



Guided Self-Help as Intervention for Traumatic Stress in Parents of Children with Cancer: Conceptualization, Intervention Strategies, and a Case Study

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Being a parent of a child diagnosed with cancer poses an enormous stressor. Indeed, several parents have difficulties adjusting to such a situation and react with symptoms of traumatic stress, depression, and reduced quality of life. However, there is little conceptual work on behavioral mechanisms that contribute to suboptimal adaptation in these parents. The authors present a conceptualization in which experiential avoidance and rumination are suggested to contribute to increased levels of traumatic stress and suboptimal adaptation. Based on this conceptualization, a recently developed intervention for parents of children with cancer, in the form of guided self-help, is presented. Finally, the authors present a successful case study as an example of the application of this intervention. Clinical implications and suggestions for future research are discussed.

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Being a parent of a child diagnosed with cancer poses an enormous stressor. Research during the last 10 to 15 years shows that a considerable number of parents of children with cancer experience clinical levels of posttraumatic stress symptoms (PTSS; e.g., Bruce, 2006), depression (e.g., Boman, Viksten, Kogner, & Samuelsson, 2004), and reduced quality of life (e.g., Klassen et al., 2008). Kazak et al. (2006) proposed a framework for understanding the responses to medical trauma of children and their parents. They argued that interventions targeting traumatic stress responses after medical events should be brief, in part due to the essential normality of reactions and the fact that most people function quite well after experiencing these. However, initiatives to reduce distress among parents of children with cancer have to this date been mixed in terms of benefit from intervention (Kazak et al., 2004; Sahler et al., 2005; Sahler et al., 2002; Stehl et al., 2008). To the best of our knowledge, an eight-session protocol of problem-solving therapy among mothers of children recently diagnosed with cancer has been the most effective intervention with results indicating increased problem-solving skills and moderate reductions in traumatic stress and depression (Sahler et al., 2005).

Current evidence thus tentatively suggests that the assertion that interventions for this population need to be brief could be slightly overstated. Rather, evidence suggests that some parents of children with cancer are in need of more intensive psychological interventions than has been asserted. Findings suggest that there are subgroups of parents in terms of initial levels of traumatic stress and its subsequent development. For example, it has been reported that some parents initially experience a high but steadily declining level of distress, whereas some initially and over time experience a moderate level, and others initially and over time experience a low level of distress (Dolgin et al., 2007).

We suggest that psychological interventions adjusted to a certain parent's level of distress in response to a child's cancer diagnosis are needed. When developing such interventions it needs to be considered that pediatric oncology care is highly specialized and that many families live far from the centers where their child receives its treatment. In a longitudinal study from our group, parents' mean distance from center was 151 km ($SD = 115$) km (Pöder, Ljungman, & von Essen, 2008). Also, medical treatment protocols in pediatric oncology often are given on a schedule that requires the child to be at the hospital for a couple of days, going back home for 2 or 3 weeks then back to the hospital, and so forth. This may result in a situation where parents in need of more intensive psychosocial support have a hard time remaining in continuous contact with proper providers of such support. Given this, we set out to develop an intervention based on cognitive and behavioral

principles, designed for parents of children with cancer experiencing high levels of traumatic stress that could be delivered in a remote fashion with support from a clinical psychologist via e-mail and/or telephone. This mode of administration has been shown effective for anxiety and mood disorders and various health problems such as stress, headache, and tinnitus (Anderson, 2009). Our intervention includes psychoeducation, relaxation training, and structured writing assignments that have been proven effective in self-help treatments in other populations with elevated levels of PTSS (e.g., Lange et al., 2003; Litz, Engel, Bryant, & Papa, 2007). However, given that ruminative thinking about a trauma and experiential avoidance may have an important link to symptoms of traumatic stress (e.g., Chawla & Ostafin, 2007; Ehring, Frank, & Ehlers, 2008) we included treatment components targeting behaviors hypothesized to serve such functions. These components are characterized by detached mindfulness exercises (Wells, 2008), defusion exercises, and stimulating acceptance and values-based action in the presence of aversive thoughts and feelings (Hayes, Strosahl, & Wilson, 1999). In the following we outline a conceptualization of traumatic stress in parents of children with cancer and present strategies aiming to decrease such symptoms. Finally, we present a case study as an example of the application of this approach.

