The tip of the iceberg & beyond
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Chapter 4 A Qualitative Study of the Implementation and Sustainability of TRAffic 8-12 in School Practice Settings

4.1 Introduction

In Chapter 3 of this thesis we concluded that participation in the TRAffic 8-12 program, a school-based social skills intervention program aimed at reducing aggressive behavior in special elementary school children, did not result in a long-term reduction of children’s aggressive behavior. In the effect study we solely focused on the program outcomes. This focus, however, does not reveal anything about why the program did not work in the long term. For the purpose of finding out why the program did not work, one of the issues we need to consider is the way in which the program is implemented by the trainers and the extent to which the training techniques are sustained by the children’s teachers. Without consideration of the program implementation and sustainability we cannot determine whether the program itself did not work or the program was carried out insufficiently (Hahn et al., 2007; Schneider, 1992).

A second issue that needs to be considered is the (school) context in which the program is implemented. Successful implementation of an intervention program in practice settings such as schools is a complex task (Durlak & DuPre, 2008; Lochman, Boxmeijer, Powell, Qu, Wells & Windle, 2009; Massey, Armstrong, Boroughs, Henson & McCash, 2005). A growing body of evidence shows that teacher and school specific factors influence the effectiveness of school-based intervention programs (Lochman, 2003; Louwe & van Overveld, 2008; Ringeisen, Henderson & Hoagwood, 2003).

In the present study our first aim is to get insight into the quality of implementation of the TRAffic 8-12 program and the degree of sustainability of the TRAffic 8-12 training techniques in the four schools that participated in the study. Our second aim is to provide insight into contextual processes of the school that influenced the implementation and sustainability of the TRAffic 8-12 program. The current chapter searches for answers to the question of why the TRAffic 8-12 program did not show the desired results in the long term, despite the fact that the program is based on sound theoretical assumptions.
4.2 Implementation, Sustainability and the School Context

4.2.1 Program Implementation and Sustainability

Implementation consists of the actual efforts that are undertaken by the program implementers to carry out the new program and to integrate it in the organization (Zazzali, Sherbourne, Hoagwood, Greene, Bigley & Sexton, 2008). Implementation refers to ‘what a program consists of when it is delivered in a particular setting’ (Dane & Schneider, 1998) and whether or not it is delivered according to how it was designed (La Greca, Silverman & Lochman, 2009). The quality of implementation is determined by eight aspects (Durlak & DuPre, 2008): fidelity, dosage, quality, participant responsiveness, differentiation, monitoring of control / comparison conditions, program reach (i.e. participation rates, program scope) and adaptation. Fleuren, de Wilde, Mikolajczak, Stals and Paulussen (2009) conducted an extensive literature search for determinants of successful program implementation. From this search determinants were distinguished at four levels: 1) the intervention itself (e.g. relevance), 2) the program implementer (e.g. knowledge, skills, support), 3) the organization (e.g. commitment, time), and 4) the social-political context (e.g. legislation and rules).

Implementation is important to consider as research has shown that the quality of implementation has a high impact on program outcomes; programs that are carefully implemented and free of implementation problems are more effective than programs with implementation problems (Domitrovich & Greenberg, 2000; Durlak & DuPre, 2008). Therefore, a growing number of researchers stress the importance of implementation data. However, until now, most intervention researchers still fail to assess relevant aspects of implementation (Domitrovich & Greenberg, 2000). Durlak (1997), for example, found that less than five percent of 1200 prevention studies in mental and physical health and education provided implementation data. In the present chapter the implementation of the TRAffic 8A12 program by the program trainers is evaluated. Without this evaluation we cannot make conclusions about the potential effectiveness of TRAffic 8-12.

