MANUAL FOR THE LIDCOMBE PROGRAM OF EARLY STUTTERING INTERVENTION

2008

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PART ONE

OVERVIEW OF THE LIDCOMBE PROGRAM

The Lidcombe Program is a behavioural treatment for stuttering in preschool-age children. In this program, a parent or some other significant person in the child's life delivers the treatment in the child's everyday environment. The parent learns how to do this during weekly visits with the child to the speech clinic. During these visits, the speech pathologist trains the parent to do the treatment and to make daily measurements of the child's stuttering severity. The parent's measures, along with those made by the speech pathologist during the clinic visits, guide the conduct of the program. At these weekly clinic visits the speech pathologist also monitors and adjusts the treatment, and ensures that it is a positive and enjoyable experience for the child.

The program is conducted in two stages. During Stage 1, the parent and child attend the speech clinic once a week and the parent does the treatment each day in the child's everyday environment. When the child's stuttering reaches a very low level, the second stage commences. During Stage 2, the parent does the treatment less frequently and the child and parent attend the clinic less frequently, over a period of months or years, providing that the low level of stuttering attained at the end of Stage 1 is maintained.

The Lidcombe Program has a number of essential components. However, the implementation of these components is individualised for each child. The program is based on operant methodology and children are not taught to use a different speech pattern, such as slowing down. Nor are parents instructed to alter the child's environment with the aim of facilitating fluency. However, parents may adjust the family routine or change certain aspects of their interactive style during structured treatment conversations, when this is thought necessary for the successful implementation of the program.

The Lidcombe Program has been developed as a joint project of the Australian Stuttering Research Centre, and the Discipline of Speech Pathology at The University of Sydney, and the Stuttering Unit, Bankstown Health Service, Sydney. Ongoing research suggests that the program will be modified in the future, in which case this manual will be revised again. The first edition of this manual was written in 2001.

This manual operationalises only the basic procedures of the Lidcombe Program. It is published in this format primarily as a resource to be used by clinical researchers.

Speech pathologists who are considering conducting the Lidcombe Program are advised to add to their knowledge of the Lidcombe Program by also reading the numerous publications which provide more detailed information about the program and the research that underpins it. The Lidcombe Program has been written about and researched extensively. Many of these publications, including clinical trials and other clinical research dealing with the treatment, are listed at the "Publications" page of the website of the Australian Stuttering Research Centre (ASRC) (http://www.fhs.usyd.edu.au/asrc). The program is examined in detail in the book "The Lidcombe Program of Early Stuttering Intervention: A Clinician's Guide." This can be ordered from the ASRC website. The website also provides details about a program of Continuing Professional Education in Stuttering (CPES) which includes workshops on the Lidcombe Program. Speech pathologists are advised to participate in a Continuing Professional Education program before using the Lidcombe Program. There is an international Lidcombe Program Trainers Consortium, involving several countries, which is described on the "Professional Education" page of the ASRC website (follow the link to the "Lidcombe Program Trainers Consortium").

PART TWO

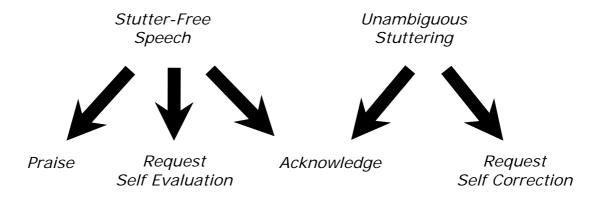
ESSENTIAL COMPONENTS OF THE LIDCOMBE PROGRAM

Parental Verbal Contingencies

In delivering treatment, the parent comments after periods of stutter-free speech and after instances of unambiguous stuttering.

After *stutter-free speech*, the parent may (1) acknowledge this response (e.g. "That was smooth"), or (2) praise the response (e.g. "That was good talking"), or (3) request the child to evaluate the response (e.g. "Was that smooth?"). After *stuttering*, the parent may (1) acknowledge the response (e.g. "That was a bit bumpy") or (2) request the child to correct the response (e.g. "Can you try that again?").

Verbal contingencies should be given as soon as possible after the response (stutter-free speech or unambiguous stuttering) and in such a way that the child hears them. In the case of acknowledging the response of unambiguous stuttering, the parent uses a neutral and non-punitive tone of voice. The ratio of verbal contingencies for stutter-free speech to verbal contingencies for stuttering is determined by the clinician and parent, as appropriate for each individual child. However, in order to ensure that the Lidcombe Program is a positive experience for the child, most of the parent's verbal contingencies are for the child's stutter-free speech rather than for stuttering. The parental verbal contingencies given above are examples only, and parents are encouraged to vary the phrases they use. It is important, also, that type and frequency of verbal contingencies are individualised for each child (see PART FOUR). The child's responses and the corresponding parental verbal contingencies that are essential in the Lidcombe Program are summarised in the diagram below.



