stuttering interventions. Most importantly, fewer children, and therefore adults, will live with the potentially serious and life-long consequences of stuttering.

Acknowledgements

The authors would like to acknowledge Robyn Lowe for helpful comments when preparing the manuscript, and Damien Liu-Brennan for his scientific copyediting contribution.

Data Availability Statement

No data was used in the preparation of this manuscript.

References

Amato Maguire, M., Onslow, M., Lowe, R., O'Brian, S, & Menzies, R. (2023). Searching for Lidcombe Program mechanisms of action: Inter-turn speaker latency. *Clinical Linguistics and Phonetics*, *37*(12), 1091–1103. https://doi.org/10.1080/02699206.2022.2140075

Ambrose, N. G., & Yairi, E. (1994). The development of awareness of stuttering in preschool children. *Journal of Fluency Disorders*, *19*(4), 229–245. https://doi.org/10.1016/0094-730X(94)90002-7

Asay, T. P., & Lambert, M. J. (1999). The empirical case for the common factors in therapy: Quantitative findings. In M. A. Hubble, B. L. Duncan, & S. D. Miller (Eds.), *The heart & soul of change* (pp. 23–55). American Psychological Association. https://doi.org/10.1037/11132-001

Attanasio, J. (2003). Some observations and reflections. In M. Onslow, A. Packman, & E. Harrison (Eds.), *The Lidcombe Program of early stuttering intervention: A clinician's guide* (pp. 207–214). Pro-Ed

Bakhtiar, M., & Packman, A. (2009). Intervention with the Lidcombe Program for a bilingual school-age child who stutters in Iran. *Folia Phoniatrica et Logopaedica, 61*(5), 300–304. https://doi.org/10.1159/000241880

Bernard, R., Hofslundsengen, H., & Frazier Norbury, C. (2022). Anxiety and depression symptoms in children and adolescents who stutter: A Systematic Review and Meta-Analysis. *Journal of Speech, Language, and Hearing Research, 65*(2), 624–644. https://doi.org/10.1044/2021_JSLHR-21-00236

Bloodstein, O. (1960). The development of stuttering: I. Changes in nine basic features. *Journal of Speech and Hearing Disorders*, *25*, 219–237. https://doi.org/10.1044/jshd.2503.219

Bloodstein, O, Bernstein Ratner, N., & Brundage, S. B. (2021). *A handbook on stuttering* (7th ed.). Plural.

Bluemel, C. S. (1932). Primary and secondary stammering. *Quarterly Journal of Speech*, *18*(2), 187–200. https://doi.org/10.1080/00335633209379870

Boey, R. A., Van de Heyning, P. H., Wuyts, F. L., Heylen, L., Stoop R., & De Bodt, M. S. (2009). Awareness and reactions of young stuttering children aged 2–7 years old towards their speech disfluency. *Journal of Communication Disorders*, *42*(5), 334–346. https://doi.org/10.1016/j.jcomdis.2009.03.002

Boyle, C. A., Decoufle, P., & Yeargin-Allsopp, M. (1994). Prevalence and health impact of developmental disabilities in US children. *Pediatrics*, *93*(3), 399–403.

Briley, P. M., O'Brien, K., & Ellis, C. (2019). Behavioral, emotional, and social well-being in children who stutter: Evidence from the National Health Interview Survey. *Journal of Developmental and Physical Disabilities*, *31*, 39–53. https://doi.org/10.1007/s10882-018-9625-x

Byrd, C. T., Werle, D., & St. Louis, K. O. (2020). Speech-language pathologists' comfort level with use of term "stuttering" during evaluations. *American Journal of Speech-Language Pathology*, *29*(2), 841–850. https://doi.org/10.1044/2020_AJSLP-19-00081

Chang, S. E., Jackson, E. S., Santayana, G., Zavos, G., & Onslow, M. (2024). Contemporary clinical conversations about stuttering: What does brain imaging research mean to clinicians? *International Journal of Speech-Language Pathology.* Advance online publication. https://doi.org/10.1080/17549507.2024.2327472

346 Clark, C. E., Conture, E. G., Frankel, C. B., & Walden, T. A. (2012). Communicative and
347 psychological dimensions of the KiddyCAT. *Journal of Communication Disorders*,
348 *45*(3), 223–234. https://doi.org/10.1016/j.jcomdis.2012.01.002

349 Constantino, C., Campbell, P., & Simpson, S. (2022). Stuttering and the social
350 model. *Journal of Communication Disorders*, *96*, Article 106200.
351 https://doi.org/10.1016/j.jcomdis.2022.106200

352 Cook, F. (1996). The Lidcombe Programme—is this the cure? *Bulletin of the Royal*
353 *College of Speech and Language Therapists*, *528*, 14.

