

## **Treatment Programs for Children with Selective Mutism**

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Selective mutism (SM) is defined in DSM-IV-TR as a persistent failure to speak in social situations in which there is an expectation for speaking (e.g., at school) despite speaking in other situations and being able to comprehend language (APA, 2000). Children with SM generally speak freely and comfortably with immediate family members within the family home. How much they continue to speak with family members and others outside of the home appears to vary according to the presence of other factors that increase or lower the child's anxiety (e.g., non family members, unfamiliar environments). These children often fail to speak with their teachers and classmates at school, and in recreational and community settings.

Whilst earlier studies suggest the disorder is relatively rare, affecting approximately 0.01% of the population (Cline & Baldwin, 2004), recent methodologically improved school-based prevalence studies reveal substantially higher rates that range between 0.7 and 1.9% of children in the first three years of school (Bergman, Piacentini, & McCracken, 2002; Elizur & Perednik, 2003). SM typically presents around three years of age (Black & Uhde, 1995; Dummit et al., 1997). A proportion of children have a transient form of mutism that tends to remit without treatment (Bergman et al., 2002), however, for other children the failure to speak can persist into adolescence or early adulthood. Treatment is often sought once the child has failed to speak for four to five years, at which time the child may experience secondary social and emotional problems and treatment is much more difficult (Pionek Stone, Kratochwill, Sladeczek, & Serlin, 2002). Of those children who do begin to speak without treatment, a proportion continue to experience clinically significant levels of anxiety as well as social, academic, and communication deficits (Bergman et al., 2002).

Although SM is categorised in DSM-IV-TR under “Other Disorders of Infancy, Childhood and Adolescence”, there is strong empirical evidence that it is an anxiety disorder (Anstendig, 1999; Vecchio & Kearney, 2005). For example, almost all

children with SM meet diagnostic criteria for social phobia and about half meet criteria for an additional anxiety disorder (Black & Uhde, 1995; Dummit et al., 1997; Vecchio & Kearney, 2005). Further support for SM being an anxiety disorder is the higher incidence of social phobia and avoidant personality traits in first-degree relatives (Black & Uhde, 1995) and the positive response of SM to SSRI's that are known to have anxiolytic properties (Black & Uhde, 1994; Dummit, Klein, Tancer, Asche, & Martin, 1996).

Until the late 1990s, there was a paucity of research on treatments for SM, with the majority being single-case research designs and case studies. There were only a handful of studies with more than 20 cases, very few between-groups designs, and no independent replication studies (Cline & Baldwin, 2004). In the only meta-analysis to date (Pionek Stone et al., 2002) the existing treatments for SM, which were predominately behavioural, were shown to be more effective than no treatment. Applying these interventions in clinical practice was difficult as the existing treatment studies provided brief descriptions of interventions and the process of treatment was not clearly delineated. No manualised treatment programmes were available to guide treatment. As a result of these limitations, a structured programme (described below) was developed by the second author to provide clear guidelines for the management and treatment of children with SM (Milic, 1999; 2005).

### **“I can talk. I do talk!”: A School-Based Cognitive Behavioural Treatment Programme**

The programme developed by Maria Milic is a cognitive-behavioural (CB) treatment that views SM as an anxiety-based disorder in which anxiety limits the child's ability to communicate. It was developed for children from four years of age. Within the programme, “talking” is defined as exchanging ideas by any appropriate means, including speech, whispering, sounds, gestures and writing. This broader definition places “talking” on a continuum such that most children with SM can be perceived to “talk” in settings where others describe them as mute. The central goal of treatment is to help the child feel relaxed and confident in using more ways of “talking”/communicating, with the final stage being use of speech in all situations where the child needs or wants to speak.

The programme is conducted over a twelve-month period at the child's school (or preschool) and consists of four primary components:

- (a) training sessions, in which the parent(s) and teacher are trained by the clinician in CB strategies for anxiety and SM;
- (b) behavioural strategies for the school staff;
- (c) trice-weekly play sessions (for approximately six months); and
- (d) generalisation and maintenance of "talking".