Sustainability of the training techniques after the program has ended is an important part of program implementation. Sustainability refers to the degree in which the training techniques continue to be implemented after the program has ended, with ongoing fidelity to the core principles of the program (Han & Weiss, 2005). Sustaining school-based programs is difficult, especially when the programs are external to the school system (Massey, Armstrong, Boroughs, Henson &
Sustainability is important to consider because changing children’s behavior is very complex. Applying new skills in real world situations is a process that takes a long time (Bijstra & Nienhuis, 2003). In this sense, the application of a short social skills intervention program such as TRAffic 8-12 should be seen as only the beginning of a long-term process of behavioral change. During this process children need ongoing support from relevant adults, especially after the program has ended. In schools, teachers are the ones that can support children in applying their newly learned skills in real life school situations (Louwe & van Overveld, 2008). Despite the fact that it is indisputably clear that sustainability is crucial for long-term program effects, most, if not all, social skills intervention programs fail to provide guidelines and support for teachers to sustain training techniques. Also, research reports are not accompanied by data for the degree of sustainability of training techniques after the program has ended. In the present chapter the sustainability of the TRAffic 8-12 training techniques by the children’s teachers is evaluated. This evaluation is essential in understanding the long-term effectiveness of TRAffic 8-12.

The implementation and sustainability of a school-based social skills intervention program such as TRAffic 8-12 must be understood in the school context in which the program is carried out (Ringeisen, Henderson & Hoagwood, 2003). A second aim of the qualitative study presented in this chapter is to consider the influence of school contextual processes on the implementation and sustainability of TRAffic 8-12.

### 4.2.2 The School Context

‘Evidence-based’ (EB) or ‘empirically supported’ (ES) is the label that all intervention researchers and program developers aim to obtain for their program. An intervention program is labeled ‘EB’ or ‘ES’ if randomized controlled trials have proven it to be efficacious in highly controlled research conditions as well as effective in real world settings. The label is popular because it implies that a program ‘works’, i.e. the program ‘cures’ the problem, under the condition that the program is
implemented according to how it was designed. Furthermore, practitioners such as teachers or youth workers obviously prefer to buy and implement programs that work. However, evidence-based practice is also criticized.

One of the arguments against evidence-based practice is the notion that it is problematic to assume that the causal relations that accounted for a program’s effectiveness in one context can be easily and identically transferred to another context (Cartwright, 2009). It is a common misconception to think that if an intervention program is implemented in new contexts, but in the same way that it was implemented in situations in which the program was found effective, it will be effective again (Fleuren, de Wilde, Nikolajczak, Stals & Paulussen, 2009; Lochman, 2003; Louwe & van Overveld, 2008). The effectiveness of an intervention program cannot be viewed as independent of the complex context in which it is implemented (Hughes, Cavell, Meehan, Zhang & Collie, 2005; Ringeisen, Henderson & Hoagwood, 2003).

Why is context so important when it comes to program implementation in practice settings? In the case of school-based programs, the implementation of a program is influenced by the interactions with the school context, consisting of children’s teachers, peers in the classroom, school policy and available resources (Lichtwarck-Asshof & van Geert, 2004). Whether or not an intervention program is effective in changing a child’s behavior is dependent on that context, i.e. on the causal relations in the school context that account for the effectiveness of the program24 (Cartwright, 2009). School program elements will only be effective together with, or via, factors ‘external’ to the intervention program. We call this the context-dependency of causality.

A simple general illustration of the notion of context-dependency of causality is the fact that an assignment will only be carried out correctly if the person who receives the assignment understands it. In the field of intervention programs we can also find illustrations of the context-dependency of causality. For example, a developer of a new school-based intervention program is often successful in delivering the desired results to the target group, which motivates the developer to put the program on the market. However, when the program is implemented by people other than the program developer, suddenly the program is less successful (Louwe & van Overveld, 2008). Obviously, the program’s effectiveness is, in part,

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24 In the remainder of this chapter we will use the term ‘school contextual processes’ to refer to the causal relations in the school context that influence the effectiveness of an intervention program.
the result of a common factor, such as the person who delivers the program. It is likely that a program developer delivers his or her ‘own’ program with more enthusiasm and a stronger belief in the program elements compared to trainers who did not develop the program themselves. These so-called ‘therapist’ related factors have been proven crucial in program effectiveness (Wampold, Ahn & Coleman, 2001). Another example that illustrates how causality is dependent on the context is the role of peers or parents in the child’s environment. Examples of prosocial behavior, provided in the intervention context, can only become effective in replacing antisocial behavior if, at the same time, there are no bad examples in the school context (i.e. aggressive peers) or the family context (i.e. deviant parenting) (Lichtwarck-Asschof & van Geert, 2004).

