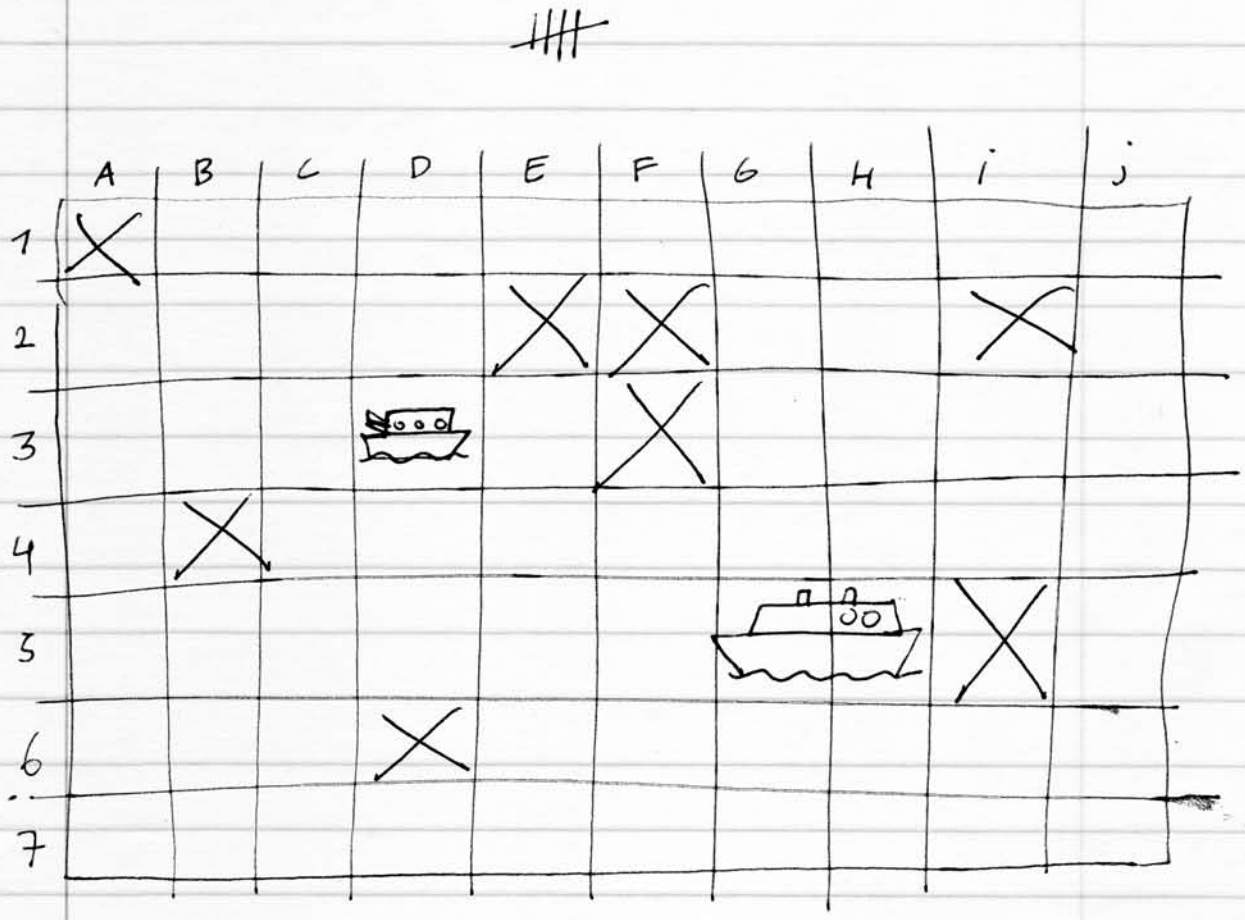
The @school project : developmental considerations in the design and delivery of cognitive-behavioural therapy for adolescent school refusal

Sauter, F.M.



Chapter 4

Developmentally-Appropriate Cognitive-Behavioural Therapy for Adolescent School Refusal: A Case Study

Floor M. Sauter, David Heyne, T.H. Ollendick, Brigit M. Van Widenfelt, & P. Michiel Westenberg

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Abstract

The '@school project' is a developmentally-appropriate cognitive-behavioural therapy for anxiety-based school refusal in adolescence (Heyne, Sauter, & Van Hout, 2008). This paper illustrates the application of this intervention with a 16-year-old female, her mother, and her homeroom teacher. Family communication skills, family problem-solving, and cognitive and behavioural therapeutic techniques for managing anxiety and depression were used to address key etiological factors which are common in anxious adolescents who refuse to attend school (i.e., parent-adolescent conflicts; concurrent depressive symptoms). Results of this case study suggest that the '@ school project' was associated with increased school attendance and reduced anxious and depressive symptoms. Clinically significant treatment gains were maintained at two month follow-up. Factors influencing treatment outcome are discussed and suggestions are offered for treatment-related research with adolescents.

Introduction

School refusal is characterized by a young person's reluctance or refusal to attend school due to internalizing problems such as fear and anxiety (Berg, 2002; Heyne & King, 2004). The short- and long-term consequences of school refusal on social-emotional, academic, and family functioning can be extremely impairing (McShane, Walter, & Rey, 2004); therefore, it is important to treat school refusal efficiently and effectively. Cognitive-behavioural therapy (CBT) is regarded as the preferred intervention for school-refusing young people (King, Ollendick, & Tonge, 1995; King, Heyne, & Ollendick, 2005), with demonstrated reductions in complaints at post-treatment and follow-up (Heyne et al., 2002; King et al., 2001).

Adolescents appear to be less responsive to currently available versions of CBT for school refusal than children (Heyne, 1999; Last, Hansen, & Franco, 1998). Several factors may account for this inferior treatment response. First, school refusal during the adolescent years is often severe, with greater levels of absenteeism being reported among school-refusing adolescents relative to younger children (Hansen, Sanders, Massaro, & Last, 1998). Second, the clinical presentation associated with adolescent school refusal is complex. Just as adolescents with anxiety disorders often present with additional anxiety and mood disorders (Ollendick, Jarrett, Grills-Taquechel, Hovey, & Wolff, 2008), so too do anxious adolescents refusing to attend school (McShane, Walter, & Rey, 2001).

Numerous developmental factors associated with adolescence may influence the therapeutic process and outcomes associated with CBT (Sauter, Heyne, & Westenberg, 2009). For example, school-refusing adolescents striving for autonomy frequently want to decide for themselves 'when and how' they return to regular school attendance, with plans for school return becoming a source of family conflict and tension (Berg & Collins, 1974; Rubenstein & Hastings, 1980). Further, while some adolescents have acquired cognitive capacities necessary to benefit from cognitive therapeutic techniques in CBT, there are large interindividual differences among adolescents in their levels of cognitive development (Schrodt & Fitzgerald, 1987). Specific cognitive techniques may therefore be helpful for some school-refusing adolescents but not others.

