Chapter 2 The Dutch School-Based Social Skills Intervention
Program TRAffic 8-12

2.1 Introduction

In schools social skills intervention programs are popular for improving children’s social competence (Bijstra & Nienhuis, 2003). The programs have different aims such as reducing aggression or strengthening resilience in children. TRAffic 8-12, which is short for Training for the Reduction of Aggression for 8 to 12 year old children, is a social skills program. It aims at reducing anger and aggression in children in special education elementary schools.

In this chapter TRAffic 8-12 is described in detail. We explain the development of the program shortly. We then elaborate on the theoretical principles underlying the program, describe the target group, and present the format and structure of the program.

2.2 The Development of the Program

Since 1998 two Dutch institutions have been working on the development of TRAffic 8-12, together with the University of Groningen. These two institutions are the Regional Expertise Centre for Cluster 4 education in the north of the Netherlands (RENN4) and the Seminarium voor Orthopedagogiek. RENN4 is an expertise centre for all Cluster 4 schools in the north of the Netherlands. In the Netherlands there are four types of special education: Cluster 1 (visually impaired), Cluster 2 (auditory and communicatively impaired), Cluster 3 (physically and mentally impaired), and Cluster 4 (behavioral and / or psychiatric problems). The inclusion criteria for Cluster 4 education are listed in Chapter 1. The Seminarium voor Orthopedagogiek in the Netherlands is a teaching and training institute for teachers, professional educators and social workers who deal with parents and children who need specialized care.

Special focus in the interdisciplinary collaboration is the development of an intervention program for children with persistent aggressive behavior that is connected to, and results from, their psychiatric problems (like an Attention Deficit Hyperactivity Disorder (ADHD) or a Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS)). A version for adolescents was first developed
(Jongsma, 1997), followed by a version for younger children\textsuperscript{12} (Dijkema & Oosterhof, 2000). The effects of the first version, i.e. for 8 to 12 year old children, has been studied (see Chapter 3) and evaluated with respect to its content. The results of the content evaluation were used to adjust version 1 and create version 2 of TRAffic 8-12. The second version of the program is evaluated in the study that is described in Chapter 3.

2.3 Theoretical Approach and Techniques of the Program

In Chapter 1 we described four theoretical approaches in social skills programs that are considered to be relevant in the development of aggressive behavior: 1) the social-learning approach, 2) the social-cognitive approach, 3) the self-control approach, and 4) the perspective taking approach. Nowadays most social skills programs, including TRAffic 8-12, combine two or more of these approaches. The training techniques in TRAffic 8-12 are based on the social-cognitive and the social-learning approach. In the next sections we describe these approaches together with the techniques that are used in the TRAffic 8-12 program.

2.3.1 The Social-Cognitive and the Social-Learning Approach

In terms of theoretical models, the social-cognitive information processing (SIP) model by Crick and Dodge (1996) is a frequently used model as a basis for social information. Several studies indicate that aggressive children differ from non-aggressive children in each of these steps (Crick & Dodge, 1996). The perception of social information is step 1, and the encoding and interpretation of this information is step 2. Aggressive children seem to give more attention to hostile information than to neutral information compared to non-aggressive children. Furthermore, aggressive children appear to be more likely than non-aggressive children to attribute hostile intent to peers’ actions. Step 3 and 4 refer to the selection of goals and to the generation of possible responses. Aggressive children are more likely than their non-aggressive peers to select goals that are damaging to their peer relations (e.g. getting revenge). They also generate responses that are more aggressive and less prosocial than those generated by their non-aggressive peers. Next, the possible responses are

\textsuperscript{12}The version for adolescents and the first version for 8-12 year-old children is called Reduction Aggression Method, in short RAM training (\textit{Reductie Agressie Methodiek}). We changed the name because younger children made fun of the name. The Dutch word RAM relates to beating someone up. Trainers expressed the need for a new name, and we chose the name TRAffic 8-12.
evaluated (step 5) and finally (step 6) the chosen response is carried out. Aggressive children evaluate aggressive responses as more favorable than non-aggressive children. Therefore, in the final step aggressive children tend to select more aggressive strategies and less positive and prosocial behavior compared to non-aggressive children.

The social-learning approach is applied in almost all social skills programs. Central to the social-learning theory is the assumption that behavior is acquired behavior (Bandura, 1978). Children learn aggressive behavior by observing aggressive behavior in parents, siblings, peers or the media (modeling). If the acquired aggressive behavior is also reinforced by significant others or by personal satisfaction, aggressive behavior can become part of a child’s behavior repertoire.

Both social-cognitive and social-learning mechanisms play important roles in the development of aggressive behavior in children. Therefore, program developers have searched for ways to translate elements of these mechanisms into techniques that can be used to reduce aggression in children. In the following section we explain how this was done in TRAffic 8-12.

2.3.2 Training Techniques

In TRAffic 8-12 the techniques of the ‘Stop sign’ and the ‘Traffic circle’ are derived from the social-cognitive approach. The Stop sign technique uses the three colors of a traffic light to represent three actions children should take in a conflict situation:

- **Action 1**, the red light: ‘Calm down when you are in a fight’, which corresponds with the first two steps of the SIP model (perceiving and interpreting social information).
- **Action 2**, the orange light: ‘Think before you act’, which corresponds with step 3, 4 and 5 of the SIP model (goal selection, response generation, and evaluation of responses).
- **Action 3**, the green light: ‘Do what you think is best’, which corresponds with the last step in the SIP model (reaction).