In sum, it is clear that context plays a crucial role in program effectiveness. The examples described above all seem very logical and might be seen as stating the obvious. An increasing number of researchers stress the importance of considering the influence of the school context on the effectiveness of intervention programs (Hughes, Cavell, Meehan, Zhwang & Collie, 2005; Lochman, 2003; Ringeisen, Henderson & Hoagwood, 2003). However, in research and publications we continue focusing on program outcomes without studying the role of the context in which the program is carried out. In order to achieve more successful implementation of school-based intervention programs, we need to improve our understanding of the school contextual processes that promote the success of intervention programs (Louwe & van Overveld, 2008). Additionally, we need insight into the conditions under which programs are found to be ineffective. These ‘unsuccessful’ conditions give us as much important information about school contextual processes that account for program effectiveness as the ‘successful’ conditions.

In this chapter we do not only look at the actual implementation and sustainability of the TRAffic 8-12 program, but we also focus on the contextual processes in the schools that influence the trainers’ and teachers’ implementation and sustainability of the program (techniques). By considering the school context in which the program is implemented, we aim to explain what caused the TRAffic 8-12 program to be insufficient in effectively reducing children’s problematic behavior in the long term.
4.2.3 Questions and Design

Two questions are discussed in the present chapter:

1. What is the quality of the implementation of the TRAffic 8-12 program by the program trainers? And which school contextual processes influence the trainers’ implementation?

2. To what extent do the children’s teachers sustain the TRAffic 8-12 training techniques? And which school contextual processes influence the teachers’ sustainability?

The questions are answered in the form of a discussion about the implementation and sustainability of the TRAffic 8-12 program and the school contextual factors that influenced these issues. The discussion is based on a combination of the researcher’s personal observations and interviews with trainers and teachers.

The dominating quantitative methods used in intervention and implementation research, which consider primarily children’s pre- and post-intervention scores, are not sufficient to capture school contextual processes. Because of this, a great deal of valuable information is lost (Domitrovich & Greenberg, 2000). Qualitative reports are much better resources for gaining insight into school processes. They capture a ‘wisdom literature’ of personal experiences and observations of the implementation of intervention programs. Unfortunately, these highly informative qualitative reports accompanying effect studies often do not get published, because they are labeled as ‘weak’ and ‘second class’, at best (Wendt & Slife, 2007). With the present study we fulfill the need for more qualitative reports that inform us about processes in the school context that influence program effectiveness.

4.3 Implementation and Sustainability of TRAffic 8-12 in four Special Elementary School Settings

4.3.1 Program Trainer Implementation of TRAffic 8-12 and the Influence of School Contextual Processes

Our first question was: What is the quality of the implementation of the TRAffic 8-12 program by the program trainers, and which school contextual processes influence the trainers’ implementation of the program? Remember that the TRAffic 8-12 program was carried out in a group format for half of the children,
while the other half of the children received the program individually. Also, there were two training sessions; the first half of the children were trained between January and March 2003 (session 1), the other half of the children were trained between April and June 2003 (session 2).

During session 1 the program was not optimally implemented in the group-based format of TRAffic 8-12. Because of children’s disobedient and aggressive behavior (such as disobeying rules or being inattentive during meetings) the trainers sometimes had to (temporarily) remove children from the meeting as their behavior was unacceptable and, as a result, the progress of the meeting was threatened. Removing children from meetings obviously influenced the dosage (how much of the program is delivered; children who were removed missed parts of the meeting) and the quality (how well components of the program were delivered; removing children disturbed the meeting) of the implementation.