When treating school-refusing adolescents, it is important that a range of adolescent developmental factors be considered when designing and delivering CBT. Examples of 'developmentally-appropriate' treatments for adolescents with anxiety disorders have begun to emerge (see Siqueland, Rynn, & Diamond, 2005); however, until recently, no such 'developmentally-appropriate' CBT interventions have been developed for adolescents who refuse school. Based on a review of the literature, Heyne and colleagues (2008) adapted an existing practitioner guide to CBT for school-refusing children and adolescents (Heyne & Rollings, 2002) to better account for adolescent developmental issues. The resulting treatment, the '@school project' (Heyne et al., 2008), has recently been evaluated in a clinical trial (Sauter,

Heyne, Westenberg, Van Widenfelt, & Vermeiren, 2010). In this paper, we describe the '@school project' for adolescent school refusal and report on a case study which illustrates a number of developmentally-appropriate treatment elements relevant to working with this challenging group of youngsters.

The '@school project' for school refusal in adolescence

The major aims of the '@school project' are to reduce emotional distress in the adolescent and to help him or her return to regular school attendance. This is achieved via individual CBT with the adolescent and his or her parents, along with consultation to school staff. The treatment manual comprises compulsory 'modules' and optional 'modules' for the adolescent, parents, and school staff (Table 1). Thus, several modules are conducted in a similar way with all clients (e.g., 'Considering the Case Formulation'; 'Understanding School Refusal / Anxiety / CBT'; 'Understanding Teenage Transitions'; 'Setting Goals'; and 'Promoting Progress'). However, the selection, dosage, and sequencing of other modules is unique to each client. In order to select, dose, and sequence treatment modules, clinicians are asked to develop an individualized treatment plan, based on a developmentally-appropriate case formulation. The case formulation is derived from the clinicians' integration of quantitative and qualitative assessment information, and describes the predisposing, precipitating, perpetuating, and protective factors hypothesized to be associated with the school refusal (Heyne & King, 2004). The case conceptualization can be modified as new information is obtained; hence, in turn, the treatment plan (e.g., discontinuation/inclusion of a module; greater/lesser emphasis upon a module) can be adjusted throughout treatment.

The adolescent component of the '@school project' contains several treatment modules which are specifically relevant to working with adolescent school refusers, and several modules which were adapted to account for specific developmental capacities and needs of adolescents. For example, the optional module 'Dealing with Depression' was included in the '@school project' given that many school-refusing adolescents suffer from depressive symptoms (McShane et al., 2001), and that such symptoms can influence and complicate intervention (Bernstein et al., 2000). When the module is included in treatment with the adolescent, parents also receive psychoeducation about depression and they are helped to apply behaviour management strategies to the additional area of managing depression. The 'Dealing with Cognition' module was adapted for the adolescent age group, in that it encourages the clinician to informally assess the level of the adolescent's CBT-relevant cognitive capacities, and to apply this knowledge in the selection, timing, and delivery of cognitive therapeutic techniques. The module incorporates a range of cognitive therapeutic techniques and resources (e.g., self-instructional training as a less cognitively demanding procedure, Ollendick, Grills, & King, 2001; Socratic questioning requiring a higher level of cognitive capacities, Siqueland et al., 2005). All

modules for the adolescent encourage clinician use of developmentally-appropriate language, activities, and materials, together with procedures to enhance motivation (e.g., an email to invite the adolescent to attend the first session).

Parents are engaged in the parent component of the '@school project', and can play a more supportive, autonomy-granting role or a more authoritative role, depending on the nature of the problems and the capacities and needs of both the adolescent and the parents (Sauter et al., 2009). Decisions about the nature and extent of parental facilitation of school attendance are made in the context of the 'Facilitating School Attendance' module. In the 'supportive' role, parents may issue gentle prompts for appropriate behaviour, and reinforce such behaviour. In this way, the adolescent is provided with opportunities to show that they can 'do it on their own' without the intensive involvement of parents. If the adolescent continues to refuse to attend school, the parents can be encouraged to employ an 'authoritative' approach, assuming more responsibility for decision-making about the timing and the process of the adolescent's attendance at school, being responsible for escorting the adolescent to school, and using behaviour modification strategies to reduce inappropriate behaviours. The decisions about the nature and extent of parental facilitation of school attendance give direction to the relative emphasis that is placed on the modules containing strategies for managing the antecedents and consequences of behaviour (i.e., the modules 'Giving Effective Instructions' and 'Responding to Behaviour').

Two modules specifically developed for the '@school project' are common to both the adolescent and the parent treatment. In the module 'Understanding Teenage Transitions', the adolescent and the parents are helped to consider the impact that adolescent transitions may have (had) on the presenting problems. This information can inform treatment goals (e.g., through the signalling of additional targets for treatment) and treatment process (e.g., the insights gained may help clinicians apply treatment strategies in ways which are most fitting to the adolescent's developmental level). In addition, the module 'Solving Family Problems' was incorporated in the treatment for both adolescents and parents, due to the role that family conflict may play in adolescent school refusal (e.g., McShane et al., 2001). The module is delivered in several joint sessions in which the parents and adolescent practice skills in effective communication and problem-solving. An important activity included in this module is a family problem-solving discussion around school placement and/or timing of attendance. This activity can allow for the elucidation of the pros and cons associated with a change of school, or yield an attendance plan describing the roles of the adolescent and the parents in increasing attendance.

Table 1.
Module Description and Case-Specific Sequencing and Dosing of Modules in the Case of Allison