When a child is able to ‘stop’ (red light), he or she may be more able to think about the possible reactions to the situation and the consequences of those actions (orange light). Orobio de Castro, Bosch, Veerman and Koops (2003) showed that the method of ‘Stop and Think’ may have a beneficial effect if children are also trained in terms of what to think and if they have positive experiences when using the new
method. This condition is met in the program, in part, by using the technique of the Traffic circle. With the use of the Traffic circle children learn that there are three behavior alternatives in anger evoking situations: fighting, withdrawing, and solving. A ‘real’ traffic circle with three sides represents the three behavior alternatives. During role play children practice three social skills (listening, asking, discussing) that helps them react adequately.

Following the social-learning approach, modeling and positive reinforcement are the two important components of the TRAffic 8-12 program. By watching a DVD, specifically produced for TRAffic 8-12, children are confronted with both adequate and inadequate examples of children’s behavior in conflict situations (modeling). This way they learn to distinguish between types of behaviors and to follow examples. Trainers also function as role models.

Adequate behavior of children is reinforced during the program meetings. During training meetings trainers are taught to reinforce children’s adequate behavior by complimenting and encouraging them. There are also individual rewards (stickers when a child cooperates well during a meeting) and group rewards (when the group complies with certain group rules). Trainers first discuss what went well (positive feedback) and they then address the less adequate behavior (for example not (effectively) applying certain skills). Role play can be an opportunity to start such discussions.

Finally, generalization to daily life is considered crucial as the main goal of the program is to reduce aggression outside the training situation. Trainers and teachers must put a lot of energy into helping the children transfer the learned principles from the training situation to the classroom and the playground. Ideally, teachers are highly involved and are even present at the program meetings. During the program, so-called ‘conflict forms’ are used to stimulate generalization of principles to daily life. After children are involved in a fight or conflict, they fill in the form with regards to the degree of anger felt, the conflict partner, reason, topic, and the reactions/behaviors. These conflict descriptions from daily life have a central role during the program meetings. During role play trainers have the opportunity to teach children alternative ways to resolve their conflicts other than with aggression.

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2.4 The Target Group

TRAffic 8-12 is especially suitable for children with ADHD and PDD-NOS, two psychiatric disorders often treated as contra-indications for social skills intervention programs (i.e. children with these psychiatric disorders are considered unsuitable for participation in social skills intervention programs). Although there are legitimate reasons to handle ADHD and PDD-NOS as contra-indications, the exclusion means that an important group of children with frequent aggressive behavior is not reached. Also, recent figures show that children with ADHD and PDD-NOS form a substantial portion of Cluster 4 education (Bijstra & Strijker, 2001; Huyghen, 2007). Therefore, TRAffic 8-12 was developed with the specific problems of children with ADHD and PDD-NOS in mind.

Because of their impulsivity and attention problems, children with ADHD have difficulties in adequately perceiving and interpreting social information. Much attention is paid to these first two steps in the processing of social information. This is done, for example, by intensively elaborating on how to use the Stop sign or on how to calm down. Children with PDD-NOS often experience difficulties in understanding social information. Therefore, the importance of facial expressions, posture and body language is stressed in the program, with the help of the Stop sign, among other things. Visual tools such as an anger thermometer, a real stop sign, a real traffic circle and a DVD also have a prominent role in the program. Especially children with PDD-NOS appear to benefit from visual tools.

2.5 Format and Structure of the Program

2.5.1 Format

In the standard format, children are trained in groups of six with two therapists in each group. The children attend 14 meetings of approximately 45 minutes. In this study we also developed another TRAffic 8-12 version in which children can be trained individually. Only minor adjustments were necessary for the individually-trained version. The training for the therapists consists of three meetings in which the basic principles of the program are outlined. The trainers study literature and the DVD and they practice extensively with the components of the program with the use of the program handbook.
2.5.2 Structure

The first meeting serves as an introduction to the TRAffic 8-12 program. Meetings 2 and 3 cover the subject of anger. More specifically, in meeting 2 children learn how to recognize their own feelings of anger and in meeting 3 they learn how to recognize anger in others. The Stop sign is introduced in meeting 4, and in meeting 5 the Traffic circle is introduced. Both models are practiced with the use of DVD fragments, role play and other games in meetings 4 to 7. From meeting 8 on, three specific social skills are practiced, mainly through role play and the use of DVD fragments. The Stop sign and the TRAffic circle maintain a prominent role in each meeting. During the last meeting (meeting 14) the children choose an activity that they would like to do and for which they receive a certificate.

2.6 Effectiveness of the TRAffic 8-12 Program

The TRAffic 8-12 program can be considered a theoretically well-founded program (see www.nji.nl for the criteria). The next necessary step is an effect study to determine whether the program is potentially effective in reducing children’s aggressive behavior. In Chapter 3 the outcomes of TRAffic 8-12 are described for a group of 74 children with aggressive behavior problems in Cluster 4 elementary education. Because the TRAffic 8-12 program has a sound theoretical basis, the expectation that the program will be effective in reducing children’s aggressive behavior is plausible. However, we expect the program to have a minimal to moderate, and only temporary effect, on the behavior of the children. In Chapter 3 the reasoning behind this expectation is explained. Moreover, the main goal of the effect study is not to determine the effectiveness of the program in general, but to consider the possible moderating influence of the children’s motivation and the intervention group composition on aggression reduction.