There were two group trainers in session 1 who were not willing to train a group in the second session. They expressed the need for more support in managing the group. Although the subject of managing a group was discussed and practiced by using role play during the training for the program trainers, they found that the attention that was given to this subject was insufficient. One of the conditions needed for the group trainers to train a group again was the presence of, and collaboration with, the teacher of the children. In session 1 they experienced a difficult cooperation with the children’s teacher because they disagreed on how to approach the children. The teacher believed that the children needed a very strict approach while the program trainers were more focused on providing safety for the children. This difference in approach resulted in an initial increase in children’s problem behavior during the program meetings, as well as an increase in problem behavior when the children returned to the classroom after the program meetings.

The trainers of the groups in session 2 were more able to implement the TRAffic 8-12 program. This was because they had less difficulty managing the children’s problem behavior than the session 1 group trainers. Because of the encountered problems in session 1, it was arranged that, in session 2, the children’s teachers would be present at all meetings. The trainers valued the teacher’s presence and recognized an improvement in the functioning of the group. The teacher could correct the children’s behavior by using the standard classroom rules. As a result, children did not have to be removed from meetings, the meetings were not
interrupted as much as in session 1 and the program trainers were more able to carry out the full program.

Because the group trainers of session 1 urged for higher involvement of, and more cooperation with, the teachers, we arranged a third training session. In this session the teacher was not only present at the meetings (as in session 2), but he was a co-trainer. Together with a program trainer from the first session he trained the children from his own classroom. These children were not included in the sample of children that was studied in Chapter 3 for two reasons. First, not all the children in this sample were aggressive or had difficulties with managing their anger. Therefore, this sample was qualitatively different from the original sample. Second, we only performed a pre- and post test on teachers’ and parents’ ratings of aggressive behavior and behavioral problems. We did not measure the children’s behavior on the long term and we did not interview them with the inner logic interview instrument.

Both the teacher and the trainer evaluated the organization of the program very positively. The trainer observed that, in the third session, the children’s behavior was more manageable than the behavior of the children in the first session. The teacher knew the children and was able to maintain the same rules and standards as used in the classroom outside the program. The teacher emphasized that children in Cluster 4 education depend on the familiar adults in their environment in order to function properly. According to him, the presence of the teacher could even be viewed as an essential condition for carrying out a program such as TRAffic 8-12 in Cluster 4 education. The presence of the group trainer was then a supplement to the teacher’s role. So, in this third session the TRAffic 8-12 program was optimally implemented. The individual TRAffic 8-12 training sessions were also free of implementation problems stemming from children’s disruptive behavior.

Another factor that is likely to have negatively influenced the implementation of the TRAffic 8-12 program is the trainers’ low motivation to implement the program. For a successful implementation the program trainers need to be motivated to carry out the program (Zazzali, Sherbourne, Hoagwood, Greene, Bigley & Sexton, 2008). Therefore, the availability of necessary resources (such as

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25 The comparison of pre- and post-intervention scores revealed a significant decrease in aggressive behavior in the teachers’ ratings. The children trained in the third session also showed higher decreases in aggressive behavior and behavioral problems in the teachers’ ratings compared to the children who were not trained, but also compared to the children trained in session 1 and session 2. The parents’ ratings did not reveal differences between the training sessions.
time and space) to carry out the program is a prerequisite to successful implementation. Administrators of the four schools that participated in the study agreed to guarantee available time and space. In cases where teachers were co-trainers, substitute teachers were arranged in the classroom. When school therapists were co-trainers, they were given extra hours on top of their regular hours. Rooms were made available by the school administrators for the group and individual program meetings.

Despite the fact that agreements were made, the program trainers still experienced problems when they started implementing the program because resources were not sufficiently available. For example, in one case, in which a group of children was trained by a school therapist and a teacher, there were difficulties with the agreed substitution of the teacher. Due to organizational issues she was not available to carry out the first three meetings of the program, and thus, her co-trainer had to do these meetings alone. After the first three program meetings this problem was resolved, but the therapist’s and the teacher’s motivation to implement the program was reduced. They did not feel supported by their organization and they indicated that this influenced their enthusiasm and efforts to carry out the program.

In other cases the program trainers who trained children individually had problems with finding appropriate space to carry out the program meetings. Although the school administrators had indicated that certain rooms were available, the rooms were sometimes occupied for other purposes and the program trainers had to look for alternatives. The program trainers indicated that this created a somewhat ‘chaotic feeling’, which was not beneficial to the overall enthusiasm to carry out the TRAffic 8-12 program.

