Response to Commentary on A "Cool Kids" Cognitive-Behavioral Therapy Group for Youth with Anxiety Disorders: Part 1, The Case of Erik, and Part 2, Analysis of the Process and Outcome of Responders Versus Nonresponders

"Cool Kids" in Denmark: Continuing Reflections on a Cognitive-Behavioral Therapy Group for Anxious Youth

MIKAEL THASTUM a,b & IRENE LUNDKVIST-HOUNDOUMADI a

a The Anxiety Disorder Clinic for Children and Adolescents, Dept. of Psychology, Aarhus University, Denmark
b Correspondence regarding this article should be addressed to Mikael Thastum, Department of Psychology and Behavioural Sciences, Aarhus University, Bartholins Allé 9, 8000 Aarhus C, Denmark.
Email: mikael@psy.au.dk

ABSTRACT

This paper responds to a commentary by Perini, Wuthrich, and Rapee (2013) on two case studies on cognitive behavioral therapy for anxious children and their parents using the "Cool Kids" treatment program (Lundkvist-Houndoumadi & Thastum, 2013a; Lundkvist-Houndoumadi & Thastum, 2013b). In our response we address the following topics: including fathers in the therapy; a stepped-care approach to treatment; treatment of non-responders; parental anxiety as a predictor of treatment response; combining group and individual formats; and inclusion of students in the treatment.

Key words: case studies; clinical case studies; child anxiety; cognitive behavioral treatment; group treatment; non-responders; parental involvement; stepped-care treatment

We are grateful for the thoughtful commentary from Perini, Wuthrich, and Rapee (2013) to our two case studies (Lundkvist-Houndoumadi & Thastum, 2013a; Lundkvist-Houndoumadi & Thastum, 2013b) on cognitive behavioral therapy for anxious children and their parents using the "Cool Kids" treatment program. Their outline of the Cool Kids suite of manuals is very informative and illustrates how the research field progresses, allowing the adaptation of manuals to the different needs of clients. Through this response we would like to address some of the issues raised by Perini et al., namely: similarities versus differences between treatment in Sydney and Aarhus illustrated with inclusion of fathers in treatment, a stepped-care approach to treatment, treatment of non-responders, parental anxiety as a predictor of treatment response, combining group and individual formats, and inclusion of students in the treatment.
 INCLUDING FATHERS IN THE THERAPY

Importantly, Perini et al. recognized from their own experience the descriptions of our clients, as well as the difficulties that occurred in the process of the treatment, suggesting that there may be few cultural differences between Australian and Danish children with anxiety disorders and their parents. This explanation is reflected in the fact that we only had to make minor changes to the original material in our translation and adaptation of the Cool Kids program to a Danish population.

However, one possible cultural difference that could influence both treatment process and treatment efficacy is that at our Clinic both fathers and mothers usually participate in the group sessions, whereas in Australia as well as in the United States mainly mothers participate in treatment programs. Specifically, clinicians based in school systems in the United States reported including fathers in child treatment only 6% - 30% of the time and mothers only 38% - 59% of the time (Lazar, Sagi, & Fraser, 1991; Duhig, Phares, & Birkeland, 2002). Studies of the treatment of anxious children with parental involvement typically only include mothers (e.g., Silverman, Kurtines, Jaccard, & Pina, 2009), or do not report whether fathers participated in the therapy sessions (e.g., Kendall, Hudson, Gosch, Flannery-Schroeder, & Suveg, 2008; Schneider et al., 2011).

We have only found one study measuring mothers’ as well as fathers’ attendance and engagement in session. This study included both parents in a family CBT program for anxious youth, and both parents were expected to participate in all treatment sessions. Parents were involved in the treatment as co-clients, meaning that parents learned skills to modify maladaptive parental beliefs and expectations, reduce negative reinforcement of their child’s anxious behavior, support the child’s mastery, and increase effective communication. It was found that parental attendance and engagement in the treatment was associated with child gains (Podell & Kendall, 2011). However, of the 16 sessions in the program, mothers had a mean attendance of 15.63 sessions, while fathers only had a mean attendance of 9.43 sessions. Also, fathers had significantly lower engagement ratings than mothers. Although the literature on the inclusion of parents in the treatment of anxious children is mixed (Creswell, Murray, Stacey, & Cooper, 2011; Reynolds, Wilson, Austin, & Hooper, 2012), this study suggests that when both mothers and fathers are included and engaged in the therapy, treatment gains for the children are improved.