If other difficulties are identified that are not part of SM or social anxiety (e.g., school refusal, parental anxiety disorder, family disharmony), a referral is made for concurrent outpatient treatment.

(a) **Training sessions:** Ten to twelve training sessions are attended by the parent(s), classroom teacher and other relevant school personnel. One session is held approximately every four weeks of the school term. The content of the sessions (described below) is modelled on well-researched family orientated treatment programmes for children with anxiety disorders (Barrett, Lowry-Webster, & Holmes, 1999; Rapee, 2003).

Session 1: Provide rationale. Describe CB model for anxiety. Introduce graded exposure. Establish play sessions. Implement basic behavioural strategies.

Session 2: Psychoeducation about, and management of, physiological symptoms of anxiety (slow breathing, exercise, distraction techniques e.g., play).  
Review graded exposure. Establish reward programme.

Session 3: Psychoeducation about relationship between thoughts and feelings, and common patterns of unhelpful thinking. Review graded exposure and reward programme.

Session 4: Train adults to help the child identify and challenge unhelpful self-talk.  
Review graded exposure and reward programme.

Sessions 5 to 12: Review graded exposure, focusing increasingly on generalising gains from play sessions to classroom, playground, community and social events. Continue practising cognitive challenging. Discussions around pacing exposure, normal patterns of recovery, setbacks, expectations, and helping the child manage new situations and change. Monitor social functioning and implement skills training (if relevant).

A significant part of each training session is helping the adults to break down the exposure tasks for “talking” into achievable steps and plan the sequence of steps to be practised over the following four weeks. The continuum of communication is divided into five stages:

Stage 1: Nonverbal communication.

Stage 2: Indirect verbal communication which involves video/audio tapes or computer recordings of the child speaking.

Stage 3: Whispering through a ‘safe’ person (e.g., to a parent in the teacher’s presence)

Stage 4: Speaking freely with the teacher.

Stage 5: Speaking freely with children and adults at school and in the community.

Within each stage there is an extensive hierarchy of steps. It is expected that the child will take small steps and practise each step over a number of occasions.

(b) **Basic behavioural strategies:** Guidelines were developed to help the adults to encourage the child’s communication in the least threatening manner. They include:

1. Expect the child to communicate for themselves in whatever way they find least anxiety-provoking.
2. Give the child opportunities to communicate by adopting a style of questioning (e.g., closed questions or choices) that allows the child to respond.
3. Give the child adequate time to communicate as their anxiety frequently results in hesitancy.
4. Show interest in, and praise the *content* of the child’s responses, rather than the fact that they have communicated.
5. When the child’s voice is heard for the first time, act in a “matter of fact way” without surprise or celebration.

Strategies are also implemented to increase the child’s interaction with peers at, and outside of, school, and to include the child in all aspects of school life.

(c) **Play sessions:** The child begins to face their fear of using their voice in play sessions with their parent and classroom teacher. Prior to the session the parents negotiate with the child what steps will be practised, and the teacher and parent together implement an individualised reward programme. Ideally, the play sessions are held three times a week for 20 minutes in a closed room. One parent attends the

play sessions to support the child to practise using modes of “talking” that are progressively more anxiety-provoking. Although children with SM are more likely to start speaking with a child than an adult (Black & Uhde, 1995), the classroom teacher is used because they are present in the majority of school situations with the child and in a position to be able to meet the child’s needs. The play sessions provide the child with a space to learn to feel secure in their teacher’s presence and to learn that their teacher can be a reliable support. Once the child can speak confidently with the teacher, the teacher can help them generalise their speaking to the school environment.

For Stage 1 (nonverbal communication), the play sessions are structured as 20 minutes of free play. The child chooses a game or activity and decides how the game will be played. For the first two weeks the only expectation on the child is to enjoy playing. This allows the child time to become familiar and comfortable with the room and their teacher. From the third week the child begins to work on the steps in Stage 1 of the hierarchy. During the child-led free play, the adults chat, make statements, and ask questions about the activity. Initially, the parent asks more questions than the teacher and both adults ask the child one question for every five statements to prevent the child from becoming overwhelmed. Strategies to manage the child’s hesitancy and failure to respond to questions are discussed to ensure that the child is not pressured to respond in any way. Strategies include acknowledging the anxiety, simplifying questions, and returning to the question later.

