The ‘Smart Intervention Strategy’ for school-aged children who stutter.

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My position in the world of stuttering:

I have been practicing as a speech language pathologist since 1981. My highest ambition in my profession has always been to ‘make a difference’. Shapiro (1999) notes that ‘lightning does not strike twice’ however ‘magic in fluency intervention strikes at least three times’.
The first time magic struck, just as in David Shapiro’s case, was when I stopped focusing on myself as a clinician and shifted my attention on my clients. This made sessions more rewarding and satisfying.
2nd magic!

Magic strikes the second time when clients start experiencing the freedom to use fluent speech. I remember clearly the spark in their eyes as they expressed themselves fluently.
The third time magic struck was when I received a letter of thanks from a sixteen-year-old client who stuttered. She had been given a copy of ‘A Way through the Forest: One Boy’s Story with a Happy Ending’, by D. A. Shapiro (1995) and was inspired to reflect on her feelings.

She motivated me to continue my studies and specialize on fluency. Her letter was another breakthrough in my educational journey:
Thank you for listening while I was struggling through my un-cemented words.

Thank you for understanding me when bad things happened to my good sentences.

Thank you for giving me the opportunity to share my feelings rather than demanding that I follow a program that sucks.

Thank you for talking to me in words that I understood, rather than sounding professional and pompous... and speaking crap.

Thank you for not being angry when I did my best, but couldn’t succeed.
Thank you for being so interested in my views and for reminding me of all the things that you thought I could do so well.

Thank you for not reminding me of what I already knew I could not do.

Thank you for knowing that I always did my best.

Thank you for helping my parents and teachers understand stuttering.

Thank you for helping my brother realize that teasing can be frustrating to me. Thank you for changing my life.

I am proud of who I am.

(From a client’s letter following therapy)
WHAT is SUCCESS in Stuttering Therapy?
Negative emotions associated with stuttering increase the difficulty in physically managing speech.

(Murphy, 1999)

As the disorder develops, negative reactions can become a significant concern, at least for some children who stutter.

(Vanrychkeghem, Hylebos, Brutten, & Peleman, 2001).
Research has shown that children who stutter view speaking more negatively and experience more negative speech-related emotions than do non-stuttering peers (De Nil & Brutten, 1991).

Practical strategies for helping children who stutter change their feelings and beliefs are available but many speech pathologists appear uncomfortable targeting such goals (Murphy, Scott Yaruss & Quesal, 2007; Cooper & Cooper, 1985, 1996).
What is severity?

**Behavioural side:**
- frequency,
- types,
- avoidance of stuttering

**Emotional side:**
- feelings (anxiety, shame, guilt, frustration).
- attitudes towards stuttering (bad, terrible, sign of weakness, failure).
Feelings and Thinking!

You are locked in a room. You desperately want to get out. You want freedom. Your feelings are very strong. Which is the more useful, this very strong feeling or a key to the lock?

Feelings without the means to carry them out are not much good. At the same time, the key without the desire to leave the room is also not much good!

We need feelings and thinking. Feeling is no substitute for thinking. Thinking without feeling is aimless.
Perception and Logic:

‘In our obsession with logic we have never taught perception’ argues de Bono (2005).

Although in ordinary life the perception aspect is more important,

‘much attention has been paid in the past to the logic of thinking’ (de Bono, 1994).
‘Think Smart, Feel Smart’ Programme

- 10 group sessions
- Participation of 15 children aged 8 years- 12 years
- 90 minutes duration

3 Main Components:
- *Thinking Skill Tool* based on CoRT 1 (de Bono, 1986)
- *Desensitization exercise*
The Direct Attention Thinking Tools:

- are simple, practical, clear and focused and

- broaden perception so that in any thinking situation we can see beyond the obvious, immediate and egocentric.
Thinking Skills Tools based on CoRT 1
(de Bono, 1986)

1. PMI  Plus, Minus, Interesting
2. OPV  Other People’s Views
3. FIP  First Important Priorites
4. APC  Alternatives, Possibilities, Choices
5. AGO  Aims, Goals, Objectives
6. CAF  Consider All Factors
7. C&S  Consequence & Sequel
8. Rules
9. Decisions
10. Planning
Desensitization Exercises:

- Telephone-a-mate activity
- Presentation on favourite topic
- Reading in front of group.
Aim of Study:

To explore shifts in the attitudes, feelings and frequency of dysfluency in school age children who stutter following a ten week thinking skills programme.
Research Questions:

1. Are there variations in the CAT (Communication Attitude Test) \((Brutten, 2004a)\) scores of stuttering children following a thinking skills programme and stuttering children not following the programme?

2. Are there variations in the SSC-ER (Speech Situation Checklist- Emotional Reaction) \((Brutten, 2004b)\) scores of stuttering children following a thinking skills programme and stuttering children not following the programme?
Research Questions- (cont.)