Modules for the Adolescent	Session	Modules for Parents	Session
Considering the Case Formulation Presentation and discussion of the case formulation based on assessment data	1	*Considering the Case Formulation* Presentation and discussion of the case formulation based on assessment data	1
Understanding School Refusal / Anxiety / CBT Psychoeducation about school refusal and anxiety; information about the current treatment	1, 2	*Understanding School Refusal / Anxiety / (Depression) / CBT* Psychoeducation about school refusal, anxiety (and depression); information about the current treatment	2, 3
Understanding Teenage Transitions Discussion of adolescent transitions and developmental tasks	2, 3, 13, 14, 15	*Understanding Teenage Transitions* Discussion of adolescent transitions and developmental tasks	2, 3, 13
Setting Goals Setting goals in relation to the treatment program, including eventual return to school	2, 3	*Setting Goals* Setting goals in relation to the treatment program, including eventual return to school	1, 2
Solving Problems Training and application of problem-solving steps for problems associated with attending school	3, 10, 11, 15	*Addressing Maintenance Factors* Exploration and management of factors potentially maintaining school refusal (e.g., access to television; household routines)	4, 5, 6
Solving Family Problems Training and application of communication and family problem-solving skills to problems related to school refusal, such as planning the adolescent's return to school	6, 9	*Solving Family Problems* Training and application of communication and family problem-solving skills to problems related to school refusal, such as planning the adolescent's return to school	7, 10
Managing Stress Discussion of general stress management strategies; optional practice of relaxation techniques which can be used in combination with exposures		*Giving Effective Instructions* Discussion and practice of effective instruction giving to facilitate the adolescent's compliance in school attendance–related situations	3, 9, 11
Dealing with Cognition Identification, restructuring, and replacement of unhelpful cognition. The module contains a range of techniques and handouts which differ in terms of how cognitively demanding they are.	5, 7, 8, 9, 10, 11, 13, 14, 15	*Responding to Behaviour* Discussion and practice of behaviour management strategies involving positive and negative reinforcement (e.g., rewards; planned ignoring) for managing youth anxiety (and depression).	2, 3, 8, 9, 11, 12
Enhancing Social Competence (optional) Practice of social skills for 'difficult' social situations in relation to school refusal (e.g., answering questions about absence from school)	13, 14	*Helping Build the Young Person's Confidence* Discussion of ways in which to stimulate/ support exposures to (non) school-related situations (e.g., modelling confidence; prompting)	2
Dealing with Depression (optional) Psychoeducation about depression, planning of pleasurable activities in order to manage depressed mood, and cognitive therapy tailored to depression-related cognition	2, 3, 4, 5	*Preparing Parents to Provide Support* Identification and modification of unhelpful parental beliefs/attitudes associated with the management of school refusal; optional practice of problem-solving and relaxation techniques	13, 14
Attending School Development and execution of an 'attendance plan' for the resumption of regular school attendance using exposure-based strategies	2, 3, 4, 5, 7, 8, 9, 10, 11, 12,	*Facilitating School Attendance* Decision-making about the nature of parent facilitation of attendance; integration/use of strategies addressed in previous modules in development and execution of 'attendance plan'	2, 3, 8, 9, 11, 12, 13
Promoting Progress Discussion of strategies to maintain treatment gains and manage lapses and relapses	15, 16, B1, B2	*Promoting Progress* Discussion of strategies to maintain treatment gains and manage lapses and relapses	15

Note. B1 and B2 refer to booster sessions 1 and 2.

Modules for School Staff	Meeting
Orientation to Intervention Discussion of the case formulation and developmental issues; CBT and the rational for selected modules; the role of school staff, parents, and the adolescent with respect to the treatment plan	1
Organizational Issues Information about key organizational issues in an adolescent's return to regular school attendance, and preparation of a case-specific plan for addressing school-based issues (e.g., whether/how to advise peers of the adolescent's return)	1
Emotional Issues Decision-making about strategies school staff can use to support the adolescent in dealing with anxiety (and depression) at school (e.g., collaboration between school and the adolescent in developing attendance plans)	1, 2
Behavioural Issues (optional) Decision-making about strategies school staff can use to deal with disruptive behaviours and strategies to reinforce appropriate behaviours	1
Social Issues (optional) Decision-making about strategies school staff can use to address peer-interaction problems (e.g., buddy system; strategies for dealing with bullying)	
Academic Issues (optional) Constructing a (temporary) academic plan that accounts for the length of time the adolescent has been away from school, and their competencies and interests (e.g., temporary exclusion from gym class; increased homeroom teacher support)	1, 2
Promoting Progress Exploration and decision-making about strategies school staff can use to foster the adaptive behaviour of the adolescent, and to maintain treatment gains and manage lapses and relapses	2

School consultation occurs during two or three school visits and via regular telephone and email contact with school staff. The clinician helps school staff focus on practical issues for the adolescent's school attendance (e.g., academic concessions; social engineering) and upon relevant behaviour management strategies (e.g., responding to somatic complaints and anxious behaviours; reinforcing attendance in adolescent-appropriate ways) which are represented by a number of optional and compulsory modules.

In general, 10 to 16 treatment sessions are conducted with the adolescent and his/her parents. The services of two clinicians are enlisted: one clinician works with the adolescent while another clinician works with the parents. This is done so that the clinician working with the adolescent is more likely to establish a therapeutic relationship and working alliance with the adolescent (Sauter et al., 2009). This 'dual clinician model' also has practical advantages, as it reduces the need for families to make twice as many visits to the '@school project'. In the first half of treatment the adolescent and his/her parents are seen twice a week to address non-attendance issues. In the second half of treatment, treatment sessions are often scheduled once a week to allow for trouble-shooting during the adolescent's efforts to attend school regularly. In the two months following treatment, two optional booster sessions are offered to the adolescent and parents to prevent relapse.

The following case illustrates the '@school project' approach to the treatment of adolescent school refusal. The client and her mother provided permission for de-identified case information to be used and descriptive and clinical data have been altered to protect the anonymity of the family.

Case study

Referral and background information

Allison was a 16-year-old female of average intelligence (IQ = 102; WISC-III; Wechsler, 1991) who was enrolled in year 11. She was referred to the '@school project' by her homeroom teacher because she had been missing three to four days of school a week for the last four months. Allison's attendance had been irregular since the first year of high school (Year 8) and had deteriorated further in Years 10 and 11. Allison's frequent non-attendance had caused her to miss several key tests, and therefore she had been required to repeat Year 11. At the time of referral and during the '@school project', Allison lived with her mother and her younger sister. Her parents were divorced when she was two years old, and she and her sister had infrequent contact with their father who lived overseas. In order to support the family, Allison's mother worked fulltime. Out of necessity, Allison assumed responsibility for many domestic duties at home. Allison's mother took part in a telephone screening to clarify the presenting problems and establish the suitability of the '@school project' for the family.

Presenting problems

Information from the telephone screening indicated that Allison was frequently absent from school due to somatic complaints (e.g., "feeling sick" in the morning). Often the missed days occurred when tests were scheduled. Previous medical examinations had failed to find a somatic cause for the complaints. Allison was somber and lethargic, had withdrawn from usual activities, and spent much time worrying about school grades, family life, and acceptance by peers. Mother indicated that in the last few weeks, she had not made any attempts to get Allison to school on the days Allison felt sick. In the past, she had occasionally brought Allison to school by car, despite Allison's protests that she was not feeling well. This often resulted in arguments between mother and Allison. Allison's mother indicated that she was unsure of what the best approach was to dealing with Allison's refusal to attend school. On the basis of this information, Allison and her mother were invited to participate in an assessment.

Assessment

The measures used to inform treatment planning and to evaluate treatment progress conformed to the multi-method, multi-informant approach used previously in the evaluation of CBT for school refusal (e.g., Heyne et al., 2002). The three assessment periods consisted of pre-treatment (two weeks immediately prior to treatment; T1), post-treatment (two weeks following the end of treatment; T2), and follow-up (two months following the end of treatment; T3). Allison's mother did not complete all of the assessment measures at follow-up despite requests to do so. Measures at T1 were administered by the clinicians, two psychologists with Master's-level training in clinical/developmental psychology. At T2 and T3, assessments were conducted by Master's-level students blind to treatment progress.