Some studies investigating maternal and paternal treatment outcome predictors have found that pretreatment paternal rejection, somatization, anxiety, and depression uniquely predict treatment outcome (Rapee, 2000; Liber et al., 2008; Crawford & Manassis, 2001). Since fathers may have a different role in the development and maintenance of anxiety in children than mothers (Bogels & Phares, 2008), it may enhance treatment efficacy that both parents are participating in treatment.

At our Anxiety Clinic we strongly encourage both parents to attend therapy, and it is our experience that they prioritize to do so. The group investigated through the embedded case study (Lundkvist-Houndoumadi & Thastum, 2013b) illustrates how attendance is very high for both
parents; out of the 10 sessions mothers had a mean attendance of 9.33 sessions and fathers 9.00 sessions. However, a difference emerged when examining parents’ report of practicing in between sessions ($M_{mothers} = 2.64$, $M_{fathers} = 1.97$, range = 0-4), and this was also the case in the ratings given by student therapists ($M_{mothers} = 3.0$, $M_{fathers} = 2.0$, range = 0-4). Findings indicate that mothers were more engaged than fathers overall, with the lowest ratings being given to the fathers of the non-responders.

In our experience, the participation of both parents in treatment has allowed the clinician to obtain additional insight into family patterns, including both factors that maintain and factors that protect against anxiety. At intake these factors are identified and integrated into the case formulation, and can later be revised by the clinician during the course of treatment. Participation of both parents may facilitate their cooperation in regards to homework, and in session it is possible to problem-solve eventual differences in their views of the problems of their child, as well as their ways of trying to help the child. When both parents attend treatment, the family obtains a “common language” and a common way of tackling anxiety. This, in turn, may facilitate the maintenance of treatment gains, and make it possible to address the specific paternal risk, as well as protective factors for the child anxiety.

As exemplified in the case of Erik, the father was able to assist Erik with exposure exercises in situations where the mother had given up or was too anxious. Erik’s father said that he was happy about being given this role in the program, since Erik’s mother never expected him to do these things. We can assume that it was helpful for Erik, as well as for the future collaboration between the parents, that the father was empowered in his parenting role by being present in the treatment.

**A STEPPED-CARE APPROACH TO TREATMENT**

Since most children with anxiety disorders are not receiving treatment (Essau, Conradt, & Petermann, 2000), Perini et al. noted the need for developing a stepped-care approach to treating anxious children. This approach involves initially providing low intensity and inexpensive treatments to children, followed by more intensive and costly treatments to the children for whom the low intensity treatment has not been sufficiently effective. The relatively low intensity and inexpensive Cool Kids group treatment program may be seen in the middle of a continuum in a stepped-care program, preceded, for example, by an internet-based self-help program, and followed, for example, by an individualized, non-manualized treatment to the non-responders of the manualized program.

Since our initial pilot testing of the Cool Kids program, reflected in our two systematic case studies published in PCSP (Lundkvist-Houndoumadi & Thastum, 2013a; Lundkvist-Houndoumadi & Thastum, 2013b) and commented on by Perini et al., we have been working on a number of different types of studies relevant to stepped-care, as follows.

1. We have conducted a randomized waitlist controlled study of the efficacy of the Cool Kids program in Denmark (Arendt, Hougaard, Jørgensen, Mathiesen, & Thastum, 2013).
2. We are currently conducting the last treatment sessions of a randomized controlled study comparing the efficacy of a low-cost and low-intensity bibliotherapy treatment program to the efficacy of the Cool Kids program (Thastum et al., 2013). In this condition the parents are provided with self-guided reading material (Rapee, Wignall, Spence, Cobham, & Lyneham, 2008) and a workbook for their children. In groups of 5-6 couples or single parents, they meet 5 times with a therapist for 1½ hours problem-solving any issues the parents encountered with the treatment procedures. The therapists do not see the children.