From Stage 2 (Indirect Verbal Communication) the child practises the exposure task for the first ten minutes with the final ten minutes devoted to child-directed free play. Ending the session with play provides the child with a strategy to calm their anxiety and to end their interaction with their teacher in a positive way, thus challenging any unhelpful thoughts they may have about the exposure task.

**(d) Generalisation and maintenance of “talking”:** Once the child is able to speak to their teacher during the play sessions, the teacher supports the child to practise talking with them in the classroom, and gradually use their voice with classmates and other adults. The parent helps the child to generalise speaking to the playground and to

various community settings, such as shopping centres, extracurricular activities, friends' houses, and in the home with visitors.

### **Comparisons between resources and treatment programmes for selective mutism**

A number of resource manuals and structured treatment programmes emerged whilst the “I can talk. I do talk!” programme was being developed. These programmes, and their main differences, are outlined in Table 1.

Table 1. Differences between resources and programmes for selective mutism.

Programme/resource	Cognitive component	Adult responsible for school exposure programme	Number of stages of communication
Boggs (2005)	Yes	Not specified, possibly clinician	Not specified.
Fung et al. (2000) Kenny et al. (2000)	Yes	Parent	13
Goetze Kervatt (1999, 2004)	No	School personnel	Not specified, 5 stages described.
Johnson & Wintgens (2001)	No	Clinician	10
McHolm et al. (2005)	No	Parent	11
Milic (1999, 2005)	Yes	Clinician	5
Shipon-Blum (2003a;b)	Yes	Not specified, possibly clinician	5

There are a number of similarities between these programmes. All view SM as being an anxiety-based disorder and underscore a collaborative approach between parents, schools and professionals. The main goal of the interventions is for the child to gradually face their fear of speaking without being pressured to speak. They consider lack of speech to be the first stage of a continuum of communication, with speaking being a later, more anxiety-provoking, stage. Common components of the programmes include psychoeducation about anxiety, changes to the school environment to make it less anxiety-provoking, and other behavioural techniques such as systematic desensitisation, stimulus fading, shaping, and contingency management. Adults are encouraged to assess which situations the child finds anxiety-provoking and develop an individualised graded hierarchy. Generalisation of speaking to all children and adults is considered unlikely to occur without specific intervention.

### **Preliminary Results From the “I can talk. I do talk!” Programme**

The programme was offered by the second author as a solely school-based intervention from 2002. The progress of children who participated in this treatment between January 2002 and June 2005 will be qualitatively reviewed here. Fifteen children diagnosed with SM were offered treatment within that period. Four of those fifteen are not included; two did not complete the programme and two were engaged in concurrent individual and family outpatient treatment in their local area. Thus, the progress of eleven children (5 females, 6 males) was reviewed.

Age (mean  $\pm$  SD) at referral was  $5.8 \pm 1.28$  years (range: 4.2 to 8.3 years) with the children having failed to speak for  $3.3 \pm 0.8$  years (range: 2.2 to 4 years). The children commenced treatment at a younger age than the literature suggests with four children commencing treatment in preschool. English was not the first language of seven of the children. This is consistent with the higher prevalence of SM in children of parents of non-English speaking background (Elizur & Perednik, 2003). A family clinical interview revealed a high prevalence of comorbid anxiety disorders (seven children had Social Phobia, three had Separation Anxiety Disorder, and two had Generalised Anxiety Disorder). Furthermore, ten (91%) of the eleven mothers and four (36%) fathers identified clinically significant anxiety.