Several assessment measures were obtained. *School attendance* (% half days attended in the two weeks prior to assessment) was based on inspection of school-based attendance registration. The attendance data for the two weeks prior to telephone screening (T0) and during treatment were obtained by the clinicians from Allison, her mother, and school records. *The Anxiety Disorders Interview Schedule for Children* (ADIS-C/P; Silverman & Albano, 1996; Dutch translation and adaptation by Siebelink & Treffers, 2001) possesses good psychometric properties, and yields diagnoses in accordance with the DSM-IV and a Clinician Severity Rating (CSR; 0–8 scale whereby ≥ 4 represents a clinically significant diagnosis) (American Psychiatric Association [APA], 1994). Global functioning was rated by the clinicians using the *Global Assessment of Functioning Scale* [GAF] (APA, 1994). The *School Fear Thermometer* (SFT; Heyne & Rollings, 2002) is a visual analogue scale with high reliability and acceptable validity which assesses school-related fear. The child and parent versions of the *Multidimensional Anxiety Scale for Children* (MASC and MASC-P; March, 1997; Dutch translation and adaptation by Utens & Ferdinand, 2000, 2006) and the *Children's Depression Inventory* (CDI; Kovacs, 1992; Dutch translation and adaptation by Braet & Timbremont, 2002) are valid and reliable instruments which were used to assess anxious and depressive symptoms. The well-established *Child Behavior Checklist* (CBCL; Achenbach, 1991a; Dutch translation and adaptation by Verhulst, Van der Ende, & Koot, 1996) was administered to assess internalizing problems from the parent perspective. A self-efficacy questionnaire was also administered to examine perceived ability to manage anxiety-provoking situations associated with school attendance (*Self-Efficacy Questionnaire for School Situations-Dutch version* [SEQ-SS-NL]; Heyne et al., 2007).

At T1, Allison met DSM-IV diagnostic criteria for major depressive disorder (CSR = 6; primary diagnosis) and generalized anxiety disorder (CSR = 5; secondary disorder). In the two weeks prior to assessment, she had attended only one day of school (additional baseline data are presented in Table 2, T1).

Case formulation

Assessment results, as well as insights into the developmental and maintenance of the school refusal gained throughout the treatment, informed the case formulation (Figure 1). Allison and her mother described Allison as a "perfectionist", who derived much of her self-worth from "performing well" on academic and social fronts. She and her mother reported that since Allison had become a teenager, she was more concerned with "what others thought of her". These characteristics, in addition to the stress in the family due to persistent financial problems, were seen to be factors which potentially *predisposed* Allison to developing school refusal. Although Allison reported having trouble with attending school for several years, a *precipitating* factor for the recently escalated absenteeism seemed to be the increased importance of tests in the second last year of high school. The *perpetuation* of the school refusal

was conceptualized as follows. Faced with the prospect of having to take tests at school, Allison experienced physical symptoms of anxiety and feelings of stress, and negative cognitions related to her performance on tests. The reduction in symptoms she experienced when she at home rather than going to school, negatively reinforced her avoidance of tests. The avoidance gradually generalized to whole school days, as Allison also begin to worry about the negative evaluations of her teachers in relation to her academic work and her peers in relation to her absenteeism. Over time Allison began to think that she had "failed" and was "hopeless" because she was away from school so much, which in turn led to a sense of guilt and depressed mood, as well as behavioural and physical symptoms (anhedonia; lethargy). Mother reported that she had attempted to return Allison to school, but became frustrated and discouraged after several unsuccessful attempts, believing her efforts to be futile. Although school staff had referred Allison to the '@school project', they had long 'turned a blind eye' to the problem and did not enforce any consequences of her absenteeism. Allison's anxious and depressive symptoms, the negative reinforcement of Allison's avoidance resulting from mother's inconsistent behaviour, and the lack of monitoring by school were all seen to be involved in the of the school refusal. During treatment it also became apparent that mother's own problems (e.g., financial and work-related issues as well as her sense of loneliness and helplessness) had a negative influence on her current ability to engage in the treatment, and to be emotionally available for Allison. The impact of mother's own problems on her relationship with Allison, and the resulting parent-child conflicts, were therefore seen to be additional and significant perpetuating factors of the school refusal. Key *protective* factors included: Allison's willingness to engage in treatment, her good social skills, and her supportive peer network; mother's emotional bond with Allison; and the willingness of school staff to help with the management of the problem.