In sum, the implementation of the TRAffic 8-12 program was hampered by two factors: 1) with respect to group-based training: the program trainers’ capability and skills to manage the children’s behavior was insufficient and 2) many program trainers suffered from reduced motivation to implement the program. For both factors the school context played a crucial and conditional role. Behavior management of the group-trained children was less difficult when the children’s teachers, who are an important element in the child’s context, were present during the program meetings or when the teachers carried out the program themselves. The trainers’ motivation was related to the availability of resources in the school context, such as time and space. In the Discussion section we will elaborate on how our findings are illustrations of the context-dependency of causality.
4.4.2 Teacher Sustainability of TRAffic 8-12 Training Techniques and the Influence of School Contextual Processes

Our second question was: To what extent do the children’s teachers sustain the TRAffic 8-12 training techniques, and which school contextual processes influence the children’s teachers’ sustainability of the techniques?

Our assumption was that if teachers would make a well-founded choice for participation in the project (i.e. they are motivated) then the chances of successful sustainability of the techniques would be higher. First, in a general meeting we informed the teachers who were interested in the TRAffic 8-12 program about the effect study as well as the required time and efforts needed to participate in the project and to sustain the training techniques. The teachers who were enthusiastic after the meeting, who had one or more students in their classroom that met the inclusion criteria (see Chapter 3) and who felt that they could meet the requirements to participate in the project were contacted. In individual meetings with those teachers we, once again, discussed practical issues such as required time and organizational issues. We explicitly discussed the required effort in the classroom: supporting children to apply the newly learned skills by active implementation of training techniques, with the aim of securing transfer and sustainability of learned skills. After these individual meetings teachers could still withdraw from participation in the project. In sum, at the start of the project we paid extensive attention to the selection of motivated teachers.

The participating teachers started off motivated; there were no signs that they were unmotivated. However, their motivation decreased during the implementation of the program because, as several teachers indicated, they did not see any improvement in the children’s behavior. This decrease was expressed by, for example, less effort to support children in doing ‘homework’ for the TRAffic 8-12 program in the classroom (i.e. filling in conflict forms). Also, some teachers became unmotivated to fill in the questionnaires and/or stayed away from meetings in which project results were presented. Apparently, these teachers expected immediate improvements in behavior. They were not made sufficiently aware of the fact that changing children’s aggressive behavior requires a lot of time in which considerable

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26 Participation in the project involved attending frequent meetings, implementing and sustaining training techniques in the classroom and filling in questionnaires about children’s behavior as part of the effect study described in Chapter 3.
efforts need to be made in terms of supporting the children to apply the newly learned skills.

Teachers’ motivation was also influenced by the degree to which they felt capable of applying the training techniques. Our assumption was that if we involved teachers with the program as much as possible, then the chances that teachers would implement and sustain the techniques would be higher because they would feel more familiar with them (i.e. a sense of ‘ownership’). In several ways, and with different intensities, we tried to involve the teachers in the program as much as possible.

In session 1 teachers attended a presentation about the program. They received the program handbook and were encouraged to prepare children for the meetings (through classroom discussions and short talks before children were taken out of the classroom by trainers) and to make evaluations with children after the meetings (through short talks when children returned to their classroom). Also, when the two central training techniques were introduced in the program meetings (the ‘Stop sign’ and the ‘Traffic circle’), trainers organized a meeting with the teachers to explain these techniques and teachers were given the opportunity to use the real ‘Stop sign’ and ‘Traffic circle’ in their classrooms outside the program meetings. Finally, after the program had ended, the researcher organized individual meetings with the teachers to encourage them to keep using the two training techniques.

In session 2 we intensified these efforts because we observed that teachers were not applying the techniques in their classroom in the first session (i.e. there was no sustainability of training techniques). The trainers who trained children individually provided teachers with weekly reports about what children learned and how they responded during program meetings. In the group trainings the presence of one of the children’s teachers was organized. Other teachers involved with the trained children were invited to regular meetings to inform them about the program meetings. In session 3 the teacher was optimally involved in the program as he trained the children of his own classroom himself (together with a group-trainer from the first session).