Conceptualization of Traumatic Stress in Parents of Children with Cancer

Having a child with cancer is an adverse event and a potential traumatic stressor. The diagnosis of cancer can pose a threat to the child's life and result in intense fear and feelings of hopelessness in the child's parents. Even though a diagnosis of posttraumatic stress disorder (PTSD) in these parents is rare, subclinical PTSS is quite common, including symptoms such as reexperiencing, avoidance, numbing, and hyperarousal. One can argue that this type of response is natural for a parent when faced with such a situation, just as it is normal to react with intense fear when exposed to a disaster, combat experiences, or violent and/or sexual assault. In PTSD, in the more generic sense, however, the stressor, or traumatic event often is discrete, and a requisite for diagnosis is that at least 1 month has passed since the event (American Psychiatric Association, 2000). The human organism probably, as an evolutionary adaptation, has the potential of a natural recovery from these kinds of adverse events once the stressor is terminated, but for a person suffering from PTSD one can say that he or she suffers from a "traumalock" condition (Wells, 2008) where different psychological processes (and contextual variables) interfere with the organism's natural ability to recover from trauma.

Regarding PTSS in the context of having a child diagnosed with cancer one can conclude that this type of stressor is different from events that are normally associated with the onset of PTSD. The most important difference

is that having a child diagnosed with cancer is an ongoing stressor. Having a child with cancer is not something that you can escape from, as when exposed to other types of potential PTSD-inducing adverse events. Instead, having a child with cancer is an ongoing stressor including diagnosis, initiation of treatment, uncertainty of prognosis and whether the child will survive, information regarding whether treatment has been successful or not, treatment complications, and even if treatment is successful one can adequately fear the possibility of relapse. Some parents experience the death of their child. In addition to this, parents of children with cancer could be faced with difficulties in their employment responsibilities as they have to spend more time with their child, and perhaps strains in their own relationships, which can mediate more stress and adversity. Facing such a situation what is attenuated is the person's ability to cope with the situation. However, one can expect that the human organism has a natural resourcefulness to cope with these kinds of stressors, and when these conditions are met the person will achieve an optimal adaptation regarding the stressful situation. This will not be without psychological distress, but its impact is minimized so that resources can be allocated to other important issues. For some individuals destructive psychological processes might interfere with optimal adaptation and instead of promotion of recovery, attenuated distress and elevated levels of PTSS could result. We here propose experiential avoidance and rumination as core psychological processes that might interfere with optimal adaptation.

Experiential avoidance. Experiential avoidance (EA) is conceptualized as

the phenomenon that occurs when a person is unwilling to remain in contact with private experiences (e.g. bodily sensations, emotions, thoughts, memories, behavioral predispositions) and takes steps to alter the form and frequency of these events and the contexts that occasion them. (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996, p. 1154)

It is stressed that EA is a functional dimension, not topographical, which means that any type of behavior could have the function of EA, irrespective of its form. EA is suggested to be a key element in the development and maintenance of PTSS (Walser & Westrup, 2007). In a review of the literature it is concluded that there is strong support for EA as a mediating variable in the relationship between trauma and subsequent psychological distress (Chawla & Ostafin, 2007).

Even though EA, to our knowledge, is to be investigated in parents of children with cancer, one can argue that there is indirect support of its role in causing elevated distress in this population. Evidence for this comes from research investigating coping strategies and their relation to adjustment in parents of pediatric oncology patients. *Emotion-focused coping* refers to efforts to regulate emotional states caused by or related to stressful events,

changing one's perception of the situation including deliberate efforts of avoidance, and has been shown to predict general distress in parents of children with a brain tumor (Fuemmeler, Mullins, & Marx, 2001) and depression, anxiety, and global mental health in mothers of children with cancer (Barrera et al., 2004). Furthermore, Sloper (2000) found that self-directed coping strategies predicted higher levels of distress among mothers of children with cancer and Fuemmeler, Brown, Williams, and Barredo (2003) found the presence of repressive adaptation to be related to poor adjustment. Thus, although EA has not been investigated in parents of children with cancer, the overlapping constructs and behavioral proxies emotion-focused coping, self-directed coping, and repression have been shown to be associated with elevated distress, which lends preliminary support for the negative impact of EA in this context.

