

# Conditioning the speech activity in early stuttering: A case report

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## Introduction

“Conditioning the speech activity” is the first therapy phase of a social cognitive behavior therapy for stuttering in very young children (Boey, 2010). It comprises modeling of facilitating speech behavior, which is characterized by a gradual pace, increased prosody, and frequent pausing. However, the treatment of very young children who stutter does not always have to consist of direct therapy. In cases where several factors point towards possible spontaneous recovery one could consider applying indirect therapy. Indirect therapy generally consists of informing the parents about stuttering, providing communication advices to the parents, and closely monitoring the child’s speech behavior. Examples of communication advices are lowering the speech rate, waiting longer before responding, using proper turn taking, letting the child finish his/her sentences himself/herself, not commenting on the child’s speech behavior, and adapting the language to the child’s level. As one can see, these recommendations resemble the intervention of conditioning the speech activity, with this difference that in the latter the speech behavior is modeled by the therapist for both parents and child. This way a more controllable situation is created.

## Aim

The aim of the present case study was to determine whether conditioning the speech activity was sufficient to decrease the stuttering characteristics in a very young boy diagnosed with early stuttering.



Figure 1. Image of the therapy setting

## Case report

C. was born three days late, after a stressful pregnancy. The developmental milestones were achieved at the appropriate time, and the boy even showed a rapid vocabulary acquisition. C. has a good general health. There are no indications of a familial predisposition to stuttering.

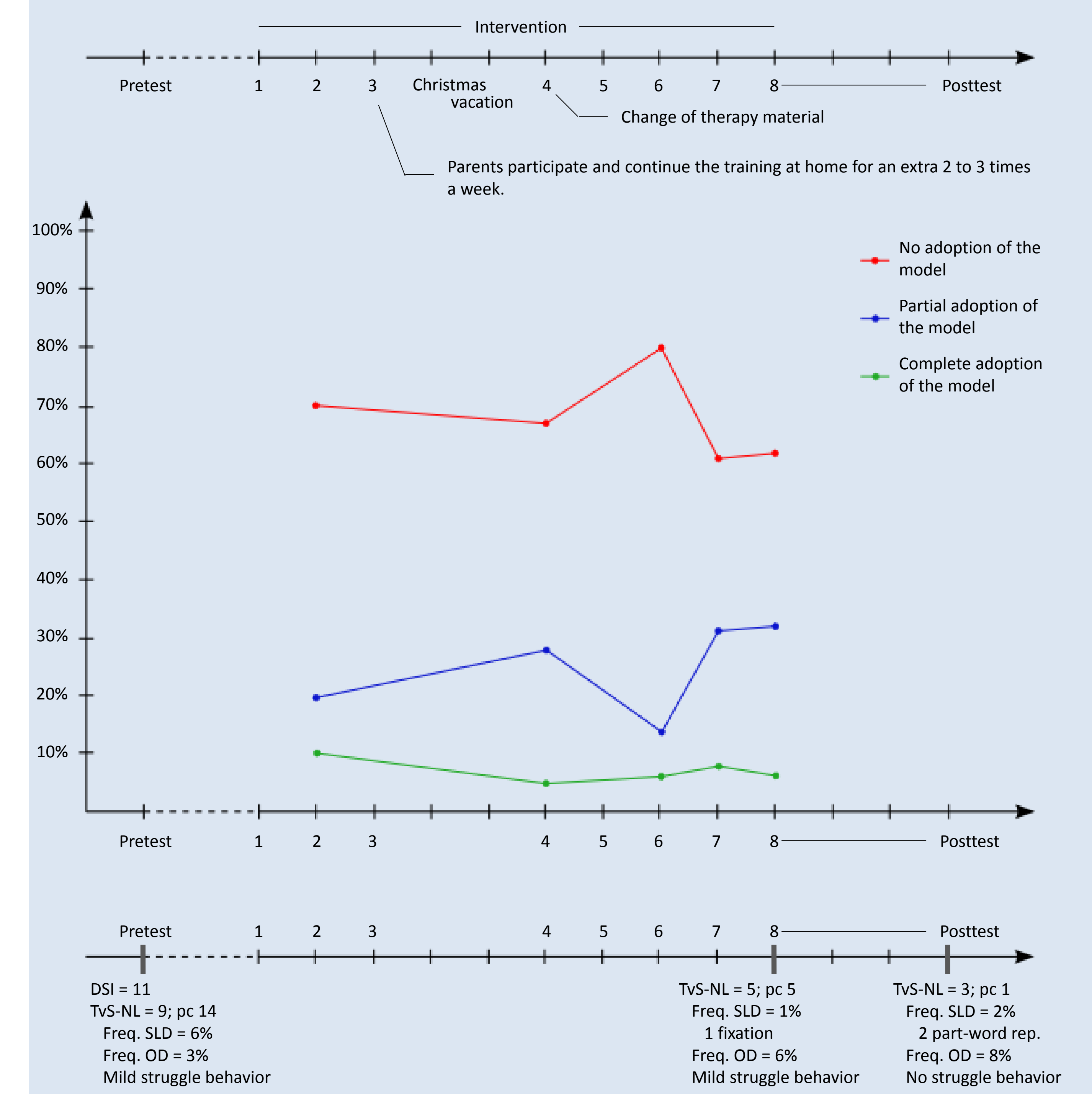
At the time of the first consultation C. was 2 years and 8 months old. About four months previous to that consultation C.’s parents started to notice dysfluencies in their son’s speech. The occurrence of the dysfluencies was mentioned to a pediatrician of ‘Kind en Gezin’ (Child and Family), a Flemish agency that works actively in ‘Public Health, Welfare and Family’ policy area and focuses on preventive treatment and guidance of young children. The pediatrician told the parents that the dysfluencies should resolve in a few months. This actually happened, but when C. started his first year in kindergarten the dysfluencies reappeared and have not been gone since.