In all cases described above the efforts to secure sustainability of the training techniques were not effective. Most teachers did not prepare children for the program meetings nor did they evaluate the meetings with the children afterwards. Only a few teachers made use of the opportunity to use the real Stop signs and Traffic circles in their classroom during a short period of time. In individual
meetings with the researcher some teachers very clearly stated that they needed more guidelines on how to implement the techniques in the classroom. For example, one teacher said, when she was handed a document with an explanation of the techniques (Stop sign and Traffic circle), ‘But how should I do this in the classroom? I do not know how to use them. I need a handbook that describes how I can actually use the techniques’.

In session 2 teachers were involved more intensively by organizing regular meetings between trainers and teachers or by increasing teacher attendance during the program meetings. In session 3 the teacher even implemented the program himself. However, these efforts still did not result in an improved transfer and sustainability of the training techniques. Both trainers and teachers mentioned that there was too much of a gap between practicing skills during the program meetings and actually applying the skills in the real world. Our expectation that teachers would be able to think of ways to implement the techniques in real life situations themselves was not correct. They indicated that they needed more support in integrating the techniques in their daily practices.

To sum up, the conclusion is that the teachers were not motivated enough and not capable enough to sustain the TRAffic 8-12 training techniques in the classroom. As a result, the children were not supported in applying their newly learned skills in real life situations. Simply providing the teachers with a description of the techniques and asking them to implement the techniques in their classroom was not sufficient for sustainability. With regards to the context-dependency of causality, another illustration is as follows: whether or not the training techniques were sustained by the teachers seemed to be independent of the techniques themselves and of the extent to which the teachers were informed about the contents of the techniques. Rather, individual processes within the teacher appear to play an important role. In the Discussion section we will elaborate on what these processes could be.

4.4 Discussion

In the present study the program trainer and the teacher implementation and sustainability of the TRAffic 8-12 program were considered. We also focused on school contextual processes that influenced the implementation and sustainability. We aimed at getting insight into reasons for the absence of long-term effects of TRAffic 8-12 on the children’s aggressive behavior.
4.4.1 Program Trainer Implementation of TRAffic 8-12 and the Influence of School Contextual Processes

As we concluded in the preceding section, the implementation of the TRAffic 8-12 program was hampered by difficulties with the management of children’s behavior and by reduced motivation to carry out the program. The program trainers indicated that they did not feel skilled and supported enough in managing the children’s behavior in the groups. Research suggests that these problems influence the implementation of a program, i.e. a trainer’s skillfulness and a sense of self-efficacy to carry out the program codetermine the quality of program implementation (Durlak & DuPre, 2008; Fleuren, Wiefferink & Paulussen, 2010). The program trainers valued the presence or active involvement of the children’s teachers as a precondition for the implementation of the TRAffic 8-12 program in groups of children. In cases where this precondition was secured there were less, or no, problems with the management of children’s behavior, which improved the implementation of the program. Further, the program trainers’ motivation to carry out the TRAffic 8-12 program is also likely to have influenced program implementation. Research suggests that at the organizational level the presence of necessary material facilities codetermines implementation quality (Durlak & DuPre, 2008; Fleuren, Wiefferink & Paulussen, 2010). Although agreements were made about required resources to implement the program, problems arose with available time and space when the program started running. These problems resulted in reduced enthusiasm for the program.

The findings described above are examples of the context-dependency of causality. The effectiveness of the TRAffic 8-12 program was dependent on processes in the school context and not only on the program itself. The implementation of the program was threatened (i.e. the program was likely to be less effective) by the children’s disruptive behavior. This behavior was less present when the teacher, a ‘factor’ in the child’s context, was involved in the program meetings. Apparently, the presence of the teacher is an important determinant of children’s behavior when they are part of a group of aggressive children. Furthermore, we must bear in mind that the cause of the implementation problems, i.e. the children’s disruptive behavior, is related to the problems that are targeted in the intervention program (the aggressive behavior of the children). These problems cannot be viewed as independent of the children’s context, in which the teacher plays a crucial role (Louwe & van Overveld, 2008). The reduced motivation is also an example of the
context-dependency of causality: the program is only likely to be effective if there are
enough available resources in the environment to carry out the program. In dynamic
systems modeling the amount of available resources are in fact described as
important determinants of a system’s dynamics (Van Geert, 1998).