3. We have evaluated the effectiveness of the Cool Kids program in ordinary clinical practice (Jónsson, Arendt, Jørgensen, Sørensen, & Thastum, 2013)

4. We have evaluated the outcome of an individualized treatment plan for children who did not respond adequately to the waitlist controlled trial (Lundkvist-Houndoumadi, Jørgensen, Mathiesen, & Thastum, 2013).

5. We are currently planning to compare an internet-based version of the Cool Kids program augmented by Skype contact with the standard therapist-led Cool Kids program.

The results of the completed studies mentioned above are in the process of being submitted for publication, but the preliminary results have already been reported at various conferences. The studies, including the planned internet-based study, evaluate and compare the efficacy and effectiveness of each intervention of different intensity and setting, a prerequisite for determining whether they are suitable to be tested in a genuine stepped-care study. A fundamental assumption for testing a stepped-care model is that with sufficient sample sizes, minimal interventions can provide significant mental health gains equivalent to that of traditional psychological therapies, at least for a proportion of patients (Bower & Gilbody, 2005).

As illustrated in Table 1, based on the percentage of participants free of primary diagnosis at discharge (as judged by the Anxiety Disorder Interview Schedule for DSM-IV C/P [Albano & Silverman, 1996]) the low intensity bibliotherapy treatment was less effective (33% diagnosis-free) than the more intensive Cool Kids treatment (64% diagnosis-free), but significantly more effective than no treatment (6% diagnosis-free). Implementing the Cool Kids program in an ordinary clinical practice produced results (46% diagnosis-free) that were lower than the Cool Kids condition in a specialized university setting, but higher than the bibliotherapy condition. Based on the primary self-report questionnaire measuring anxiety completed by the mothers (Spence Children’s Anxiety Scale (SCAS) (Nauta et al., 2004; Spence, Barrett, & Turner, 2003)), the bibliotherapy treatment was less effective ($d = 1.04$) than the Cool Kids treatment ($d = 1.18$), but more effective than no treatment ($d = 0.20$). However, the ordinary clinical practice produced results ($d = 0.77$) that were lower than the bibliotherapy condition (1.04). These somewhat conflicting findings may be partly explained by the fact that, compared to mothers at the ordinary clinical practice, the mothers at the university clinic scored significantly higher on the SCAS at intake.

Our results indicate that besides the Cool Kids program being effective in a Danish setting, a substantial proportion of anxious children in Denmark can benefit from an easily
accessible, low intensity treatment such as bibliotherapy. Thus, bibliotherapy may be a candidate for the first step in a stepped-care approach. Nonetheless, 36% are not free of their primary diagnoses even after treatment in the more intensive Cool Kids group condition in the specialized university setting and 54% after treatment in ordinary clinical practice, which leads us to the topic of non-responders.

**TREATMENT OF NON-RESPONDERS**

Perini et al. point to the need to continuously revise and improve the standard, evidence-based manualized treatment programs (e.g., the Cool Kids Program), since up to 40% of clients remain symptomatic after treatment. Perini et al. suggest that systematic case studies of clients drawn from evidence-based treatment studies may be a fruitful way of gaining knowledge of which components could be modified or added to increase treatment efficacy.

Very little is known about what characterizes non-responders within interventions such as the Cool Kids Program, under which conditions treatment works, and how the evidence based treatment mechanisms of change may be enhanced to improve the outcome of this group (Weisz, Ng, Rutt, Lau, & Masland, 2013). Only a few research summaries of predictors of outcome in CBT for anxious children have been published, and these studies have concluded that children tend to do worse when they are older, male, with higher severity of symptoms, with depressive symptoms, and from families with parental psychopathology or family stress (Hudson, 2005). Additionally, it has been shown that the most consistently identified influence on treatment outcome is parental psychopathology (Rapee, Schniering, & Hudson, 2009).