354 Cook, F., & Rustin, L. (1997). Commentary on the Lidcombe Programme of Early
355 Stuttering Intervention. *European Journal of Disorders of Communication*, *32*(2), 250–
356 258. https://doi.org/10.3109/13682829709020406

357 Craig, A., & Tran, Y. (2014). Trait and social anxiety in adults with chronic stuttering:
358 Conclusions following meta-analysis. *Journal of Fluency Disorders*, *40*, 35–43.
359 https://doi.org/10.1016/j.jfludis.2014.01.001

360 Daniels, D. E., Gabel, R. M., & Hughes, S. (2012). Recounting the K-12 school
361 experiences of adults who stutter: A qualitative analysis. *Journal of Fluency Disorders*,
362 *37*(2), 71–82. https://doi.org/10.1016/j.jfludis.2011.12.001

363 de Sonneville-Koedoot, C., Stolk, E. A., Raat, H., Bouwmans-Frijters, C., & Franken, M. -
364 C. (2014). Health-related quality of life of preschool children who stutter. *Journal of*
365 *Fluency Disorders*, *42*, 1–12. https://doi.org/10.1016/j.jfludis.2014.09.001

366 de Sonneville-Koedoot, Bouwmans, C., Franken, M. -C., & Stolk, E. (2015). Economic
367 evaluation of stuttering treatment in preschool children: The RESTART study. *Journal of*
368 *Communication Disorders*, *58*, 106–118. https://doi.org/10.1016/j.jcomdis.2015.10.006

de Sonneville-Koedoot, C., Stolk, E., Rietveld, T., & Franken, M. -C. (2015). Direct versus indirect treatment for preschool children who stutter: The RESTART randomized trial. *PLoS One*, *10*, Article e0133758. https://doi.org/10.1371/journal.pone.0133758

Donaghy, M., Harrison, E., O'Brian, S., Menzies, R., Onslow, M., Packman, A., & Jones, M. (2015). An investigation of the role of parental request for self-correction of stuttering in the Lidcombe Program. *International Journal of Speech-Language Pathology*, *17*(5), 511–517. https://doi.org/10.3109/17549507.2015.1016110

Erickson, S., Bridgman, K., & Furlong, L. (2022). Australian speech-language pathologists' experiences and perceptions of working with children who stutter: A qualitative study. *Journal of Fluency Disorders*, Article 105944. https://doi.org/10.1016/j.jfludis.2022.105944

Franken, M. -C., & Laroes, E. (2021). *RESTART-DCM Method*. Erasmus MC. https://www.restartdcm.nl

Franken, M. -C., Millard, S., & Hearne, A. (2022). Preschool-age children. In P. M. Zebrowski, J. D. Anderson, & E. G. Conture (Eds.), *Stuttering and related disorders of fluency* (4th ed., pp. 153–173). Thieme Medical.

Frymark, T., Venediktov, R., & Wang, B. (2010). https://www.asha.org/siteassets/uploadedfiles/ebsrfluencydisorders.pdf

Garbarino, J., & Bernstein Ratner, N. (2022). What is the role of questioning in young children's fluency? *American Journal of Speech-Language Pathology*, *31*(5), 2061–2077. https://doi.org/10.1044/2022_AJSLP-21-00209

Gerlach-Houck, H., & Constantino, C. D. (2022). Interrupting ableism in stuttering therapy and research: Practical suggestions. *Perspectives of the ASHA Special Interest Groups*, *7*(2), 357–374. https://doi.org/10.1044/2021_PERSP-21-00109

Gerlach-Houck, H., Kubart, K., & Cage, E. (2023). Concealing stuttering at school: "When you can't fix it… the only alternative is to hide it. *Language, Speech, and Hearing Services in Schools*, *54*(1), 96–113. https://doi.org/10.1044/2022_LSHSS-22-00029