Rumination. Rumination has been described as a form of excessive conceptual processing characterized of "long chains of predominantly verbal thought in which the person attempts to answer 'What if . . . ?' questions or attempts to answer questions about the meaning of events (e.g. "Why do I feel this way?")" (Wells, 2008, p. 11). Rumination is assumed to play a critical role in the onset and maintenance of anxiety and depression as it, together with worry, threat monitoring, and dysfunctional strategies such as thought suppression and behavioral avoidance, feed into a viscous circle that maintain emotional distress causing psychological disorder. Indeed, research has shown that trauma-related rumination is associated with severity of PTSS (Ehring, Frank, et al., 2008; Michael, Halligan, Clark, & Ehlers, 2007) and predicts PTSD (Ehlers, Mayou, & Bryant, 1998; Ehring, Ehlers, & Glucksman, 2008).

When it comes to parents of children with cancer the role of repetitive thought and rumination and if it affects PTSS or general distress has to our knowledge not been investigated. However, Goldbeck (2001) found that rumination described as withdrawing, musing, and backwards-directed coping style was elevated in a sample of parents of children with cancer compared to a control group. Thus, one can hypothesize that rumination could be an important factor with the potential of impeding optimal adaptation when a child is diagnosed with cancer.

Conclusion and model. Having a child diagnosed with cancer elicits a range of thoughts and emotions as part of a normal reaction to such an event. At the outset of this work is the assumption that human beings have a capacity of dealing with such distressing situations. No doubt, it has probably been an evolutionary advantage for the human race to adapt to such situations, and such characteristics should have been selected in the course of natural selection. Thus, the human being has an inborn capacity to recover from stressful situations and process difficult emotions, sometimes leading to a new perspective of life and reports of increased meaning and purpose, conceptualized as post-traumatic growth (Tedeschi & Calhoun, 2004).

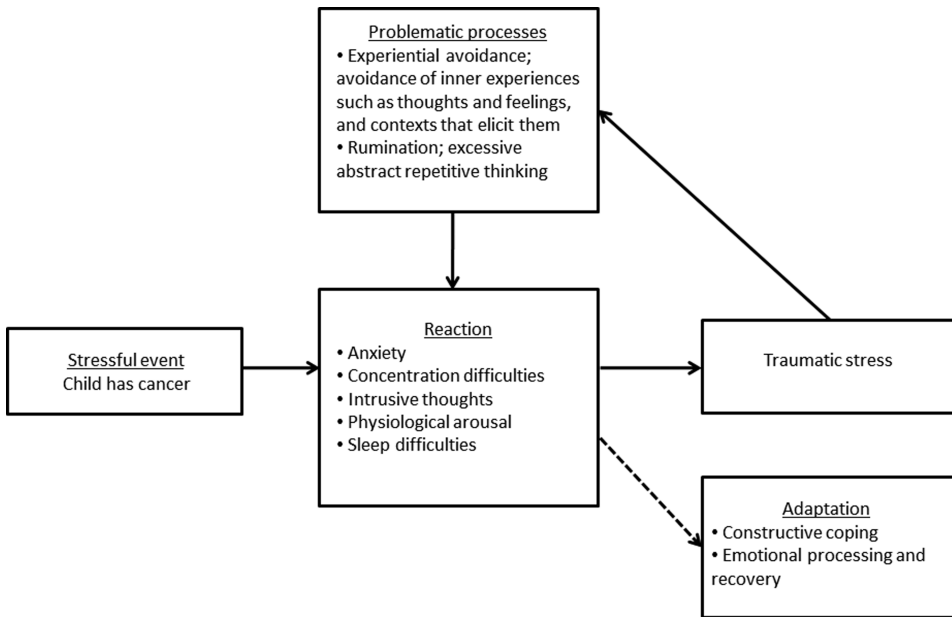


FIGURE 1 Proposed conceptualization of traumatic stress in parents of children with cancer.

However, psychological processes may interfere with this adaptation and cause prolonged distress and prevent recovery or optimal adaptation.