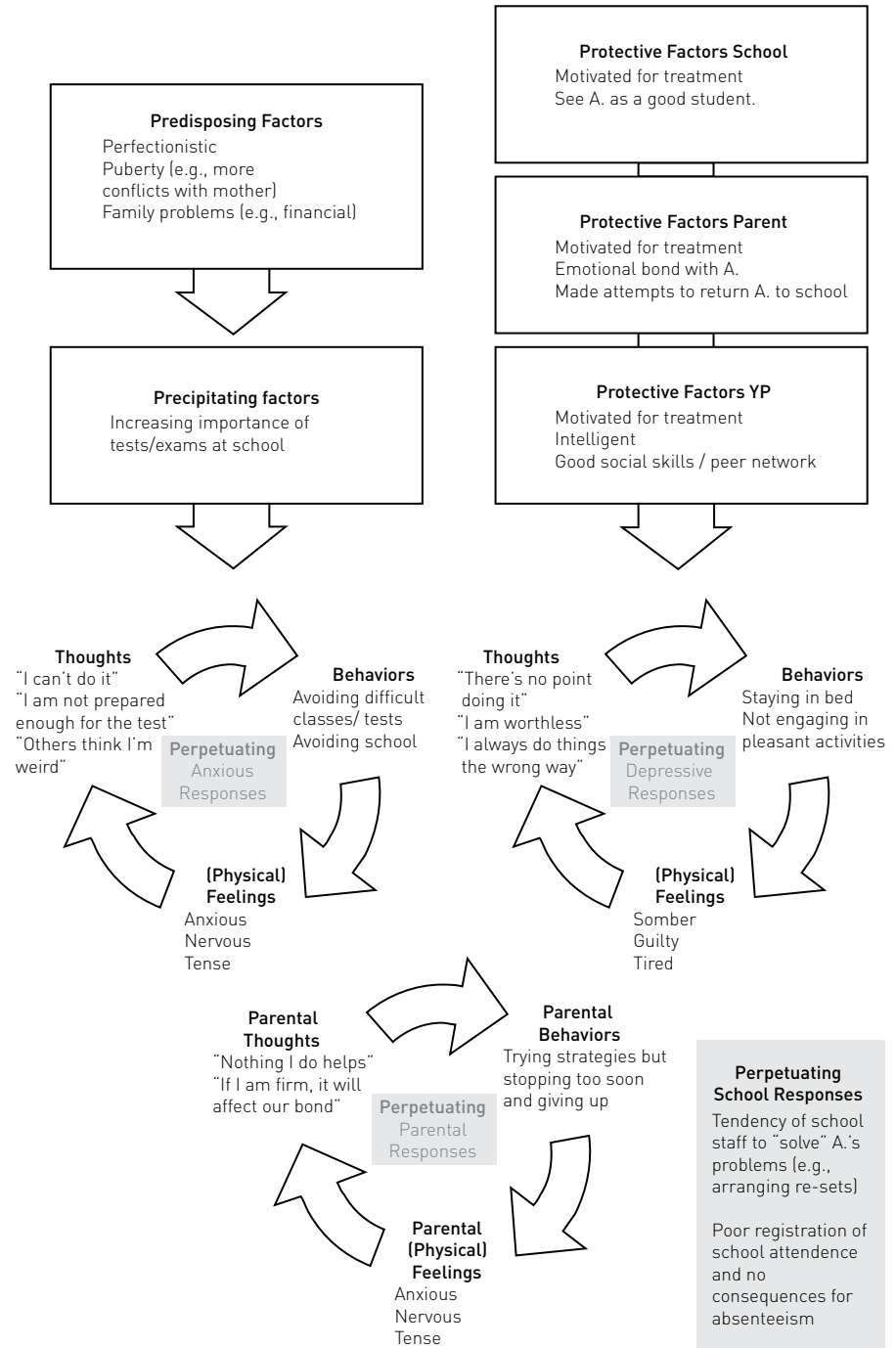

Figure 1. Case Formulation of Predisposing, Precipitating, Protective, and Perpetuating Factors

Treatment planning

The case formulation informed treatment planning with respect to the selection, dosage, and timing of the modules to be delivered. Allison functioned quite independently, and it was uncertain as to whether mother would be able to facilitate Allison's school attendance. Therefore, the treatment plan emphasized Allison's own decision making about school attendance in the 'Attending School' module (i.e., rather than during the 'Solving Family Problems' module). The 'Dealing with Depression' module was scheduled throughout treatment, given that Allison was diagnosed with depression on the ADIS-C/P (Silverman & Albano, 1996), scored above the clinical cut-off on the CDI (score of 13; Kovacs, 1992), and given that behavioural activation has been demonstrated to be efficacious in the treatment of depression (e.g., Dimidjan et al., 2006). Based on self- and parent-reported somatic complaints during the clinical interviews and the CBCL, and given the effective use of relaxation training in the treatment of school refusal and anxiety (Heyne & Rollings, 2002; Lohaus & Klein-Hessling, 2000), the module 'Stress Management' was incorporated in the initial treatment plan. However, during the 1/3 treatment review (coinciding with session 6), it was decided that it was no longer necessary to deliver this module because Allison was already benefiting from engagement in 'relaxing' activities which arose in the context of the the 'Dealing with Depression' module. At the 2/3 review (coinciding with session 10), it was decided that some parts of the optional 'Enhancing Social Competence' module should be applied given that Allison increasingly expressed worries about her peer relations.

It was determined that mother should try to employ more 'authoritative' parenting strategies, in order to more 'firmly' support Allison in her attempts to increase her school attendance. Therefore, the module 'Giving Effective Instructions' and the 'planned ignoring' part of the 'Responding to Behaviour' module were planned in the first half of treatment, given that behaviour modification strategies can be effective in the treatment of anxious young people (Khanna & Kendall, 2009). However, the consistent use of these parenting strategies proved to be difficult for mother. Therefore, after the 2/3 review, the emphasis shifted to the application of more 'supportive' strategies such as positive reinforcement ('Responding to Behaviour'). When, in the second half of treatment, it became apparent that mother's cognitions were negatively influencing her application of key behaviour management strategies, the module 'Preparing Parents to Provide Support' was added to the treatment plan. Two joint sessions based on the module 'Solving Family Problems' were planned, given that mother and Allison had reported that communication problems and conflicts played a central role in the perpetuation of the school refusal, and given the support for the use of family-based work in the treatment of anxious adolescents (Siqueland et al., 2005).

Course of treatment

Two clinicians were involved in treatment: one worked with Allison and provided consultation with school staff, while the other worked with Allison's mother. In the first half of treatment, Allison and her mother attended two sessions per week. In the second half of treatment, the plan for weekly sessions was disrupted by additional family problems and school vacations. Thus, the treatment was not completed before the end of the school year. It was decided to suspend treatment for six weeks over the school summer holiday period and deliver the remaining six sessions of treatment in the new school year.

Treatment with Allison

Allison reacted positively to the material covered during the first two sessions (i.e., modules 'Considering the Case Formulation', 'Understanding School Refusal / Anxiety / CBT', and 'Dealing with Depression'). She reported that the visual depiction of her situation (a simplified version of the case formulation presented in Figure 1) accurately reflected her experience of being stuck in the 'vicious circles' of anxiety and depression. Allison's treatment goals were discussed during sessions 2 and 3 ('Setting Goals') and they included: 1) to engage in more fun activities; 2) to start attending school three days a week, each week; 3) to stop avoiding social situations (e.g., going out with friends); and 4) to take tests, even when "I feel like I haven't studied well enough". The 'Understanding Teenage Transitions' module was also addressed during sessions 2 and 3. In particular, the relationship between normal adolescent development and the changes in her relationship with her mother was discussed. Although Allison was very self-sufficient, she sometimes wished that her mother was more authoritative (e.g., that her mother would take responsibility for making household decisions rather than discussing them with her daughters). Allison was helped to accept her mother's parenting style, and encouraged to take on challenges herself without feeling like she needed to rely on her mother and others.

Allison's depressive complaints were attended to using the 'Dealing with Depression' module in sessions 2 to 5, with special focus on helping her achieve her goal of engaging in more fun activities. The module addressed Allison's cognitions around her guilt about engaging in pleasant activities, such as, "If I don't attend school regularly, I don't deserve to do fun things." Allison was also encouraged to monitor her activity levels and mood on a daily basis, rating both her feelings and how pleasant the activities were in which she participated. She was surprised to see how much time she spent in solitary and non-school related activities such as watching TV. As a result of her monitoring, Allison decided that she needed to increase her activity levels and selected a number of 'social' activities (e.g., meeting with friends), 'sensory' activities (e.g., drawing), and 'success' activities (e.g., doing homework).

Concurrently, the 'Attending School' module was initiated. A 'graded attendance plan' was chosen by Allison in session 2 (i.e., attend three school days

in the first week of treatment; attend four school days in the second week; etc.), as she believed it would be easier to build up gradually rather than attend a whole week of school 'in one go'. To further develop the attendance plan, Allison and the clinician spent time in session 3 on a collaborative problem-solving exercise. During this exercise, the clinician and Allison discussed the pros and cons of the available alternatives in order to determine which classes she would attend during the build up to full-time attendance ('Solving Problems').