The average number (mean  $\pm$  SD) of training sessions was  $8.9 \pm 4.5$  (range: 2 to 18 sessions), with a treatment duration of  $16.5 \pm 8.47$  months (range 4 to 32 months), which was increased by school holidays and the change of the school year. There were two children who took considerable time to complete the programme and required additional training sessions. One of these children commenced the treatment in preschool and was making good progress but experienced a set back with the transition to school. The second child's parents had clinical levels of anxiety but did not wish to commence outpatient therapy until the end of the school programme.

At the beginning of treatment, some of the children could speak to their parents on the school grounds. No children spoke comfortably to their teacher although two children could whisper to their teacher. The programme successfully helped all children begin to speak freely with their parents, adults, and classmates at school (see Table 2). Three

of the children continued to find speaking in front of an audience difficult. In contrast, two of the children talked on the microphone at the school assembly. Ten children were also speaking freely in all community and social settings.

Table 2: Number of children speaking freely in various school situations pre- and post-treatment

	Pre-treatment (n=11)	Post-treatment (n=11)
Speaks freely, with classroom teacher	0	11
Speaks freely, with other adults at school	0	11
Speaks freely, with friends at school	1	11
Speaks freely, with classmates	0	11
Speaks freely, in front of the class	0	8

### **Case example of a clinic- and school-based adaptation of the “I can talk. I do talk!” programme**

The “I can talk, I do talk!” programme was adapted by the first author to use in her privately-based selective mutism clinic, as illustrated in the following case example.

#### **Background information**

Sally, a six-year-old girl, was referred by her school counsellor due to concerns that she had entered her second year of school without yet speaking at school and was becoming increasingly isolated in the playground. Sally could talk to her parents in any setting except school or situations in which adults or children outside of her extended family could see or hear her speaking. She could talk freely with her extended family, but only responded nonverbally to family friends, neighbours, and strangers. Whenever her parents had raised the issue of her difficulty talking, Sally usually replied with “I like to talk, but can’t”. Parents and school staff identified no other academic, social, or psychological concerns.

Sally was born in Sri Lanka and moved to Australia when she was 4 ½ years old. English was the primary language spoken in the home, with Tamil being a secondary language. Sally’s early development was unremarkable. When Sally was three years old her parents noticed that she only spoke with familiar members of the extended family. Sally attended preschool in Sri Lanka for one year and daycare in Australia for three months, and did not speak at either.

## Overview of intervention

The intervention consisted of three primary components:

- i) Clinic sessions with Sally and her mother to provide psychoeducation about anxiety and SM, demonstrate the play sessions, and work on an exposure hierarchy for community situations. Greater emphasis was given to teaching Sally about anxiety compared to the school-based version, using a variety of resources (e.g., Barrett, 2004; Rapee, 2003). Eighteen sessions were held over a nine-month period. The family's finances limited the frequency, length (reduced from 60 to 30 minutes after the third session), and termination of these sessions.
- ii) School training sessions as per the "I can talk. I do talk!" programme, except that they were less frequent (four sessions over seven months) and with less attention to the community-based component as this was addressed in the clinic.
- iii) School play sessions, with Sally, her mother, and the classroom teacher.

The various components of the programme and Sally's progress are presented in Table 3.

Table 3. Sally's progress and key gains with the treatment programme.

Month	Programme components	Sally's progress and key gains
Assessment	Used 'talking map' (Johnson & Wintgens, 2001) to communicate places at school/community where Sally could talk. Conducted play session to build rapport.	Prior to the session Sally instructed her parents to "tell her (the clinician) that I'm shy". Visibly anxious throughout interview. Responded to most questions with slight head movements. Could not whisper to parents with clinician's back turned, but spoke when clinician left the room.
1	Commenced clinic nonverbal games (e.g., modified versions of 'I spy', 'Simon Says') and recordings of Sally's voice.	Keen to engage in activities. Played recording stating "To Dr Elizabeth, I'm looking forward to seeing you and playing games with you". Noticeably anxious during playback (wringing hands, looking downwards).
2	Established communication hierarchy and reward system. Taught progressive muscle relaxation and deep breathing. Conducted first school training session.	Keen to practise steps on hierarchy and earn points on chart. Disliked experience of relaxing and did not practise. Recorded a reading on tape for classroom teacher and thereafter brought similar recordings to clinic sessions.
3	Psychoeducation about anxiety.	Demonstrated good understanding of anxiety. Made loud