The solution for the implementation problems might seem simple; the
remedy being the presence or active involvement of the children’s teachers in
program meetings and providing the required resources. However, these solutions
are not so simple because they are likely to be hindered by organizational problems.
For example, if the teacher is present at program meetings that are implemented
outside the classroom, then teacher substitution needs to be organized in order to
educate the children in the classroom who are not participating in the program. We
must keep in mind that schools are not primarily organized to facilitate the
implementation of intervention programs (Massey, Armstrong, Boroughs, Henson &
McCash, 2005). Above all, schools are focused on delivering the required education
and meeting the standards of the Inspection of Education. Intervention programs
such as TRAffic 8-12 are traditionally developed for use in clinical practices and not
for school environments (Ringeisen, Henderson & Hoagwood, 2003). Ringeisen,
Henderson & Hoagwood (2003) rightly pose the question of how we know whether
intervention programs which are developed for clinically based systems are relevant
and transferable to school environments. Later in this section we will elaborate on
this issue.

Besides the presence of children’s teachers, intensive and continued
feedback during program implementation can be another way to provide support for
program trainers in managing children’s behavior during program meetings (Han &
Weiss, 2005). The importance of feedback to program trainers has been noted by
several researchers (e.g. Lochman, Boxmeyer, Powell, Qu, Wells & Windle, 2009).
However, intensifying support for program trainers does not meet the needs of
children in Cluster 4 education. Our finding that children’s behavior was much better
manageable when their teacher was present at the program meetings suggests that
these children are very dependent on familiar adults and a familiar approach for their
functioning.
4.4.2 Teacher Sustainability of TRAffic 8-12 Training Techniques and the Influence of School Contextual Processes

The children’s teachers did not implement and sustain the TRAffic 8-12 training techniques in either the classroom outside the program or after the program had ended. This means that the children were not supported in applying the newly learned skills in real life situations. The study revealed that the teachers were not motivated and capable enough to (continue) implement(ing) the techniques. Exactly these two factors, motivation and skillfulness to continue implementing training techniques, are central to teacher sustainability (Han & Weiss, 2005). The teachers’ motivation decreased during the project because, as they indicated, they did not observe any improvement in the children’s behavior. Obviously, the teachers expected to see immediate improvements in behavior as a result of the children’s participation in the program. Also, the information provided about the program and the techniques was insufficient according to the teachers. This was because, as they indicated, they needed more concrete guidelines in order to be able to implement the techniques in real life situations.

Again, we found evidence for the context-dependency of causality. The degree of sustainability of the TRAffic 8-12 training techniques, and therefore the potential effectiveness of the program, appeared to be independent on the techniques themselves and on the degree of familiarity with these techniques. However, individual processes within the teacher played a crucial role. Teachers’ motivation to sustain the techniques was reduced because they expected to see immediate improvements in children’s behavior during the implementation of the program by program trainers. A question we need to address here is ‘How do teachers view their own role with respect to children’s behavioral problems?’ Teachers can be considered to be central change agents in children’s development at school, not only at the educational level, but also with respect to the social-emotional functioning of children (Louwe & van Overveld, 2008). However, many school-based aggression reduction intervention programs such as TRAffic 8-12 are mainly aimed at changing children’s behavior without consideration of the role of the teacher in the development of children’s problematic behavior (Ringeisen, Henderson & Hoagwood, 2003). With interventions in the home setting, however, we see the opposite. Most home-based aggression reduction intervention programs are aimed at improving parents’ child-raising skills. This lack of consideration for the influence that the teachers have on the children’s problematic behavior is likely to
bring about an expectation in teachers that they do not have to invest in the process of improving children’s behavior when an intervention program such as TRAffic 8-12 is implemented by others. In order to convince and motivate teachers to contribute to that process, several conditions need to be met.