In Figure 1, a proposed model of the onset and maintenance of PTSS in parents of children with cancer as outlined in the foregoing is presented. Having a child with cancer elicits a range of symptoms such as physiological arousal, intrusive thoughts, and difficulties concentrating and sleep problems. Processes that interfere with optimal adaptation characterized as processing of difficult emotions and constructive coping are experiential avoidance and excessive abstract rumination. These interfering processes maintain or even exaggerate symptoms elicited by the stressful event and leads to elevated levels of sustained PTSS.

Intervention Components

Based on the conceptualization presented above we have developed a treatment manual in the form of self-help text material. The treatment components and content are outlined in Table 1. Several components are included with the emphasis on building skills to foster flexibility, cognitively and behaviorally, in relation to the adverse situation of having a child diagnosed with a severe illness. The treatment manual consists of eight modules, and the participant works with one at a time. However, the content of the modules extend into each other throughout the program, for example, relaxation skills will be covered and trained beyond Module 2.

TABLE 1 Overview of Treatment Components and Content

Module 1	Introduction to treatment model and psychoeducation. Participants are introduced to the treatment model and are provided psychoeducation regarding emotional responses when being a parent of a child with serious illness.
Module 2	Bodily tension and introduction to relaxation training. Participants are provided with information regarding bodily tension and learned to discriminate between tension and relaxation.
Module 3	The power of thinking and introduction to detached mindfulness and defusion. Participants are introduced to the concepts of defusion and detached mindfulness. They are taught “to catch themselves” when stuck with cognitive content and trained in applying strategies for defusing from cognitive content, i.e., to shift the style of cognitive processing.
Module 4	How rules and assumptions affect our behavior and introduction to behavioral experiments. Participants are introduced to the concepts of rules and assumptions and how these may affect subsequent behavior and their consequences. Participants are taught to analyze the consequences of following rules and to try out to new behaviors, if consequences are unwanted, i.e., behavioral experiments.
Module 5	Structured writing assignments, acceptance, and willingness. Participants are introduced to the concepts of acceptance and willingness and how this type of behavior functions in their everyday life. They are introduced to practicing acceptance and willingness through a series of writing assignments.
Module 6	Structured writing, perspective taking, self-compassion, and sharing with others. Participants are introduced to the concept of perspective taking as a way of fostering self-compassion. They are taught to practice shift in perspective through writing assignments.
Module 7	Values, goals, and valued action. In this section participants are introduced to the concepts of values, goals and valued action. They are taught that values are something that you will never get done with, that you always can act in accordance with your values. Participants practice generating goals that are in accord with their values and acting on these goals
Module 8	Recap, maintenance, and general self-care. In this section participants get a précis of the entire program. They are instructed to generate a maintenance-plan and are introduced to general self-care activities, i.e., general sleep hygiene, exercise and good eating habits.

In Module 1 the participant is introduced to the program and treatment outline. He or she is provided with psychoeducation regarding reactions to adverse events and symptoms of traumatic stress. Furthermore, he or she is introduced to the conceptualization outlined above and treatment components. The concepts of rumination and avoidance are introduced, and the participants are instructed to register this type of behavior when it happens. In Module 2, the participant is introduced to relaxation training. The training is a short version of applied relaxation (Öst, 1987) developed by Lisspers and Almén (2009). In Module 3, the participant is introduced to the dark side of language and thinking. Participants are taught to identify instances of “getting stuck” in rumination and cognitive avoidance. They are introduced to detached mindfulness (Wells, 2008) and defusion (Hayes et al., 1999). This includes detecting oneself when “stuck” or “caught up”