	Continued clinic play sessions with nonverbal games and tape-recordings. Started to elicit speech in clinic play sessions. Started school play sessions.	sounds and large movements with hands/arms, took more lead in games. Smiling whilst playing recordings. Answered clinician's questions by whispering to mother whilst clinician turned around with fingers in her ears, making noises. Laughed out loud. Whispered "How many stickers will I get?" to her mother.
4	Continued play sessions, recordings, psychoeducation.	More confident nonverbal behaviour in classroom (smiling, eye contact, requesting help by putting up hand). Playing with children in playground when initiated by others. Speaking to best friend, "Amy", at home using structured tasks (e.g., singing songs, reading). Speaking to mother in playground. Talking to mother when passing people on way to school.
5		Whispering answers to mother in clinic/school play sessions before clinician/teacher turned around or put fingers in ears.
6		Unstructured, spontaneous speaking (few words) to Amy at home. Spontaneous, unstructured voice recordings (e.g., describing swimming lessons). Louder whispering in play sessions such that clinician/teacher could respond directly to Sally (Sally looked surprised/anxious but continued at same volume).
7	Amy (friend) joined school play sessions. Cognitive strategies taught in clinic.	Talking spontaneously (short sentences) at Amy's house in front of Amy's family. Whispering directly to teacher in play sessions. Whispered to Amy in class. Initiating play in playground.
8	Replaced Sally's mother/teacher in school play sessions with boy in Sally's class, "Mark", and teacher's aide.	Spoke to clinician/teacher in low voice using structured tasks (e.g., reading). Said "goodbye" to clinician. Whispering to Mark and teacher's aide in play sessions.
9+	Clinic sessions ended. Teacher's aide continued play sessions. Teacher helped generalise talking at school.	Spoke out loud in class during structured task (i.e., spelling game).

Sally's progress was followed up six months after the clinic sessions had stopped. The teacher's aide was continuing to conduct play sessions with Sally and help generalise Sally's speaking to all school situations. Sally was speaking to almost every child or teacher that came into her class. She was regularly raising her hand to answer questions, participating in class discussions (using one sentence), presenting news to the class (using multiple sentences), and verbally participating in peer support with older children. Sally was depending less on Amy and was playing with other

children in the playground. In the community, Sally was talking freely to her mother. When there were visitors to the house she answered questions from adults and talked spontaneously to children but not adults. In church she answered questions from adults but was not talking spontaneously to anyone in this environment.

### **Outstanding issues**

Treatment programmes for children with SM appear to be heading in the right direction with progressively more focus on the anxiety underlying the mutism and greater involvement of the school. However, there is a paucity of research on this topic and many questions that are as yet unanswered. For example, the relative importance of specific treatment components is still unclear, such as the optimal combination of school-, clinic-, and community-based components, the importance of adding a cognitive component to behavioural treatments, the role of medications, and the optimal frequency and number of sessions. Now that manualised programmes are available that differ with respect to the above factors, randomised controlled treatment studies need to be conducted. Such studies are understandably challenging, however, given the difficulty recruiting subjects (due to the low incidence and poor recognition of the disorder) and the slow response to treatment. However, short research trials may be possible if they adopt outcome measures such as the number of ‘stages of communication’ through which the child has progressed rather than whether the child is speaking. Another important issue is to determine the best time to intervene. Because interventions at a younger age have more positive outcomes (Pionek Stone et al., 2002) it may be more efficacious to implement treatments in the preschool. Thus, treatments may need to be modified to suit the preschool and the cognitive capabilities of this age group. The play sessions in the “I can talk. I do talk!” programme appear particularly suitable for this purpose. If early intervention is indeed important, then another issue to address is how to facilitate early detection of SM and referral to appropriate services.

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