Even with this tailored attendance plan. Allison's school attendance continued to fluctuate. From sessions 5 to 8, the 'Dealing with Cognition' module was employed together with the 'Attending School' module, to explore the thoughts, feelings, and behaviours associated with situations which seemed to be associated with the continued non-attendance (e.g., arguments between mother and Allison about the household routine). During work with this module, Allison reported feeling angry that her mother never seemed to realize how unhappy she was with the situation at home. Rather than discussing her feelings with her mother, Allison would fret about it the whole night, such that she did not "feel well enough" to attend school the next morning. The clinician observed that Allison was able to identify and express the thoughts, feelings, and behaviours related to this situation with little prompting. Thoughts related to the arguments with her mother included "not going to school is a way of punishing mum" and "that'll teach her". In the process, Allison realized that these thoughts led to negative consequences (e.g., feeling guilty about not going to school and feeling down). Given Allison's level of CBT-relevant cognitive capacities, more cognitively-demanding techniques such as cognitive restructuring were employed. For example, via Socratic dialogues with the clinician, Allison began to challenge the logic of her cognitions (e.g., "Does punishing my mother in the short term *really* help me in the long term?"). In addition, Allison explored the benefits of taking greater responsibility for her school attendance (e.g., school attendance was reframed as something important to her future and her goals, rather than a way of asserting influence over her mother).

In session 9[7], the arguments between Allison and her mother were also discussed in a joint session focused on family communication skills ('Solving Family Problems'). Both Allison and mother reported that they often had heated arguments about small matters, and that these matters were not resolved. When describing a typical argument, it became clear that Allison and her mother often misunderstood each other due to their style of communication. For example, Allison's mother tended to be lengthy in her explanations, sometimes finding it hard to organize her thoughts. Allison would interrupt her mother or walk away from the conversation if she thought that her mother was "rambling". Mother often felt frustrated when this happened, because she did not have the chance to fully explain her point of view to Allison. Active

[7] Session 10 with mother.

listening was explained and modelled by the clinicians. Allison and her mother were encouraged to practice active listening skills in the session during a re-enactment of their most recent argument, and they were given the home-task of practicing active listening. The home-task was not completed, but both Allison and mother indicated that they now better understood each others' communicative strengths and weaknesses.

Allison's school attendance gradually increased, and by session 9 she attended approximately four days per week (80%). She was confronting increasingly challenging situations with some success (e.g., attending a class with a teacher she did not like), although her tendency to avoid these situations remained. For example, after making up her mind to attend a class, Allison would fail to go for various reasons (e.g., she first wanted to discuss with her homeroom teacher possible "tactics" for dealing with the teacher she disliked). She still occasionally avoided taking tests because she thought she had not studied enough. By exploring these situations in sessions 9 to 10 ('Attending School'), a number of cognitions were identified which were seen to underlie this behaviour (e.g., "I can't do it by myself"; "I'm sure I'm not going to pass because I missed a few questions on the test"). The cognitive restructuring procedures from the 'Dealing with Cognitions' module were used to modify these thoughts. Furthermore, in session 10 Allison was encouraged to apply problem solving skills ('Solving Problems') to identify ways in which she could solve school-related problems (e.g., arranging to take tests she had missed due to her absenteeism), rather than relying on others such as her homeroom teacher to solve these problems for her. Around this time the school head indicated that, due to her absenteeism, Allison had insufficient grades to go on to Year 12. Applying problem-solving skills, Allison weighed up the pros and cons of transferring to an adult education program at a new school (pros: a new start, absence of non-academic subjects such as gym; cons: having to make new friends; a high workload due to the intensive nature of the program[8]).

The treatment resumed after five weeks with session 11, which took place in the last week of the summer vacation, and which focused on preparation for the transition to the new school ('Attending School'; 'Solving Problems'; 'Dealing with Cognitions'). In the next session, Allison reported that she was attending school regularly and voluntarily and that she had made new friends there. She felt that she was coping well with the increased workload, and was less anxious about sitting tests ('Attending School'). In sessions 13 and 14, Allison's concerns about negative evaluation by peers

[8] Adult education programs are commonly utilized by high school students who are unable to re-enroll in their previous school. Students can achieve their high school diploma through a year-long educational track. While students have a similar class schedule to high schools (i.e., 5 days a week) they do not have to participate in non-academic classes (e.g., gym). This flexibility is in line with our regular school consultation procedures (i.e., which aim to lower the hurdle as much as possible, in the short term at least, to make increased school attendance more achievable).

(e.g., "I might say something stupid, and then they'll think I'm weird and won't like me anymore") were normalized within a developmental framework ('Understanding Teenage Transitions) and addressed via social skills training ('Enhancing Social Competence'). Alternative ways of reacting in social situations were modelled and rehearsed, and unhelpful cognitions were discussed and challenged using Socratic dialogues ('Dealing with Cognition' module). During the next few sessions, Allison's reports suggested adequate and spontaneous use of adaptive cognitions in social and school-related situations ("Asking for help is OK, but first I can try doing things by myself"; "I am sure I can solve this problem"). She also reported being more assertive (e.g., arranging a meeting with her new homeroom teacher; going to a careers day by herself). In sessions 15 and 16, and in the two booster sessions, Allison's plans to move out of home, her desire to have a part time job, her further education, and careers orientation were discussed ('Understanding Teenage Transitions'; 'Solving Problems'). In addition, her concerns about ending treatment and her fears of relapse were addressed via the 'Promoting Progress' module.

Concurrent treatment with the parent

During work with Allison's mother, the clinician took into account the current stressors in the mother's life (i.e., financial problems) by focusing on a limited number of specific problem areas and aiming for graduated changes in mother's facilitation of Allison's school attendance. In the first two sessions, mother identified the following treatment goals: 1) to have more structure in the evening and morning routines related to school; and 2) to increase her monitoring of Allison's attendance ('Setting Goals'). Sessions 2 and 3 included psychoeducation about the therapeutic strategy 'exposure' ('Understanding School Refusal / Anxiety / (Depression) / CBT') and ways in which parents can model confidence in their teenage child ('Helping Build the Young Person's Confidence'). The 'Understanding Teenage Transitions' module was also discussed during these sessions. The clinician and mother explored the changes in mother's relationship with Allison during the adolescent period. The clinician also stressed that while adolescents seem to be able to 'handle' independence, parental guidance is still needed (e.g., being authoritative at times). In response, mother expressed her own beliefs about parenting adolescents (e.g., "adolescents need freedom to decide for themselves").

In sessions 2 and 3, the role that mother and Allison would play in facilitating Allison's attendance was discussed, and the attendance plan that Allison had made was shared with mother at the end of session 3 ('Facilitating Attendance'). The clinician also supported mother in learning and applying behaviour management strategies for a more 'authoritative' facilitation of school attendance ('Giving Effective Instructions' and 'Responding to Behaviour'). Although Allison indicated that she would be able to go to school unescorted, Mother believed that she could play a role in encouraging Allison to get out of bed in the mornings when Allison reportedly 'felt sick'. Mother

reported feeling torn between worrying that Allison was really ill and not believing Allison's illness complaints. She often expressed these worries to Allison, which led to long discussions and Allison missing the school bus. The clinician conceptualized mother's well-intentioned response as a reinforcement of Allison's avoidance behaviour. The clinician emphasized that parents of school-refusing adolescents may sometimes have to firmly guide their children in 'facing their fears', due to the adolescents' desire to avoid anxiety-provoking situations. Mother was therefore encouraged to systematically ignore Allison's complaints and attempts to negotiate school attendance. Mother was also helped to give clear instructions rather than instructions which were phrased as questions ("Will you get up please?; "Wouldn't it be a better idea if you did your homework in your room?") or were vague ("Please get going"). However, mother reported finding it difficult to be consistent in her use of these strategies, partly due to the stressors in her life at that time.