in negative thinking, and the individuals are instructed to detach from this thinking through exercises. An example of such an exercise could be “the leaves in the stream exercise” where the individual is instructed to visualize a stream passing by and to place thoughts that come to mind on leaves in the stream and watch them pass by. These types of exercises are intended to foster flexibility in thinking and prevent instances of abstract and unproductive repetitive thought. In Module 4, the participants are introduced to the concepts of rules and assumptions and how they may affect behavior. Participants are instructed to assess the function of their behavior, that is, to map its consequences. If participants notice that a certain behavior as a response to certain rules or assumptions has negative consequences, they are instructed to use detached mindfulness and defusion strategies in such situations and experiment with new behaviors, that is, behavior experiments (Farmer & Chapman, 2008). In Module 5, participants are introduced to the concepts of willingness and acceptance (Hayes et al., 1999). The distinction is made between clean and dirty discomfort in the context of having a child with cancer. Clean discomfort is thoughts and emotions that show up related to their child’s disease expected under such circumstances. However, engaging in a struggle with these thoughts and feelings, that is, trying to get rid of them, often result in dirty discomfort. Through metaphors and exercises participants are instructed to open up to and accept their clean discomfort in the service of flexibility. The main exercises in this section consist of writing assignments where the participants are instructed to open up to and express their clean discomfort. Module 6 includes writing assignments framed in the context of perspective taking (Lange et al., 2003). For example, participants are instructed to imagine a friend being in the same situation as they currently are in, and to write a letter to this friend, expressing what they would like to say to this friend. The purpose of this is to stimulate self-compassion. In Module 7, participants are introduced to the concepts of values, goals, and valued action (Hayes et al., 1999). They are taught that values are freely chosen and that they are a matter of what they want to hold as important in their lives. Furthermore, participants are instructed to generate tangible goals consistent with their values and to practice valued action, that is, acting toward goals consistent with their chosen values. In Module 8, participants are given a précis of the program and are instructed to generate a maintenance plan. This section also covers general self-care strategies such as basic sleep hygiene, exercise, and good eating habits. Participants are instructed to include these in their maintenance-plan.

CASE STUDY

In the pilot phase of an ongoing randomized controlled trial (RCT), we investigated the preliminary efficacy and feasibility of the intervention with a

mother of a child on cancer treatment. Data from pre-, post-, and follow-up assessments of the primary outcome variables PTSS, depression, and quality of life are reported. In addition, data on variables that we hypothesize to influence change in the outcome variables, namely, rumination as a response to trauma-related intrusions and the opposite of experiential avoidance, namely, acceptance and action in presence of difficult thoughts and emotions, are reported.

Maria

Maria was a 38-year-old mother of a 4-year-old girl diagnosed with acute lymphoblastic leukemia 3 months prior to the intervention start. Maria lived together with the girl's father, and they had another daughter aged 9. At the time of the intervention Maria was receiving higher education. She lived 150 km from the pediatric oncology center where her daughter received her treatment and the location of the research group. At the time of the intervention Maria's daughter was on chemotherapy with 4 to 5 days stays at the hospital every other week. She had a history of an episode of depression and occasional panic attacks (around 6 years ago) for which she had received successful drug therapy.

MATERIAL

The guided self-help treatment material consisted of approximately 100 written pages in eight chapters/modules as outlined in the Introduction and Table 1, and a CD with exercises. The material was developed by the first author, a licensed psychologist and PhD student, under the supervision of an experienced licensed psychologist, licensed psychotherapist, and PhD. It was designed to enable the participant to work with the material independently by reading and conducting homework assignments and then receive feedback via e-mail or telephone from a clinical psychologist.

ASSESSMENTS

The PTSD Checklist–Civilian (PCL-C: Weathers, Litz, Herman, Huska, & Keane, 1993) was used to assess PTSS. It includes 17 items keyed to a specific trauma, in this case the child's cancer disease, and the items correspond to the B (reexperiencing), C (avoidance), and D (hyper-arousal) criteria of PTSD in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)*: American Psychiatric Association, 2000). The Montgomery Åsberg Depression Rating Scale–Self Assessment (MADRS-S: Svanborg & Åsberg, 1994) was used to assess symptoms of depression. The Quality of Life Inventory (QOLI: Frisch, Cornell, Villanueva, & Retzlaff, 1992) was used to assess quality of life.

The Acceptance and Action Questionnaire–Parents of Children with Cancer (AAQ-PCC) developed by our research group as a modification of the original Acceptance and Action Questionnaire-II (Bond et al., 2011) was used as a measure of behavioral acceptance and action in the presence of difficult thoughts and emotions. Rumination was assessed with the rumination subscale of the Responses to Intrusions Questionnaire (RIQ; Clohessy & Ehlers, 1999; Murray, Ehlers, & Mayou, 2002; Steil & Ehlers, 2000).