Goodhue, R., Onslow, M., Quine, S., O'Brian, S., & Hearne, A. (2010). The Lidcombe Program of early stuttering intervention: Mothers' experiences. *Journal of Fluency Disorders*, *35*(1), 70–84. https://doi.org/10.1016/j.jfludis.2010.02.002

Groner, S., Walden, T., & Jones, R. (2016). Factors associated with negative attitudes toward speaking in preschool-age children who do and do not stutter. *Contemporary Issues in Communication Science and Disorders*, *43*, 255–267.

Guitar, B. (2025). Stuttering: An integrated approach to its nature and treatment (6th ed.). Wolters Kluwer.

Guttormsen, L. S., Kefalianos, E., & Ness, K. -A. B. (2015). Communication attitudes in children who stutter: a meta-analytic review. *Journal of Fluency Disorders, 46*, 1–14. https://doi.org/10.1016/j.jfludis.2015.08.001

Hayhow, R. (2009). Parents' experiences of the Lidcombe Program of early stuttering intervention. *International Journal of Speech-Language Pathology*, *11*(1), 20–25. https://doi.org/10.1080/17549500802571704

Hayhow, R. (2011). Does it work? Why does it work? Reconciling difficult questions. *International Journal of Language and Communication Disorders*, *46*(2), 155–168. https://doi.org/10.3109/13682822.2010.490572

Hewat, S., Unicomb, R., Dean, I., & Cui, G. (2020). Treatment of childhood stuttering using the Lidcombe Program in mainland China: Case studies. *Speech, Language and Hearing*, *23*(2), 55–65. https://doi.org/10.1080/2050571X.2018.1511106

Imeson, J., Lowe, R., Onslow, M., Munro, N., Heard, R., O'Brian, S., & Arnott, S. (2018). The Lidcombe Program and child language development: Long-term assessment. *Clinical Linguistics and Phonetics, 32*(9), 860–875. https://doi.org/10.1080/02699206.2018.1448897

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

Iverach, L., O'Brian, S., Jones, M., Block, S., Lincoln, M., Harrison, E., Hewat, S., Menzies, R. G, Packman, A., & Onslow, M. (2009). Prevalence of anxiety disorders among adults seeking speech therapy for stuttering. *Journal of Anxiety Disorders*, *23*(7), 928–934. https://doi.org/10.1016/j.janxdis.2009.06.003

Johnson, W. (1942). A study of the onset and development of stuttering. *Journal of Speech and Hearing Disorders*, *7*(3), 251–257. https://doi.org/10.1044/jshd.0703.251

Johnson, W. (1949). An open letter to the mother of a stuttering child. *Journal of Speech and Hearing Disorders*, *14*(1), 3–8. https://doi.org/10.1044/jshd.1401.03

Johnson, G., Onslow, M., Carey, B., Jones, M., & Kefalianos, E. (2024). Lidcombe Program telehealth treatment for children 6–12 years of age: A Phase II trial. *Journal of Fluency Disorders*, *80*, Article 106057. https://doi.org/10.1016/j.jfludis.2024.106057

Kefalianos, E., Onslow, M., Ukoumunne, O., Block, S., & Reilly, S. (2014). Stuttering, temperament and anxiety: Data from a community cohort aged 2–4 years. *Journal of Speech, Language and Hearing Research*, *57*(4), 1314–1322. https://doi.org/10.1044/2014_JSLHR-S-13-0069

Klompas, M., & Ross, E. (2004). Life experiences of people who stutter, and the perceived impact of stuttering on quality of life: Personal accounts of South African individuals. *Journal of Fluency Disorders*, *29*(4), 275–305. https://doi.org/10.1016/j.jfludis.2004.10.001

Koushik, S., Hewat, S., Shenker, R. C., Jones,M., & Onslow, M. (2011). North American Lidcombe Program file audit: Replication and meta-analysis. *International Journal of Speech-Language Pathology*, *13*(4), 301–307. https://doi.org/10.3109/17549507.2011.538434