First, since teachers have a critical role in program sustainability, they must be involved in the development and planning of an intervention program (Louwe & van Overveld, 2008; Ringeisen, Henderson & Hoagwood, 2003), and they must believe in the rationale of the program. When teachers are not consulted and are not involved, they may become uncooperative and resistant to the program and/or the researcher. In the TRAffic 8-12 project the teachers did not pro-actively choose for the program to be implemented. Rather, they were confronted with the program and offered the opportunity to participate in the project, which could have negatively influenced the teachers’ motivation for the program and the project as a whole. This situation is different from that in which the teachers select a program themselves.

Second, teachers must be convinced of the need to expand or change their current classroom practices (Han & Weiss, 2005). The best way to achieve this is to show teachers that the children in their classroom are behaving better as a result of the investments that teachers are making in terms of improving their classroom practices.

This brings us to a third condition. The provision of feedback is a crucial condition for teacher sustainability of training techniques. Ongoing and in-depth performance feedback (orally or written) concerning the effects of teachers’ classroom practices on children’s behavior results in higher sustainability and, therefore, in higher improvement of children’s problematic behavior (Han & Weiss, 2005). In the TRAffic 8-12 project the teachers did not receive any form of feedback. Furthermore, feedback would only have been effective in this project if the teachers would have observed an improvement in the children’s behavior, which was not the case.

This leads to a fourth condition. For improvement in children’s behavior to occur, teachers should have received more support in integrating the TRAffic 8-12 training techniques in their daily practices. If we want teachers to sustain training techniques in their classroom, then the techniques need to be suitable for integration into the teacher’s curriculum. Research has shown that efforts directed at integrating training techniques into classroom curricula are associated with more positive child outcomes and long-term sustainability (Ringeisen, Henderson & Hoagwood, 2003).
In light of this finding, the request of the teachers for more guidelines to implement the TRAffic 8-12 techniques in the classroom is understandable. Obviously, it is impossible to provide teachers with ready-to-use ‘recipes’ that describe how to act in a particular situation with a particular child, since a large amount of variability exists between different teachers, children, classroom situations, etcetera. Rather, teachers should have been supported in finding ways to integrate the techniques in their existing classroom practices. This could have been achieved by, for example, discussing the difficult moments in the classroom and the ways in which teachers could adapt their approach by using the training techniques.

4.4.3 Conclusion

With respect to the implementation and sustainability of the TRAffic 8-12 program, our findings all point to one conclusion: in Cluster 4 education the children’s teachers are crucial. If we want to avoid the organizational and implementation problems accompanying training sessions outside the classroom by program trainers who are ‘unfamiliar’ (to the children), then a classroom-based TRAffic 8-12 training implemented by the children’s teacher is a much better option. Furthermore, teachers need to be involved in the choice for the program and need to be supported in finding ways to integrate program elements into the existing classroom practices. In this sense, a ready-to-use intervention program is not sufficient for achieving long-term results. Additionally, elements of the program need to be adjusted to the problems and the needs of the teacher. Finally, teachers need feedback on the effects of their efforts to improve the children’s behavior.

The approach in our study illuminates the need to look further than program outcomes, and to consider the processes in the intervention setting that influence a program’s effectiveness. These processes are captured best with qualitative reports. Our focus on processes in the school context revealed several factors that are crucial for program effectiveness. These factors show a high resemblance with the common factors highlighted in the contextual model of intervention. In the contextual model, factors such as the therapist (i.e. interpersonal skills, theoretical orientation) and the therapeutic relationship (i.e. alliance, engagement) are considered to be important, if not more so, than the treatment itself (Wampold, 2010). Our study showed that, for example, for the TRAffic 8-12 program to be implemented as well as sustained successfully, the teacher plays a conditional role. Most studies of common factors in successful programs have been
conducted in adult psychotherapy settings. In order to get more insight into the role of the therapist (or in this case, the teacher) in child focused interventions, more research is needed (Kelley, Bickman & Norwood, 2010).