PROCEDURE

Maria was recruited by a nurse at the pediatric oncology center where her daughter received her treatment. After providing written informed consent Maria and the first author met at the center for an initial interview. At the end of this interview Maria received the instruments to be completed before the intervention that she answered and returned to the first author in a prepaid envelope. It was agreed that Maria and the first author would have weekly contacts, weeks when Maria was at the center the contacts took place in vivo, and weeks when she was at home, contacts took place via telephone. Maria worked with the material for 10 weeks which resulted in three in-vivo meetings lasting 2 hours in total and six conversations via telephone lasting 3 hours in total. Maria e-mailed reports on homework assignments to the first author and received the new module at in vivo meetings or via posted mail. After finishing work with the last module Maria received and returned the assessments to be completed after intervention via posted mail. Maria was invited to complete follow-up assessments 3 months after the intervention but failed to do so because of time restraints. Instead she provided follow-up assessments 6 months after the intervention according to the same procedure. The procedure and study protocol was approved by the local regional ethics committee.

STATISTICAL ANALYSES

To determine the clinical significance and reliability of change subsequent to intervention we used statistical methods suggested by Jacobson and Traux (1991). Clinical significance is suggested when either (1) the level of functioning subsequent to intervention falls within the range of a nonclinical population, where range is defined as within two standard deviations of the mean of that population, or (2) the level of functioning subsequent to intervention places the individual closer to the mean of the nonclinical population than the mean of the clinical population, which correspond to the (2) and (3) criteria suggested by Jacobson and Truax (1991). (1) was used when the distributions were nonoverlapping and (2) when distributions were overlapping. When distributions were overlapping, the reliable change index (RC) proposed by Jacobson, Follette, and Revenstorf (1984) was utilized to ensure that change was reliable.

RESULTS

See Table 2 for an overview of results from pre-, post-, and follow-up assessments.

At the preassessment Maria's scores indicated that she experienced a high level of PTSS, moderate depression, and impaired quality of life. Her responses on the RIQ subscale indicated that she often engaged in ruminative thinking. Responses on the AAQ-PCC indicated that she used acceptance strategies to some extent but had difficulties handling distressing thoughts and emotions. In the initial contact, Maria described high levels of tension and stress and a predominant fear that her child would die. She reported suffering from headaches, neck and shoulder pain, and what she referred to as "stress-stomach" resembling symptoms of irritable bowel syndrome. Furthermore, she described mood swings and that she often felt very irritated and had frequent outbursts of anger. She ruminated about why this had happened to her family, what the purpose was, worried about being abandoned and left alone, and that nobody would care for her. In addition, she described difficulties concentrating, such as listening to others.

During the intervention Maria worked with relaxation training and practiced detached mindfulness and defusion strategies. She identified verbal rules that affected her behavior negatively, such as "I must not lose control" and "Others cannot see me sad," and was encouraged to practice detached mindfulness when these rules came into mind and to reduce avoidant behavior triggered by such thinking and instead engage in valued behavior and activities. Maria appreciated the writing assignments and put forth the value of practicing self-compassion.

TABLE 2 Scores for Maria at Pre-, Post- and Follow-Up-Assessment Compared to Clinical and Nonclinical Norms

	Pre-	Maria		Clinical	Nonclinical	Critical Cutoff	Critical Change
		Post-	Follow-up	Norms <i>M (SD)</i>	Norms <i>M (SD)</i>		
PCL-C	48	31 ^f	29 ^f	49.9 (9.1) ^a	29.0 (7.5) ^a	38.5	5.5
QOLI	-0.25	2.06 ^f	1.63	0.9 (1.6) ^b	2.6 (1.1) ^c	1.9	1.7
MADRS-S	24	8 ^f	10 ^f	20.1 (5.7) ^d	7.85 (8.4) ^e	15.2	5.0
Rumination	11	3	6	NA	NA	NA	NA
AAQ-PCC	67	83	82	NA	NA	NA	NA

Note. PCL-C = PTSD Checklist-Civilian; QOLI = Quality of Life Inventory; MADRS-S = Montgomery Åsberg Depression Rating Scale-Self Assessment; AAQ-PCC = Acceptance and Action Scale-Parents of Children with Cancer; NA = not available.

^a Pöder, et al., 2008.

^b Carlbring et al., 2005.

^c Frisch, et al., 1992.

^d Bergström et al., 2003.

^e Holländare et al., 2008.

^f Clinically significant and reliable change from preintervention assessment.