Koushik, S., Shenker, R., & Onslow, M. (2009). Follow-up of 6–10 year-old stuttering children after Lidcombe Program treatment: A Phase I trial. *Journal of Fluency Disorders*, *34*(4), 279–290. https://doi.org/10.1016/j.jfludis.2009.11.001

Laiho, A., Elovaara, H., Kaisamatti, K. Luhtalampi, K., Talaskivi, L., Pohja, S., Routamo-Jaatela, K., & Vuorio, E. (2022). Stuttering interventions for children, adolescents, and adults: A systematic review as a part of clinical guidelines. *Journal of Communication Disorders*, *99*, Article 106242. https://doi.org/10.1016/j.jcomdis.2022.106242

Langevin, M., Packman, A., & Onslow, M. (2009). Peer responses to stuttering in the preschool setting. *American Journal of Speech-Language Pathology*, *18*(3), 264–276. https://doi.org/10.1044/1058-0360(2009/07-0087)

Langevin, M., Packman, A., & Onslow, M. (2010). Parent perceptions of the impact of stuttering on their preschoolers and themselves. *Journal of Communication Disorders*, *43*(5), 407–423. https://doi.org/10.1016/j.jcomdis.2010.05.003

Lattermann, C., Shenker, R. C., & Thordardottir, E. (2005). Progression of language complexity during treatment with the Lidcombe Program for early stuttering intervention. *American Journal of Speech-Language Pathology*, *14*(3), 242–253. https://doi.org/10.1044/1058-0360(2005/024)

Lee, K. (2014). Korean speech-language pathologists' attitudes toward stuttering according to clinical experiences. *International Journal of Language and Communication Disorders*, *49*(6), 771–779. https://doi.org/10.1111/1460-6984.12093

Lincoln, M. A., & Onslow, M. (1997). Long-term outcome of early intervention for stuttering. *American Journal of Speech-Language Pathology, 6*(1), 51–58. https://doi.org/10.1044/1058-0360.0601.51

Lowe, R., Jelčić Jakšić, S., Onslow, M., O'Brian, S., Vanryckeghem, M., Millard, S., Kelman, E., Block, S., Franken, M.-C., Van Eerdenbruch, S., Menzies, R., Shenker, R., Byrd, C., Bosshardt, H.-G., del Gado, F., & Lim, V. (2021). Contemporary issues with stuttering: The Fourth Croatia Stuttering Symposium. *Journal of Fluency Disorders*, *70*, Article 105844. https://doi.org/10.1016/j.jfludis.2021.105844

Malhi, G. S., Tanious, M., Das, P., Coulston, C. M., & Berk, M. (2013). Potential mechanisms of action of lithium in bipolar disorder. Current understanding. *CNS Drugs, 27*(2), 135–153. https://doi.org/10.1007/s40263-013-0039-0

McAllister, J. (2016). Behavioural, emotional and social development of children who stutter. *Journal of Fluency Disorders*, *50*, 23–32. https://doi.org/10.1016/j.jfludis.2016.09.003

McCulloch, J., Swift, M. C., & Wagnitz, B. (2017). Case file audit of Lidcombe program outcomes in a student-led stuttering clinic. *International Journal of Speech-Language Pathology*, *19*(2), 165–173. https://doi.org/10.3109/17549507.2016.1159336

McGill, N., McLeod, S., Crowe, K., Wang, C., & Hopf, S. C. (2021). Waiting lists and prioritization of children for services: Speech-language pathologists' perspectives. *Journal of Communication Disorders*, *91*, Article 106099. https://doi.org/10.1016/j.jcomdis.2021.106099

Mori, K. (2024). Developmental stuttering as a neurodiverse speech style. *Acoustical Science and Technology,* e24–37. https://doi.org/10.1250/ast.e24.37

Mori, K. Sakata, Y., Kawai, N., Kin, J., Kenjo, M., Maeara, N., Sakai, N., Kikuchi, Y., Kobayashi, H., Hara, Y., & Miyamoto, S. (2021). *幼児吃音臨床ガイドライン 第1版* [Clinical guidelines for infant stuttering]. http://kitsuon-kenkyu.umin.jp/guideline/v1/YoujiKitsuonCGL2021.pdf