In a new systematic review of clinical and demographic pre-treatment child and family predictors of treatment outcome in CBT for anxiety disorders in youth, we concluded that few child or family characteristics predicting treatment outcome were clinically relevant. One exception was the rather trivial finding that more severely disturbed patients both begin and end treatment at a higher level of disturbance than less severely disturbed patients, but with at least as large a degree of improvement (Lundkvist-Houndoumadi, Hougaard, & Thastum, 2013). In a review of the predictors of non-response in the treatment of anxiety disorders in adults, Taylor et al. (2012) similarly concluded that no predictor of treatment outcome has been consistently supported in the literature, and that more research is needed to develop criteria for methods of selecting optimal treatments and strategies for improving outcome if the initial treatment does not lead to clinical improvement (Taylor, Abramowitz, & McKay, 2012). One of their suggestions is to reevaluate the case formulation in the case of non-response.

Research on the mediators of change in evidence-based treatments for anxiety disorders in children is also scarce, and findings confirming the temporal precedence for the mediators relative to changes in anxiety symptom (which is necessary for mediators to be considered true mechanisms of change [Weisz et al., 2013]) is to our knowledge almost non-existent. Prognostic variables of anxious children’s differential response to CBT and mechanisms of change probably form complex interactional patterns of causal relationships that may best be investigated by one of two methodologies: large samples (n>300) or multiple case studies that can investigate the
complex, idiographic patterns of patient prognostic variables (Fishman, 2005; Dattilio, Edwards, & Fishman, 2010).

**PARENTAL ANXIETY AS A PREDICTOR OF TREATMENT RESPONSE**

Perini et al. note that it is surprising that parental anxiety was not one of the factors found to distinguish between treatment responders and non-responders in the embedded case study (Lundkvist-Houndoumadi & Thastum, 2013b), especially since parental anxiety has been found to be a significant risk to the successful outcome of CBT. In our previously mentioned review of treatment predictors (Lundkvist-Houndoumadi et al., 2013) we found that even though there were some indications of parental psychopathology being associated with worse outcomes of CBT for youth, the findings were inconclusive and conflicting. The unraveling of the ideographic patterns through the systematic case study methodology may illuminate why the findings concerning prognostic variables are often conflicting. One example comes from the case study of Erik (Lundkvist-Houndoumadi & Thastum, 2013a), who shows greater anxiety when his mother is anxious, thus indicating that it is important to address maternal anxiety. In this case there was room for greater improvement (due to the high severity of the child’s anxiety), and in the therapy we worked on reducing the influence of the mother’s anxiety on her behavior towards and perception of the child. This, in addition to the traditional work with the child, facilitated improvement in both the child’s and the mother’s anxiety. This example of how treatment transformed the mother from being a risk factor to a protective factor could in some cases be an explanation for why parental anxiety, when successfully worked with, may actually enhance outcome. Despite this, in some cases parental anxiety may be so debilitating and integrated in parental behavior that it is too difficult to change through treatment that mainly focuses on children’s anxiety difficulties.

In our randomized controlled waitlist study of the efficacy of the Cool Kids group treatment in Denmark, we systematically followed up with the children who did not respond sufficiently to treatment. This follow-up utilized a mixed-methods approach, combining both quantitative and intensive qualitative material to examine in-depth why these children did not respond to treatment, and whether an additional individualized-case-formulation-based CBT treatment (Persons, 2008) could help these non-responders. Specifically, three months after the end of the Cool Kids treatment, the non-responders of the RCT were discussed at a clinical conference, and an individualized case formulation was created for those to whom additional treatment would be offered. The families were then invited to a meeting where the thoughts concerning possible reasons for the child’s non-response and suggestions for targets of the additional treatment sessions were presented. The families’ perspectives were then integrated into the design of the final individualized treatment plan. The additional treatment consisted of up to 10 case-based sessions (with a possibility for extension), and was informed by our previous knowledge of the particular factors that may have been important for a positive response to treatment for each individual child.

Out of a sample of 119 children from our clinic, 24 (20%) did not respond adequately to treatment (measured by the Clinical Global Impression-Improvement of Anxiety scale [Shaffer
et al., 1983)), and of the 16 that were offered additional case-based treatment (six were excluded due to having a primary problem not in the internalizing area), 14 were accepted to receive treatment.

