

The Lidcombe Programme

Treatment of early stuttering: the Lidcombe Program

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A speech pathologist and parent in the clinic during the Lidcombe Program.

The Lidcombe Program is a treatment developed specifically for stuttering in children younger than six. However, it is known to be effective also with school-age children. The Lidcombe Program is based on a body of laboratory-operant conditioning research.

The treatment contains two stages. During Stage 1, the child stops stuttering, and during Stage 2 that treatment gain is maintained for a long period.

The Lidcombe Program is conducted by parents, not by the speech pathologist. The role of the speech pathologist is merely to teach the parents how to conduct the treatment.

One of the likely reasons the outcome data for this treatment have been so favourable is that the treatment occurs in the situations in which stuttering occurs, not in the speech clinic. The Lidcombe Program is individualised for every family.

A summary appears below and full details are available from the website of the Australian Stuttering Research Centre (<http://casino.cchs.usyd.edu.au/asrc/>).

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In essence the treatment is that parents give feedback about stuttering and stutter-free speech during conversations with their children.

In the case of stutter-free speech, there are three types of feedback:

- Parents may acknowledge or praise (eg, "no bumps there", "that was lovely smooth talking").
- Parents may request self-evaluation from the child (eg, "was that smooth?").

In the case of stuttered speech:

- Parents may acknowledge the stuttering (eg, "that was a stuck word").
- Parents may request self-correction from the child (eg, "try it again without the stuck word").

It is critical to the success of the treatment that parents are positive and supportive of the children, who must enjoy the treatment. As is the case with any treatment for a childhood speech and language disorder, it will not work if the child does not enjoy it

and feel it is a positive experience. Most important of all in the Lidcombe Program, care is taken that parental feedback is not constant, intensive or invasive.

Also, parents need to take care that the treatment does not interfere with the child's communication. It is essential that the treatment occurs as a background to a child's everyday life - it must fit in with, not be imposed on, daily childhood activities.

The speech pathologist needs to ensure parents are presenting feedback safely and correctly. Therefore, at the start of the Lidcombe Program, when the parent is first learning to give feedback, it is done in carefully structured conversations only.

This structured application of feedback facilitates the initial teaching of the parent by the clinician. Further, consistent with standard speech pathology practices, it enables the parent to ensure the task is organised flexibly so that the child's responses are mostly correct.

Finally, structured parental feedback at the start enables the child to get used to the treatment and enables the parent to convey positive and helpful messages to the child about what is occurring. When the parent has mastered the requisite skills and the child is happy with the procedure, parental feedback is introduced into everyday, unstructured situations. This is when the treatment is fully operational and when its effects become apparent.

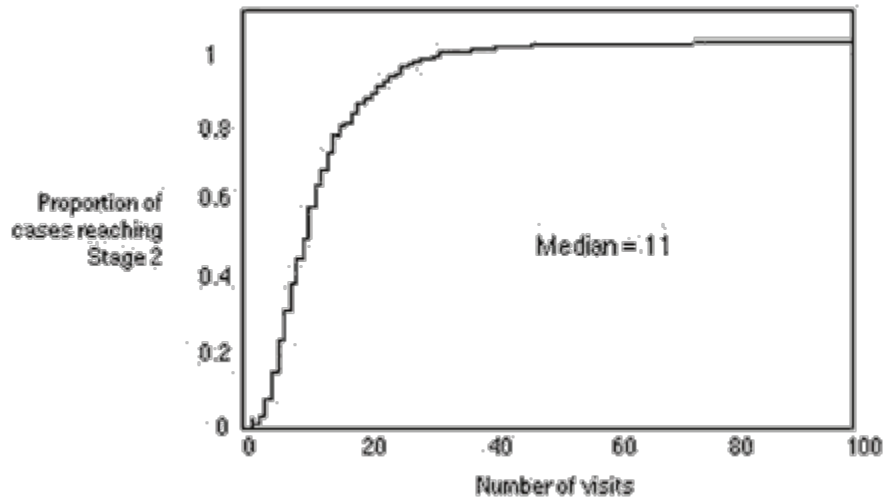
The administration of the Lidcombe Program relies heavily on measurement of stuttering. In fact, the treatment cannot be done without it. Speech measures are used:

- To check that the child's stuttering is improving and so that adjustments can be made in the event that there are no signs of improvement.
- To precisely identify when the child has met speech criteria for recovery.
- To check that the child's speech continues to meet those criteria in the long term.

Speech measures enable the clinician and the parent to communicate effectively about the severity of the child's stuttering throughout the treatment process. The clinical measures used in the Lidcombe Program are a 10-point severity scale which is used by the parent and a "percent syllables stuttered" (%SS) measure which is used by clinician.

Improvement in stuttering in the Lidcombe Program is specified with the severity rating scale and the percent syllables stuttered measure. To successfully complete Stage 1 and enter Stage 2, the child must have severity ratings for the previous week of 1 or 2, with most ratings being 1, and less than 1.0 %SS during speech within the clinic.