Nederlandse Vereniging Voor Stottertherapie. (2024). *Goede stottertherapie is maatwerk* [Good stuttering therapy is tailor-made]. http://www.nedverstottertherapie.nl

Neef, N. E., & Chang, S. E. (2024). Knowns and unknowns about the neurobiology of stuttering. *Plos Biology*, *22*(2), e3002492. https://doi.org/10.1371/journal.pbio.3002492

Neumann, K., Euler, H., A., Bosshardt, H. G., Cook, S., Sandrieser, P., & Sommer, M. (2017). Clinical practice guideline: The pathogenesis, assessment and treatment of speech fluency disorders. *Deutsches Arzteblatt International*, *114*(22–23), 383–390. https://doi.org/10.3238/arztebl.2017.0383

Norman, A., Lowe, R., Onslow, M., O'Brian. S., Packman, A., Menzies, R., & Schroeder, L. (2023). Cost of illness and health-related quality of life for stuttering: Two systematic reviews. *Journal of Speech, Language, and Hearing Research*, *66*(11), 4414–4431. https://doi.org/10.1044/2023_JSLHR-23-00072

NVLF. (2020). *Richtlijn stotteren bij kinderen, adolescenten en volwassenen* [Guidelines for stuttering in children, adolescents and adults] https://www.nvlf.nl/kennis/inhoudelijke-richtlijnen/

O'Brian, S., Hayhow, R., Jones, M., Packman, A., Iverach, L., Onslow, M., & Menzies, R. (2022). Lidcombe Program translation to community clinics in Australia and England. *International Journal of Language and Communication Disorders*, *58*(2), 295–309. https://doi.org/10.1111/1460-6984.12785

O'Brian, S., Iverach, L., Jones, M., Onslow, M., Packman, A., & Menzies, R. (2013). Effectiveness of the Lidcombe Program for early stuttering in Australian community clinics. *International Journal of Speech-Language Pathology*, 15(6), 593–603. https://doi.org/10.3109/17549507.2013.783112

Onslow, M. (2025, January). *Stuttering and its clinical management: Twelve lectures*. Retrieved February 1, 2025, from https://www.uts.edu.au/asrc/resources

Onslow, M., Costa, L., & Rue, S. (1990). Direct early intervention with stuttering: Some preliminary data. *Journal of Speech and Hearing Disorders*, *55*(3), 405–416. https://doi.org/10.1044/jshd.5503.405

Onslow, M., O'Brian, S., & Harrison, E. (1997). The Lidcombe Programme: Maverick or not? *International Journal of Language and Communications Disorders*, *32*(2), 261–266. https://doi.org/10.3109/13682829709020408

Onslow, M., Stocker, S., Packman, A., & McLeod, S. (2002). Speech timing in children after the Lidcombe Program of early stuttering intervention. *Clinical Linguistics and Phonetics*, *16*(1), 21–33. https://doi.org/10.1080/02699200110092577

Onslow, M., Webber, M., Harrison, E., Arnott, S., Bridgman, K., Carey, B., Sheedy, S., O'Brian, S., MacMillan, V., Lloyd, W., & Hearne, A. (2025). The Lidcombe Program treatment guide.

Packman, A. (2012). Theory and therapy in stuttering: A complex relationship. *Journal of Fluency Disorders*, *37*(4), 225–233. https://doi.org/10.1016/j.jfludis.2012.05.004

Packman, A., & Attanasio, J. S. (2017). *Theoretical issues in stuttering* (2nd ed.). Routledge.

Prabhat, P., Rombouts, E., & Borry, P. (2022). The disabling nature of hope in discovering a biological explanation of stuttering. *Journal of Fluency Disorders*, *72*, Article 105906. https://doi.org/10.1016/j.jfludis.2022.105906

Rappell, N., & Schmidt, D. (2017). Rolling-group Lidcombe Program delivery. *Journal of Clinical Practice in Speech-Language Pathology*, *19*(2), 76–81.