The preliminary quantitative results indicate that the case-based intervention contributed to a significant decrease in anxiety symptoms and life interference due to anxiety (measured by the Children’s Anxiety Life Inference Scale [Rapee, Thastum, & Chavira, 2013]) and an increase in the childrens’ self-efficacy (measured be the Self-Efficacy Questionnaire for Children [Muris, 2001]). Also, it seems that what was needed in the treatment was “more of the same” CBT treatment elements, but the dosage and choice of the various CBT modules was individualized to address the individual difficulties of each particular child and family. This could for example be working with difficulties with motivation, completion of homework, diagnosis-specific treatment, helping the child identify his or her anxious cognitions, taking co-morbidity into consideration, or working with parental anxiety. Our approach is very similar to the modular approach suggested by Perini et al., and combines the benefits of the group format with the individual treatment that allows for a greater accommodation to the family’s needs.

**COMBINING GROUP AND INDIVIDUAL FORMATS**

Perini et al.’s idea of combining group and individual formats of therapy is very interesting. Our experience was that the children and their parents were very happy about participation in the initial Cool Kids group treatment program, even though it did not help the child sufficiently. The good results of the subsequent non-responder treatment may partly be due to the fact that the families already had participated in the Cool Kids group program where they could meet other families with similar difficulties while being introduced to the therapy components. Our clinical experience was that this prior family participation in the group program provided the therapist with knowledge of the special problems and obstacles of the individual children as they went through the group program, and that this knowledge facilitated the preparation and precision of the subsequent tailor-made case formulations and their associated treatment plans. It could be interesting to study, as Perrini et al. suggest, whether a combination of group and individual treatment, perhaps with fewer group sessions and individual treatment in between or after the group treatment, would both increase the treatment efficacy and be more cost-effective than our present non-responder treatment.

**INCLUSION OF STUDENTS IN THE CLINIC**

Perini et al. draw attention to the fact that student therapists are included in our standard Cool Kids treatment. The students are not paid but participate in treatment as a part of their education. Therefore, the cost of the treatment is not increased compared to other settings, but this should be taken into consideration when interpreting the results since their participation may enhance the quality and efficacy of the treatment. Besides being a research clinic, our Clinic also serves as a teaching clinic, as described elsewhere (Thastum, 2013). In Denmark there is a scarcity of clinical psychologists trained in evidence-based methods of treatment of psychological disorders in children, including anxiety disorders. It is therefore important that a university clinic provides opportunities for future clinical psychologists to gain experience and
hands on training with evidence-based methods. In the long run this training is designed to increase both the efficacy and the cost-effectiveness of the treatment of children with anxiety disorders.

CONCLUSION

Evidence-based treatments for children with anxiety disorders are now well validated. However, there is a need to develop treatments that can reach the many anxious children who do not get help, and to learn more about why a substantial proportion of children are still symptomatic after evidence-based treatment. We look forward to learning more from the ongoing research on stepped-care treatment, as well as modular treatment programs, at the Centre for Emotional Health at the Macquarie University in Sydney; and to integrating this knowledge into continuing research at our Aarhus Clinic into these important areas.

REFERENCES


Table 1. Overview of the results of the studies conducted at the Anxiety Clinic

<table>
<thead>
<tr>
<th></th>
<th>No treatment (3 month wait-list)</th>
<th>Cool Kids treatment in a university setting</th>
<th>Cool Kids treatment in ordinary clinical practice</th>
<th>Bibliotherapy in a university setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect size, pre – post, SCAS mother* (Cohen’s d)</td>
<td>0.20</td>
<td>1.18</td>
<td>0.77</td>
<td>1.04</td>
</tr>
<tr>
<td>% showing clinical significant change, pre – post, SCAS mother</td>
<td>11%</td>
<td>52%</td>
<td>46%</td>
<td>24%</td>
</tr>
<tr>
<td>% free of primary diagnosis (ADIS – clinician rating**)</td>
<td>6%</td>
<td>64%</td>
<td>46%</td>
<td>33%</td>
</tr>
<tr>
<td>% free of all diagnoses (ADIS – clinician rating)</td>
<td>6%</td>
<td>48%</td>
<td>37%</td>
<td>27%</td>
</tr>
</tbody>
</table>

* Anxiety Spence Children’s Anxiety Scale (SCAS; Nauta et al., 2004; Spence, Barret, & Turner, 2003)
** Anxiety Disorder Interview Schedule for DSM-IV C/P (Albano & Silverman, 1996)