During Stage 2, the parent gradually withdraws the feedback. During this period visits to the clinic decrease in frequency. A report of 250 cases has shown the median time for the completion of Stage 1 - the elimination of stuttered speech - is 11 weekly clinic visits. The recovery plot for the Lidcombe Program is shown in the figure below.

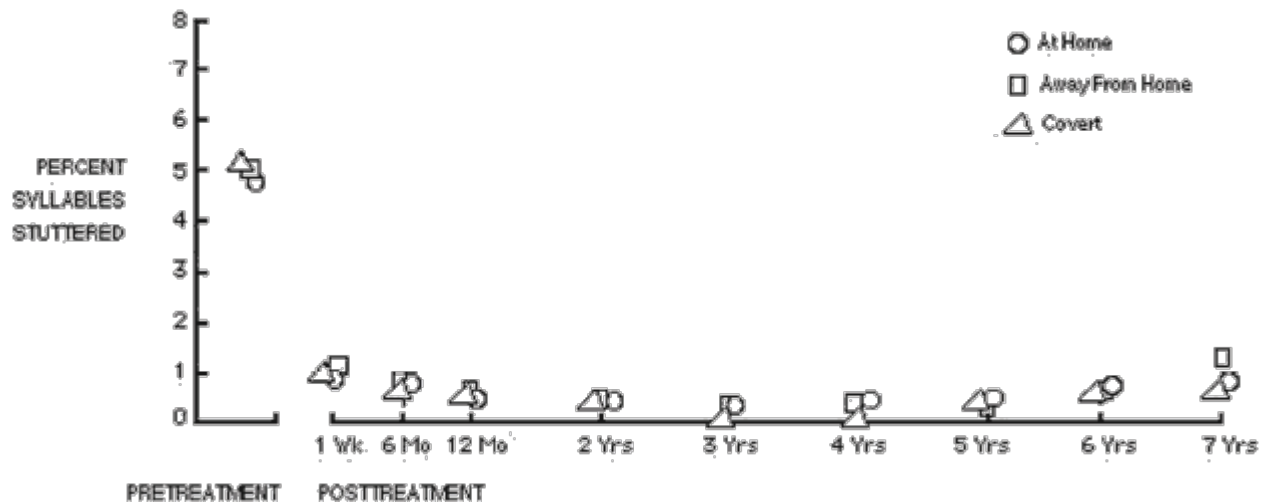


Recovery plot for the Lidcombe Program. (Adapted from Jones, et al. [2000].)

A randomised controlled trial has yet to be published for any stuttering treatment. However, one is nearing completion for the Lidcombe Program. In the interim, several outcome studies have been published.

Although they are non-controlled these studies all carry the methodological and accepted credentials of being based on reliable objective measures of speech during everyday childhood situations for a clinically meaningful period after treatment.

The studies present long-term outcome data for a total of 42 children and show that after the treatment they have near-zero stuttering in everyday speaking situations. The outcome studies of the Lidcombe Program are summarised in the figure below, which shows long-term near-zero stuttering in preschool children in everyday speaking situations after the treatment.



Summary of outcome data for the Lidcombe Program of early stuttering intervention. Data are presented for %SS scores of the children talking at home and outside their homes, and also for covert assessments when the children were not aware that their speech was being tape recorded. (Adapted from Onslow M, Menzies R, Packman A. An Operant Intervention for Early Stuttering. *The Development of the Lidcombe Program, Behaviour Modification* 2000; 24: 5:658-81.)

At present, outcome data allow only a confident statement that children are not stuttering when assessed after the treatment. Those data do not permit conclusions about whether the treatment provides effects beyond those of natural recovery.

Nonetheless, confidence in the treatment is justified for two reasons. First, there are outcome data to show that stuttering is at near-zero levels in school-age children after the treatment. This age group has little chance of natural recovery, which suggests it was the treatment that was responsible for their stuttering reductions.

Second, the known predictors of the rate of recovery with the Lidcombe Program are different from those known to predict whether natural recovery will occur. As stated previously, age and gender are powerful predictors of whether natural recovery will occur, but they have been shown not to predict anything about treatment recovery with the Lidcombe Program. Hence, there is reason to believe that treatment recovery and natural recovery are two different processes.

Another type of outcome research that supports the Lidcombe Program deals with the social validity of the treatment. It has been shown that children's speech after treatment is perceptually indistinguishable from that of control children. These data are consistent with our clinical experiences that, long after the treatment has been completed, the children have forgotten all about their stuttering.

A preliminary outcome report has been published of a "tele-health" version of the Lidcombe Program for the roughly one-third of Australian children who live rurally and are isolated from speech pathology treatment services. At the time of writing, a randomised controlled trial of this treatment model is in progress, funded by the NHMRC.

Source: Australian Doctor, 1 Mar 2002. Reproduced with permission.