At the end of the intervention Maria stated that she found the relaxation training and detached mindfulness components most useful. She reported that she didn't feel as tense anymore and that she was confident in her new strategy when faced with new stressors. She reported that she had more distance to her own thoughts and not being caught up in them as much as before. She reported that her "stress-stomach" was much better. Her postassessments indicated a low level of PTSS, mild depression, and good quality of life, all representing clinical significant and reliable change from the preintervention assessment. In addition, responses on the RIQ subscale indicated reductions in ruminative thinking whereas responses on the AAQ-PCC indicated increased acceptance and action. These results were maintained at the 6-month follow up except for quality of life which was reduced, no longer representing clinically significant and reliable change from the preassessment.

DISCUSSION

In this article we presented a conceptualization regarding the understanding of traumatic stress in parents of children with cancer and strategies to alleviate such distress and to promote adaptation. In our conceptual model the constructs *experiential avoidance* and *ruminative thinking* are hypothesized to play important roles in negatively influencing constructive coping and adjustment. These constructs are operationalized in behavioral terms and are potentially modifiable through intervention. To our knowledge such a conceptualization guided by theory informing intervention strategies has not been outlined before in the context of parents of pediatric oncology patients. However, future empirical research is needed to illuminate whether these constructs have predictive value in the understanding of traumatic stress and general adjustment among parents of children with cancer. We have suggested that strategies such as relaxation training, detached mindfulness and defusion, acceptance, behavioral experiments, and valued action could be viable options when working with parents of children with cancer. In line with this we have developed a treatment package in the form of self-help text material that parents can work with in adjunction to support via e-mail or telephone. This article also reports findings from a case study in which we demonstrate the application and feasibility of this approach. The results indicate clinically significant and reliable change in the outcome variables PTSS, depression, and quality of life, and the intervention was well received. Maria exhibited reductions in rumination and increases in acceptance and action in the presence of distressing thoughts and feelings. However, it is important to note that casual inference cannot be implied. It would have been more stringent to use several baseline assessments and continue assessment during

intervention in a single-subject design (Barlow, Nock, & Hersen, 2009). Indeed, all effects could be attributed to spontaneous remission. Furthermore, norms for AAQ-PCC and RIQ are lacking which prevented calculations of clinically significant and reliable change for these variables. However, when considering these shortcomings it should be taken into consideration that this, to the best of our knowledge, is the first, albeit preliminary and explorative, report of a remote intervention targeting PTSS in parents of children with cancer. Awaiting more rigorous evidence we hope that the current conceptual outline and case study may serve as inspiration for research initiatives and routine clinical practice in the field of pediatric psychology (Drotar, 2009).

The current conceptualization and treatment strategies were developed for parents of children with cancer experiencing high levels of traumatic stress. The intervention is rather comprehensive and time-consuming and in contrast to the assertion that interventions for this population need to be brief (Kazak et al., 2006). However, research indicates that parental PTSS as a response to a child's serious illness is related to earlier stressful events (Pöder et al., 2008) and to a previous need of psychosocial care (Bronner et al., 2010). It therefore seems plausible that some parents of children with cancer are in need of intensive and specialized treatment approaches, and that these should be integrated as options in routine care, if proven effective in more rigorous research designs. Awaiting such evidence this article may serve as inspiration for professionals in the field of psychosocial pediatric oncology. Even though anecdotal, the findings show that it may be possible to work with parents of children on cancer treatment in a remote fashion that allude to possibilities of meeting these parents' need for psychosocial support despite the limitations that their current situation impose. Furthermore, according to this article it may be possible to integrate intervention strategies such as detached mindfulness, defusion, and values clarification when working with parents of children on cancer treatment. As in the case of Maria, focusing on helping parents to reduce repetitive ruminative thinking and experiential avoidance may help them to focus on aspects where they do have control that can have empowering consequences. We are not aware of any studies of the applicability and efficacy of such components in this population but they may show to be of value in this strained group.

We are currently running a RCT investigating the efficacy of the herein presented treatment approach in parents recruited 2 months after their child's cancer diagnosis. In the trial, this material is used in an Internet-administered guided self-help format with therapist support via e-mail. If results from this trial are positive we hope that this conceptualization and the sequent remote intervention will allow more parents in a very straining situation the access to flexible and effective help.

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