3. Are there changes in the frequency of dysfluency in a reading task in stuttering children following a thinking skills programme and stuttering children not following the programme?

4. Are there changes in the personal constructs of stuttering children following a thinking skills programme as compared to stuttering children not following the programme?

5. Do parents notice changes in attitudes of children following a thinking skills programme?
Participants:

- 30 school age children who stutter
- Ages between 8 years and 12 years
- ‘2 young consultants’ observers.
Criteria:

- Receptive and expressive abilities no more than 1 year below chronological age level.
- Diagnosed as child who stutters at least 12 months prior to participation in study.
Data collection:

- Scores on the **Communication Attitude Scale (CAT)**
- Scores on the **Speech Situation Checklist-Emotional Reaction (SSC-ER)**
- Dysfluency measures on a reading task
- Self-characterisation sketches
- Post programme parent questionnaire
- Reflexive diary – participants/researcher
Communication Attitude Test (Brutten, 2004a)
(35 items)

SAMPLE:

1. I don’t mind asking the teacher a question in class
   True     False
2. I find it easy to talk to almost everyone
   True     False
3. Telling someone my name is hard for me
   True     False
Speech Situation Checklist - Emotional Reaction
(Brutten, 2004b) –
(56 items)

SAMPLE:
How do you **FEEL** when you:

1. Talk with a new kid in school
   - Not afraid
   - A little afraid
   - More than a little afraid
   - Much afraid
   - Very much afraid

2. talk during dinner
   - Not afraid
   - A little afraid
   - More than a little afraid
   - Much afraid
   - Very much afraid
Tell me what sort of boy or girl .... is. Tell me about yourself as if you were being described by an imaginary friend who knows you and likes you and above all understands you very well. This person would be able to say what your character is and everything about you. Perhaps you could begin with: (your name) is .... and say something important about yourself. Try and fill the page.

Data analysis:

Quantitative analysis of:
- Within pre-post and between pre- and post scores on CAT
- Within pre-post and between pre- and post scores on SSC-ER
- Dysfluency frequency in reading task
- Number of words in self-character sketch

Qualitative analysis of:
- CAT items
- SSC-ER items
- Self-characterisation sketches
- Parent feedback
- Reflexive diary – participants/ researcher.
Data Analysis:

- Two-way analysis of variance (ANOVA)
- T-tests
A more positive attitude to communication with a significantly lower score ($p<0.05$) on the Communication Attitude Test (CAT) was recorded by the children who stutter in the experimental group.
CAT scores for Experimental Group pre-programme and post-programme
Mean CAT scores of experimental group and control group-pre- and post-programme
Speech Situation Checklist (SSC-ER)

No significant interaction effect ($p>0.05$) was recorded in the Speech Situation Checklist-Emotional reaction (SSC-ER) pre- and post-programme of the children in the experimental group and the control group.
Mean SSC-ER scores of experimental group and control group-pre- and post-programme

SSC-ER Scores

Experimental Group

Control Group

Pre-programme

Post-programme
No significant interaction effect \((p>0.05)\) was recorded in the frequency of dysfluency \((\text{reading task})\) pre- and post-programme of the children in the experimental group and the control group.

**Frequency of dysfluency (reading task)**
Mean frequency of dysfluency (reading) scores of experimental group and control group-pre- and post-programme

% Mean dysfluency Score

Pre-programme
Post-programme

Experimental Group
Control Group
No significant interaction effect ($p > 0.05$) was recorded in the number of words in self-character sketches, pre- and post-programme, of the children in the experimental group and the control group.
Mean number of words in self-character sketch of experimental group and control group-pre- and post-programme
Other findings:

Elaboration, with increased self-construing statements, was noted in the post-programme self-character sketches of the majority of children who stutter following the thinking skills programme.
<table>
<thead>
<tr>
<th>Pre-program</th>
<th>Post-Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>A1</td>
</tr>
<tr>
<td>Views of others score: 2</td>
<td>Views of others score: 1.5</td>
</tr>
<tr>
<td>Personal history and future score: -</td>
<td>Personal history and future score: -</td>
</tr>
<tr>
<td>Psychological cause and effect score: 2</td>
<td>Psychological cause and effect score: .5</td>
</tr>
<tr>
<td>Psychological statements score: 1</td>
<td>Psychological statements score: 5.5</td>
</tr>
<tr>
<td>Contradictions score: -</td>
<td>Contradictions score: -</td>
</tr>
<tr>
<td>Insight score: 1</td>
<td>Insight score: 1</td>
</tr>
<tr>
<td><strong>Specific comments:</strong></td>
<td><strong>Specific comments:</strong></td>
</tr>
<tr>
<td>Views of others: ‘very nice’, ‘very funny’.</td>
<td>Views of others: ‘her mother loves her a lot’</td>
</tr>
<tr>
<td>Psychological cause and effect: ‘I like her cause we are friends and sometimes we play’, ‘I love Y because she is my best friend’</td>
<td>Psychological cause and effect: ‘when I go to her house her mother brings us some appetizers to eat’</td>
</tr>
<tr>
<td>Psychological statement: ‘sometimes she comes to our house’.</td>
<td>Psychological statements: ‘very good at school’, ‘knows how to sing, read and dance and other things’, ‘thing she likes most is drama’, ‘likes me a lot’, ‘likes to play hide and seek and catch’</td>
</tr>
<tr>
<td></td>
<td>Insight: ‘What I have said today about Y is very interesting’</td>
</tr>
</tbody>
</table>
Feedback, from all contributing to this study, considered parental involvement to be an essential component in stuttering intervention.
Interesting comments from the ‘young consultants’:

- ‘parents should also have sessions like these so that they do not have to worry about us’.
- ‘I noted that when something new is introduced, such as when we watched the video, the children behaved perfectly’.
- ‘I just felt that one of the kids just did not want to be there’.
a) What Parents Want

Some parents of children who are participating in the programme were informally discussing their child’s progress. They noted their children’s enthusiasm to attend sessions. They also noted that the child is feeling more serene and confident. However, they wondered whether I was going to work directly on decreasing the frequency of stuttering in their children’s speech. It seems that parents’ perception of success is ‘decrease in dysfluency’ rather than ‘increase in confidence’.
Participant Reflexive Diary:

School was observed to bring positive feelings with comments like:

‘understood what I studied’ (A6),
‘came first in my English test’ (A3) and
‘did not have too much homework’ (A3).
THE SMART INTERVENTION STRATEGY (SIS) FOR SCHOOL-AGE CHILDREN WHO STUTTER
The Smart Intervention Strategy (SIS) for school-age children who stutter is based on the following rationale:

- Stuttering is a complex and multidimensional condition. This study supports Harrison’s ‘stuttering hexagon model’ whereby intervention needs to focus on all the interactive components: physiological responses, behaviours, perceptions, beliefs and intentions.
The Stuttering Hexagon. Note, From ‘How to Conquer Your Fears of Speaking Before People’ (p. 58) by J. Harrison, 2004. Reprinted with permission from the author.
Rationale for the Smart Intervention Strategy (SIS) (cont.)

- Parents are directly involved in the programme. This study supports Rustin’s (1987) and Baggart, Cook and Fry’s (2006) view that close cooperation with parents is considered important and essential.

- Children need to be motivated. Activities need to be fun. Children are prepared and motivated to attend sessions by using sports or other interesting and fun themes.
Thinking tools are a component of this strategy. This study indicated that CoRT Thinking tools can help children improve attitude towards communication. Tools are addressed to both parents and children.

Shaping fluency or modifying stuttering needs to be addressed together with skills in public speaking.
Rationale for the Smart Intervention Strategy (SIS) (cont.)

- **Desensitization exercises aimed directly at feelings. This study showed that exercises need to focus directly on the specific feared situations of each individual.**

- **Speaking skills need to be generalized in the home, school and community situation. The skills need to be supported by the parents at home and teachers at school.**
The Smart Intervention Strategy (SIS) for school-age children who stutter consists of the following components:

Parents and child:
Both parents and children are involved in the intervention process. The children are first prepared and motivated to participate in the programme.
**Think Smart, Feel Smart:**

The CoRT (de Bono, 1986) thinking tools are offered to both parents and children. The activities and exercises could also be related to stuttering and specific speaking situations.
using CAF in stuttering intervention:

...the children are stuttering experts!

Read letters asking for their advice:

Dear Dr. Karl,
My name is Christian and I wish it wasn’t... my question is, Do you think I should change my name?

Dear Dr. Alessandro,
I am having trouble in school. Children are teasing me ...what should I do?

Dear Dr. Maria,
I like speaking to my grandparents but I have trouble speaking on the phone... Do you have any suggestions for me?

(Reitzes, 2006)
**Description for the Smart Intervention Strategy (SIS)**

**Cool Speech:**
Shaping fluency or modifying stuttering techniques are offered to the children in order to feel free to communicate. Public speaking skills are also offered to the children who stutter.

**Challenge the Dragons:**
Desensitization exercises focus directly on the specific speaking situation fears of the children.
Description for the Smart Intervention Strategy (SIS) (cont.)

- Into the ‘real’ world:
  The children are encouraged to use thinking tools and fluency techniques in specific situations at home, school and community. Parents at home and teachers at school are pillars of support for successful experiences.
Parents → School-age child who stutters

Think Smart, Feel Smart

Cool Speech

Challenge the Dragons

Into the 'real' world

CoRT Thinking Tools- (de Bono, 1986) - Perceptions Attitudes

Shaping Fluency or Modifying Stuttering Techniques, Public Speaking Skills

Desensitization Exercises- treat fear directly

Home, School Community
Acknowledgements

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References:


References:


Thank You for listening!

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