Ratner, N. B. (2005). Evidence-based practice in stuttering: Some questions to consider. *Journal of Fluency Disorders*, *30*(3), 163–188. https://doi.org/10.1016/j.fludis.2005.04.002

Ratner, N. B. (2018). Selecting treatments and monitoring outcomes: The circle of evidence-based practice and client-centred care in treating a preschool child who stutters. *Language, Speech and Hearing Services in Schools*, *49*(1), 13–22. https://doi.org/10.1044/2017_LSHSS-17-0

Reeves, N. A., Flynn, T. W., & Schuff, R. Z. (2023). Ableism to empowerment: Navigating school structures when working with students who stutter. *Language, Speech, and Hearing Services in Schools*, *54*(1), 8–26. https://doi.org/10.1044/2022_LSHSS-22-00026

Shenker, R., Rodgers, N., Guitar, B., & Onslow, M. (2023). Contemporary clinical conversations about stuttering: Neurodiversity and ableism. *Journal of Fluency Disorders*, *78*, Article 106014. https://doi.org/10.1016/j.jfludis.2023.106014

Sisskin, V. (2023). Disfluency-affirming therapy for young people who stutter: Unpacking ableism in the therapy room. *Language, Speech, and Hearing Services in Schools*, *54*(1), 114–119. https://doi.org/10.1044/2022_LSHSS-22-00015

Sjøstrand, Å., Kefalianos, E., Hofslundsengen, H., Guttormsen, L. S., Kirmess, M., Lervåg, A., Hulme, C., & Bottegaard Næss, K. -A. (2021). Non-pharmacological interventions for stuttering in children six years and younger. *Cochrane Database of Systematic Reviews*, *9*, Article CD013489. https://doi.org/10.1002/14651858.CD013489.pub2

Speech Pathology Australia. (2021). *Evidence-based practice for speech pathology in Australia*. https://acdhs.edu.au/wp-content/uploads/2021/07/EBP_speechpathologyinaustralia_16062021-3.pdf

Stewart, T. (1996). A critique of the Lidcombe Programme for children who stammer. *Speaking Out: British Stammering Association*, *17*.

St. Louis, K. O. (1997). Six reasons why clinicians may fear stuttering. *Perspectives on Fluency and Fluency Disorders*, *7*(1), 4–6. https://doi.org/10.1044/ffd7.1.4

Subasi, M., Van Borsel, J., & Van Eerdenbrugh, S. (2022). The Lidcombe Program for early stuttering in non-English-speaking countries: A systematic review. *Folia Phoniatrica et Logopaedica*, *74*(2), 89–102. https://doi.org/10.1159/000517650

Swift, M. C., Jones, M., O'Brian, S., Onslow, M., Packman, A., & Menzies, R. (2016). Parent verbal contingencies during the Lidcombe Program: Observations and statistical modeling of the treatment process. *Journal of Fluency Disorders*, *47*, 13–26. https://doi.org/10.1016/j.jfludis.2015.12.002

Wampold, B. E., Mondin, G. W., Moody, M., Stich, F., Benson, K., & Ahn, H. N. (1997). A meta-analysis of outcome studies comparing bona fide psychotherapies: Empirically, "all must have prizes"." *Psychological Bulletin*, *122*(3), 203–215. https://doi.org/10.1037/0033-2909.122.3.03

Whelan, A. (2019, May 19). 5 tips to share with parents of preschoolers who stutter. *The ASHA LeaderLive*. Retrieved from https://leader.pubs.asha.org/do/10.1044/5-tips-to-share-with-parents-of-preschoolers-who-stutter/full/

Whittington Health NHS Trust (2020). *Tips for parents*. Retrieved from https://www.whittington.nhs.uk/default.asp?c=29567

Wingate, M. (1971). The fear of stuttering. *ASHA*, *13*(1), 35.

Woods, S., Shearsby, J., Onslow, M., & Burnham, D. (2002). Psychological impact of the Lidcombe Program of early stuttering intervention. *International Journal of Language and Communication Disorders*, *37*(1), 31–40. https://doi.org/10.1080/13682820110096670

Yandeau, E., Carey, B., & Onslow, M. (2021). The Lidcombe Program: A client report 7 years post-treatment. *Speech, Language and Hearing, 25*(4), 492–497. https://doi.org/10.1080/2050571X.2021.1923304

Zebrowski, P. M., & Arenas, R. M. (2011). The "Iowa Way" revisited. *Journal of Fluency Disorders*, *36*(3), 144– 157. https://doi.org/10.1016/j.jfludis.2010.08.001