The parent may also give verbal contingencies when the child spontaneously and correctly evaluates stutter-free speech (such as when the child says, "Hey, that was good talking wasn't it?"), or when the child spontaneously corrects a stutter. However, these responses are not considered essential in the program.

Measurement of Stuttering

The *speech pathologist* measures percent syllables stuttered (%SS) at the start of each clinic visit, using a dual-button electronic counter. This measure is based on a

conversational speech sample that typically is a minimum of 300 syllables or 10 minutes duration.

The *parent* is trained to rate the severity of the child's stuttering. The ratings are done with a 10-point severity rating (SR) scale, where 1= "no stuttering", 2 = "extremely mild stuttering", and 10 = "extremely severe stuttering." That is, each day the parent assigns a SR score from 1-10 for the child's stuttering for that day, either for the whole day or for a particular speaking situation that occurred on that day, such as at dinner time. When individual speaking situations are used, a different situation is selected for each day of the week. For example, dinner time is selected for Mondays, bath time is selected for Tuesdays, and so on.

Parents start to learn how to make severity ratings during the first weekly clinic visit. Agreement between the parent and the speech pathologist is established in the clinic. After making the %SS measure, the speech pathologist also gives a SR score for the speech sample and asks the parent to do the same. The speech pathologist and the parent compare their scores and discuss any discrepancies. Comparing and discussing SRs in this way continues at each clinic visit until there is reasonable agreement between the parent's and the speech pathologist's SR scores. "Reasonable agreement" is when the parent's and speech pathologist's scores differ by no more than one scale value.

Weekly Clinic Visits

During the first stage of the program, the parent and child attend the speech clinic once a week for between 45 minutes and one hour. Procedures for these visits are described in PART THREE.

Treatment in Structured and Unstructured Conversations

Throughout the program the parent conducts treatment in the child's everyday environment. The treatment consists of parental verbal contingencies (see above), which are given during conversations with the child. At the start of Stage 1, treatment is given during structured conversations of 10-15 minutes duration. During these conversations the interchange is typically structured by the parent so that the child stutters only

occasionally. If, in a highly unusual case, a child is not able to produce consistent stutterfree speech during appropriately structured conversations, the Lidcombe Program may not be the appropriate treatment in the first instance.

Treatment conversations occur at least once, and sometimes more often if appropriate, each day. Once the speech pathologist observes that the parent is giving contingencies safely and correctly, the parent can give them during unstructured conversations, at various times during the day. Treatment is withdrawn progressively during Stage 2.

Programmed Maintenance

The performance-contingent maintenance phase, Stage 2, is designed to maintain the low level of stuttering that is achieved during Stage 1. The child and the parent attend the clinic less and less frequently, provided the child's stuttering remains at the agreed low level.

PART THREE PROCEDURES IN THE LIDCOMBE PROGRAM

This section describes the implementation of the essential features of the program.

Evaluation

Parents are asked to bring an audiotape recording of their child stuttering when they first visit the speech pathologist, in case the child is reticent or does not stutter in the clinic. The following occurs during this first visit.

- (1) The speech pathologist obtains information about the onset, nature and course of the child's stuttering, and the impact of the stuttering on the child and family.
- (2) The speech pathologist makes brief enquiries about the child's physical, linguistic and cognitive development, and the family environment. These are not explored in depth, unless the parent wishes to discuss them or there is a

possibility that stuttering treatment may conflict with other treatments, such as treatment for language delay. Environmental factors are addressed in more detail later in the program if they are thought to interfere with the child's progress through the program.

- (3) The speech pathologist makes a %SS measure in the clinic.
- (4) The speech pathologist decides if the child is stuttering.
- (5) If the speech pathologist and the parent agree that the child is stuttering, then the speech pathologist gives the parent information about stuttering, and the best time to begin intervention, including information about recovery without treatment. The information about the time to begin intervention is consistent with that provided in Chapter 4 of the book, "The Lidcombe Program of Early Stuttering Intervention: A Clinician's Guide."
- (6) The speech pathologist informs the parent about the Lidcombe Program and the parents' role in implementing it.
- (7) The speech pathologist and the parent decide either to postpone treatment and monitor the child's stuttering, or to commence treatment.

Stage 1

During Stage 1, the parent and child attend the speech clinic once a week. The following events would normally be expected to occur during a clinic visit:

- The speech pathologist measures %SS while the parent and/or speech pathologist converses with the child.
- The speech pathologist checks the parent's use of SR scale by asking the parent to give a SR score to the above conversation.
- The parent reports SR scores for each day of the previous week and the speech pathologist enters them and the %SS measure into the child's chart (examples of treatment charts are in the APPENDIX).

- The parent and speech pathologist compare SR scores for the previous week and clinic sample.
- %SS and SR scores are used as a focus for an in-depth discussion of clinical progress during the previous week.
- The parent demonstrates treatment procedures used during the previous week.
- The parent and speech pathologist discuss in-depth the treatment procedures used during the previous week.
- The speech pathologist and parent discuss changes to procedures for the coming week.
- The speech pathologist demonstrates those changes to procedures.
- The speech pathologist teaches the parent to do the changed procedures.
- The speech pathologist summarises what is expected for the coming week.
- The speech pathologist invites the parent to ask questions or raise issues of concern. Problem-solving is undertaken when required.