Because mother's difficulties in running the household appeared to be related to Allison's school attendance problems, another focus in sessions four, five, and six was the establishment of a smooth household routine ('Addressing Maintenance Factors'). Small gains were achieved during treatment (e.g., modification to the evening mealtime routine, and to the morning routine for waking Allison). To further discuss the issue of household routines, Allison and Allison's clinician joined mother and mother's clinician in a joint-session on family problem-solving ('Solving Family Problems') in session 7[9]. In this module, Allison and her mother were guided through the use of the family problem-solving steps to address the following issue: "we argue a lot about the task division of household chores". This problem was selected by both mother and Allison as it was a 'medium difficulty' problem which they believed needed to be resolved in order to increase Allison's school attendance. The final 'plan' reflected an adolescent-appropriate compromise, in that mother committed to starting the evening meal on time and Allison volunteered to help her by washing the dishes. Allison indicated that she appreciated mother's honesty in admitting that she found it difficult to juggle full-time work and running the household. Mother's acknowledgment of the problem seemed to improve the quality of the relationship between the two, and both Allison and mother reported a decrease in arguments following this session.

In sessions 8 to 12, the clinician supported mother in further facilitating Allison's school attendance, with an emphasis now on 'supportive' parenting strategies. Mother was encouraged to monitor Allison's attendance and at the same time to motivate Allison to take more responsibility for following the attendance plan ('Facilitating Attendance'; 'Giving Effective Instructions'). The clinician outlined the importance of positive reinforcement as a way in which to stimulate desirable behaviours ('Responding to Behaviour'). Mother indicated that she found it difficult to

[9] Session 6 with Allison.

reward desirable behaviours, mainly because she saw giving compliments for small successes as "inappropriate" and "unnecessary". She also believed that Allison was old enough to do things herself and did not need mother to compliment her efforts. As part of this module, a metaphor was used to illustrate that it is essential to give compliments to anxious adolescents, due to their tendency to focus on the negative and to think in black-and-white terms (e.g., 'think about yourself using a megaphone when praising an anxious teenage child – that is, do it more strongly and enthusiastically than you otherwise might do'). This technique was modelled by the clinician in session. Despite her doubts about the use of positive reinforcement, mother made efforts to give more compliments to Allison contingent on desirable behaviour in the following weeks.

In sessions 13 and 14 attention was paid to the ways in which Allison's' mother could manage her own stress and emotional distress (i.e., arising from the challenge of effectively managing Allison's school attendance problems), in order to facilitate Allison's school attendance ('Preparing Parents to Provide Support'). Discussion took place around stressors for mother, and the impact of cognitions on parenting behaviour. Mother's cognitions about parenting (e.g., "If I'm too firm with her, she'll feel unloved"), Allison's health ("Maybe she really is sick, and if I send her to school she'll get worse"), and the adolescent period ("She is old enough to manage her own school attendance") were explored and challenged using cognitive therapeutic techniques.

In the 15th and final session mother reported that her interactions with Allison were more positive and that the household routines were running more smoothly. Mother indicated that getting up in the morning was still sometimes difficult for Allison. Attention was paid to applying both 'authoritative' and 'supportive' strategies to facilitate getting up in the morning (e.g., giving effective instructions; giving compliments). Treatment gains were reviewed and the strategies addressed during treatment were discussed in relation to their application to relapse prevention ('Promoting Progress'). As mother had planned an appointment with a social worker to discuss issues that had arisen during earlier work on the module 'Addressing Maintenance Factors' (e.g., household finances), she did not make use of the two booster sessions.

Consultation with the school

Two consultative meetings with the homeroom teacher from Allison's school took place early in treatment (around session 2 with Allison) and half-way through treatment (around session 9 with Allison). Prior to commencement of the '@school project' the school inconsistently monitored Allison's non-attendance, and there was no clear procedure for arranging re-tests for the tests Allison had missed. After providing information about the '@school project' approach to Alison's school refusal ('Orientation to Intervention'), the homeroom teacher was asked to routinely

follow up on any absences by contacting Allison or her mother and encouraging Allison's attendance the next day/class ('Organizational Issues'). The homeroom teacher suggested that Allison's unhelpful cognitions about her academic and social functioning presented a greater problem for her than actual intellectual or social skills deficits ('Emotional Issues'). As part of the 'Academic Issues' module, discussion took place around the school's support of the adjusted class schedule developed by Allison and the clinician. The homeroom teacher was also encouraged to help Allison take responsibility for scheduling her own tests, and to meet with Allison on a weekly basis for an informal 'chat', as a developmentally-appropriate reinforcement for Allison's increased attendance ('Behavioural Issues'). Furthermore, the homeroom teacher helped Allison consider her further schooling and vocational options given that Allison was not able to stay at her current school and was orienting herself to her future career alternatives ('Promoting Progress').

Evaluating outcome: Post-treatment and follow-up assessments

Data from the pre-treatment (T1), post-treatment (T2), and follow-up (T3) assessments are presented in Table 2, and Allison's weekly rate of school attendance is shown in Figure 2.

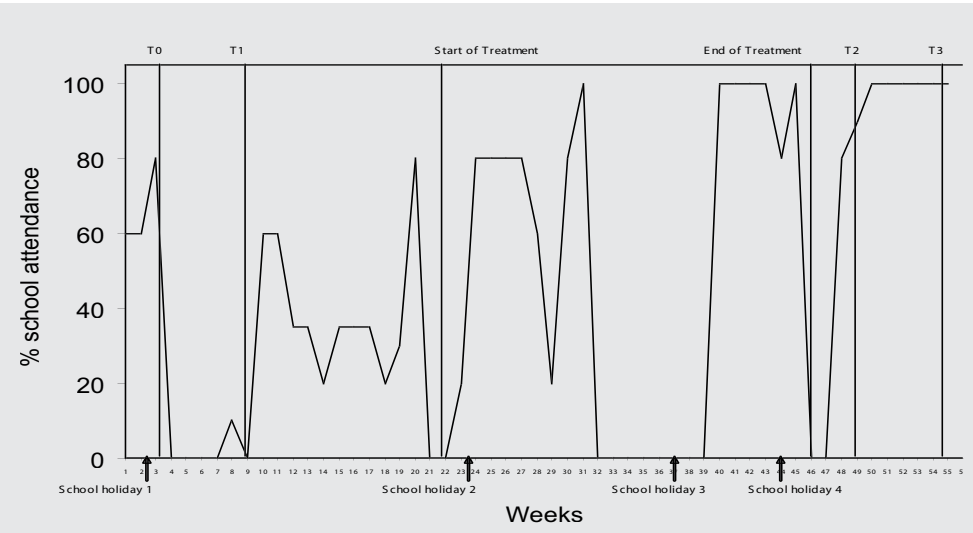

Figure 2. School Attendance per Week from Telephone Screening to Follow-up Assessment. *Note:* T0: Telephone screening; T1: Pre-treatment; T2: Post-treatment; T3: Follow-up. School holidays were 2 weeks in length, with the exception of School holiday 3 (8 weeks summer vacation).