**Pretest:** C.’s parents completed the ‘Detectie Instrument voor Stotteren’ (DIS, a screening list for stuttering), which resulted in a total score of 11 and put C. at risk for stuttering. The Test voor Stotterernst Niet-Lezers (TvS-NL v2, a stutter severity instrument) revealed a total score of 9, which corresponds to percentile 14, i.e. mild stuttering behavior. Stutter-like dysfluencies occurred with a frequency of 6% and outnumbered the normal disfluencies. They consisted mainly of (part-)word repetitions, which amounted to 4 times in a row. Mild struggle behavior was observed in the form of pressed phonation and facial tension.

**Intervention:** It was recommended that C. enrolled for 8 therapy sessions focusing on conditioning the speech activity, followed by a monitoring period during which the parents were asked to continue the training at home. Therapy sessions took place once a week for 30 minutes in the presence of one parent, alternating between mother and father (see Figure 1 and 2).

**Posttest:** At the last therapy session adoption of the modeled behavior stabilized around 40%. C. obtained a total score of 5 on the TvS-NL, which corresponds to percentile 5, i.e. very mild stuttering behavior. The speech sample contained 1 block associated with mild facial tension. Three weeks later C.’s stutter frequency remained below the 3%-criterion, and the lack of struggle behavior resulted in a further lowering of the stutter severity (TvS-NL = 3 or pc1). In addition, C.’s parents reported that their son is more talkative and rhymes and sings when playing. He also produces the modeled speech pattern spontaneously from time to time.

Figure 2. Overview of the intervention



## Conclusion

Conditioning the speech activity seemed sufficient to decrease the stuttering characteristics in this boy. Therapy was stopped, and the parents were advised to closely monitor their son’s speech behavior. As this was a case study, the positive effects observed cannot be generalized, nor can it be ruled out that they were due to factors other than the intervention. A subsequent study including a large number of preschoolers with varying degrees of stuttering severity is in preparation.

## References

Boey, R. (2010). Sociaal-cognitieve gedragstherapie voor stotteren bij heel jonge kinderen [Social cognitive behavior therapy for stuttering in very young children]. Antwerpen: Standaard Uitgeverij.