Early in the program, the treatment—parental verbal contingencies—is given for 10-15 minutes each day during structured treatment conversations. The parent and child typically sit down in a quiet place and engage in some interactive activity. The activity is structured so that the contingencies can be delivered as described in *Parental Verbal Contingencies* in PART TWO. The speech pathologist subsequently instructs the parent how to give verbal contingencies in unstructured treatment conversations at various times of the day. The parent typically starts to do this when (1) the parent demonstrates safe and correct delivery of verbal contingencies in structured conversations, and (2) the parent's SRs across the day are generally low and/or stuttering severity is low during periods of the day. By the end of Stage 1, treatment usually occurs entirely during unstructured treatment conversations.

When stuttering reaches a very low level, the parent and child move to Stage 2 of the program. The criteria for progressing to Stage 2 are: (1) %SS less than 1.0 within the

clinic, and (2) SR scores for the previous week of 1 or 2, with at least four of these being 1. These criteria need to be achieved for three consecutive clinic visits.

Stage 2

During Stage 2 of the Lidcombe Program the parent progressively reduces the frequency of verbal contingencies, and the child and parent attend the clinic less and less frequently, providing that the child's stuttering remains at the low levels described above. The first two clinic visits are 2 weeks apart, the next two are 4 weeks apart, then two are 8 weeks apart, and the final two visits are 16 weeks apart. There is some flexibility in these schedules (see PART FOUR). If criterion speech performance is met at a visit, the child progresses to the next scheduled visit. Whether or not criterion speech performance is met is determined in the same way as in Stage 1: The parent presents SR scores for each day from the previous week, and the speech pathologist makes a %SS measure in the clinic. In the event of criterion speech performance not being met at any scheduled visit during Stage 2, the speech pathologist decides either to stall progress through the sequence or to return to an earlier stage of the sequence. The speech pathologist may also decide to return the child to Stage 1.

PART FOUR INDIVIDUALISING THE LIDCOMBE PROGRAM

While the components described in PART TWO are essential to the Lidcombe Program, it is important that their implementation be individualised for each child and family. The speech pathologist and the parent adopt a problem-solving approach to ensure that the program is implemented in an optimum fashion and that it remains a positive and enjoyable experience for the child. The following few examples illustrate ways in which the program might be individualised for children and their families:

Age of the Child

The age and cognitive and linguistic development of the child will determine (1) the type of activity engaged in during structured treatment conversations, and (2) the duration

of the treatment conversation. For example, it may be more appropriate with a very young child to engage in general conversation during a treatment conversation, while describing pictures or retelling an event may be more appropriate with an older child. Shorter treatment conversations may be more appropriate for the younger child. The child's age may also influence the type of contingencies used, because it is essential that (1) the child perceives the contingencies for stutter-free speech as "rewarding" and (2) the verbal contingencies for stuttering are not perceived by the child as unpleasant or punitive. It may be appropriate for the parent to discuss with the child what verbal contingencies the child prefers.

Stuttering Severity

When stuttering is severe, the parent structures activities and conversations during treatment conversations so that the child produces sufficient stutter-free utterances to maintain the principle described in *Parental Verbal Contingencies* in PART TWO, *page 4;* namely, that most of the parent's verbal contingencies are for stutter-free speech rather than for stuttering. To this end, the parent can organise activities so that the child produces shorter utterances which are more likely to be free of stuttering. For example, the parent may use simple stimulus cards requiring short verbal responses rather than engage the child in free-flowing conversation. When the child responds to this procedure with longer intervals of stutter-free speech, more normal conversation is resumed.

The schedule of visits for Stage 2 may also be altered for individual cases. For example the frequency of visits may be reduced when it is clear that the child no longer stutters *at all* in *any* situation. However, visits must be maintained over the time span stipulated for Stage 2, even though the frequency of visits may be reduced.

Basic Behaviour

Giving verbal contingencies effectively may be difficult with extremely talkative children, and particular care may be needed when structuring activities and conversations in such cases. In (rare) cases of recalcitrant children, compliance with the interactive activities may need to be increased before treatment can be given effectively.

Personality of the Child and the Parent

Parental verbal contingencies for stuttering may be withheld altogether at the start of Stage 1 if a child is not happy having attention drawn to stutter-free speech, or to stuttering. A parent who feels generally uncomfortable drawing attention to any aspect of a child's speech may need particular assistance from the clinician.

Family Circumstances

Parents may need help with time management if they have other young children or if both parents work long hours outside the home.

APPENDIX

EXAMPLES OF STUTTERING MEASUREMENT CHARTS FOR STAGE 1 OF THE LIDCOMBE PROGRAM