Table 2.
Results of Pre-treatment (T1), Post-treatment (T2) and Follow-up (T3) Assessments

Measure/Subscale	T1	T2	% Change T2	T3	% Change T3
			Self-report		
Attendance (%)	10	90	88.89	95	89.47
SFT	90	0	100	0	100
MASC	49	27	44.89	23	53.06
CDI	18[a]	14[a]	22.22	11	38.89
YSR - Internalizing (T scores)	70[b]	57	18.57	55	21.43
SEQ-SS-NL	82	100	21.95	93	13.42
			Parent-report		
MASC-P	46	28	39.13	[c]	[c]
CBCL - Internalizing (T scores)	59	52	11.86	33	44.07
			Clinician-report		
GAF	55	70	21.43	80	31.25
CSR (primary diagnosis)	6	0	100	0	100
TRS			High		High

Note: % Change T2: changes between T1 and T2. % Change T3: changes between T1 and T3. Attendance: % attendance in 2 weeks prior to assessment; CBCL: Child Behavior Checklist (Achenbach, 1991a); CDI: Children's Depression Inventory (Kovacs, 1992); CSR: Clinician Severity Rating; ADIS-C/P (Silverman & Albano, 1996); GAF: Global Assessment of Functioning Scale (APA, 1994); MASC: Multidimensional Anxiety Scale for Children (March, 1997); MASC-P: Multidimensional Anxiety Scale for Children – Parent Version (March, 1997); Self-Efficacy Questionnaire for School Situations (SEQ-SS-NL; Heyne et al., 2007); SFT: School Fear Thermometer (Heyne & Rollings, 2002); TRS: Treatment Response Status.
[a] Above the clinical cut-off. [b] Clinical. [c] Questionnaire not returned.

Allison's school attendance increased from 10% at T1 to 90% at T2, and continued to be high at T3 (95%). Allison reported that she had missed one day of school at T2 because she had stayed up all night talking with her sister about 'boy troubles'. She had felt too tired to attend school the next day, despite mother's attempts to get her to go. At T3 Allison reported that she had not missed a day of school since the last assessment, but she had been late to school one morning which explained the 95% rate identified in the school's attendance records.

Allison's GAF score increased from T1 to T3. At T2 and T3 she no longer met criteria for any DSM-IV diagnosis, although some symptoms of Generalized Anxiety Disorder were present at T2. Specifically, Allison reported worrying about interpersonal issues and the possibility of a relapse. At the same time, she was able to deal with these worries by challenging her unhelpful thinking and talking to others. At T3 she reported that her worries were much reduced in intensity and frequency.

Self-report measures of fear (SFT) and anxiety (MASC) and parent-reported anxiety (MASC-P) decreased between T1 and T3. At T1 Allison scored above the clinical cut-off on the measure of depressive symptoms (CDI). At T2 the level of depressive

symptoms experienced by Allison was slightly above the clinical cut-off, but by T3 the level had fallen to within the normal range. Mother's reports of Allison's internalizing problems (CBCL) indicated a decrease from T1 to T2, and a further decrease at T3.

Following Ladouceur et al. (2000), a clinically significant treatment response was defined as a 20 percent reduction in scores after treatment (i.e., between pre-treatment and post-treatment; between pre-treatment and follow-up) on the following treatment outcome measures (SFT; MASC; MASC-P; CDI; CBCL-Internalizing); a 20 percent increase in the following measures (% attendance; SEQ-SS-NL; GAF) after treatment; and a CSR of < 4 on the primary diagnosis on the ADIS-C/P after treatment. The clinical significance of the treatment response was then categorized as 'high' (i.e., criteria reached on 6 or more of the measures), 'moderate' (i.e., criteria reached on 4 of the 9 measures), 'low' (criteria reached on 2 measures) or 'no treatment response' (i.e., criteria reached on none of the measures). Based upon these guidelines, Allison demonstrated high treatment response status at post-treatment. This status was maintained at T3.

Discussion

Previous studies reported poorer outcomes for older versus younger school refusers (Heyne, 1999; Last et al., 1998), prompting the development of the '@school project' for adolescent school refusal. The current case study with 16-year-old Allison, her mother, and her homeroom teacher suggests that the '@school project' may be an effective treatment for adolescents. Post-treatment assessment indicated increased school attendance and accompanying reductions in anxious and depressive symptoms. Clinically significant treatment gains were maintained at the two month follow-up. The case of school refusal described in this study is a good example of the etiological complexity associated with school refusal, with a range of individual, family, and school factors seen to be associated with the onset and maintenance of the school attendance problems (Heyne & King, 2004). A number of factors may have influenced treatment outcomes (e.g., mother's personal problems; the treatment being spread across two academic years). At the same time, a number of developmentally-appropriate elements specific to the '@school project' are likely to have contributed to the findings. The modules 'Solving Family Problems' and 'Dealing with Depression' addressed factors common to adolescent school refusal (i.e., parent-adolescent conflicts; concurrent depressive symptoms) and applicable in Allison's situation. Information gathered via application of the 'Understanding Teenage Transitions' module helped focus attention upon developmental tasks and transitions potentially associated with Allison's school refusal. For example, mother's cognitions about her expectations of adolescents and how to parent teenagers were explored and challenged, and Allison was helped to use social skills and cognitive techniques to manage her fears of negative evaluation by peers and her avoidance of social situations. Furthermore, the treatment modules were delivered in a developmentally-appropriate manner (e.g., using therapeutic

resources and strategies relevant to Allison's developmental level).

Optimal engagement of mother in both assessment and treatment was impeded by mother's reactions to the external stressors in her life. Indeed, the high levels of stress reported by mother lead to her referral to social services following treatment. While mother only had a few appointments with the social worker after the '@school project', this extra support may have influenced the effectiveness of the treatment as measured at follow-up. Another limitation of the current study is the uncontrolled single case study design, restricting the generalizability of the findings. Further research with a controlled single case design and randomized clinical trials are needed to draw firmer conclusions about the effectiveness of the '@school project'. In future large-scale studies, it will also be informative to determine the predictive influence of developmental factors such as autonomy and cognitive development on the outcomes of this developmentally-appropriate CBT.

Notwithstanding these limitations, the current case study provides a qualitative and quantitative description of a promising CBT for adolescent school refusal. The case of Allison illustrates how the '@school project' allows for a targeted yet flexible treatment with adolescent school refusers, their parents, and school staff. This treatment keeps adolescent developmental factors in focus in order to best meet the needs of this challenging group of young people.