



## UvA-DARE (Digital Academic Repository)

### Innovations in the Treatment of Childhood Anxiety Disorders

*Mindfulness and Self-Compassion Approaches*

Maric, M.; Willard, C.; Wrzesien, M.; Bögels, S.M.

#### DOI

[10.1017/9781108235655.013](https://doi.org/10.1017/9781108235655.013)

#### Publication date

2019

#### Document Version

Final published version

#### Published in

Innovations in CBT for Childhood Anxiety, OCD, and PTSD

#### License

Article 25fa Dutch Copyright Act (<https://www.openaccess.nl/en/in-the-netherlands/you-share-we-take-care>)

[Link to publication](#)

#### Citation for published version (APA):

Maric, M., Willard, C., Wrzesien, M., & Bögels, S. M. (2019). Innovations in the Treatment of Childhood Anxiety Disorders: Mindfulness and Self-Compassion Approaches. In L. J. Farrell, T. H. Ollendick, & P. Muris (Eds.), *Innovations in CBT for Childhood Anxiety, OCD, and PTSD: Improving Access and Outcomes* (pp. 265-286). Cambridge University Press. <https://doi.org/10.1017/9781108235655.013>

#### General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

#### Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

# 12 Innovations in the Treatment of Childhood Anxiety Disorders

Mindfulness and Self-Compassion Approaches

Marija Maric, Christopher Willard, Maja Wrzesien, and Susan M. Bögels

## Introduction

### The Guest House

This being human is a guest house.  
Every morning a new arrival.

A joy, a depression, a meanness,  
some momentary awareness comes  
As an unexpected visitor.

Welcome and entertain them all!  
Even if they're a crowd of sorrows,  
who violently sweep your house  
empty of its furniture,  
still treat each guest honorably.  
He may be clearing you out  
for some new delight.

The dark thought, the shame, the malice,  
meet them at the door laughing,  
and invite them in.

Be grateful for whoever comes,  
because each has been sent  
as a guide from beyond.

*RUMI, translated by Coleman Barks*

This poem by Rumi is probably one of the most cited poems in mindfulness trainings all over the world. It represents the core of mindfulness approach meaning welcoming daily hassles with acceptance, calmness, self-compassion, and gratefulness. Mindfulness as a therapeutic method has gained great popularity in the past few decades and has been implemented in adults suffering from a wide range of problems including chronic somatic and mental conditions, but also anxiety disorders. So, the question arises whether mindfulness would also be beneficial for childhood anxiety disorders (CADs).

In this chapter, we aim to explore the potential important role of mindfulness and self-compassion approaches in childhood anxiety disorder etiology and treatment. Given the fact that mindfulness has gained popularity in youth clinical practice, and given the promising results with mindfulness in adults with anxiety disorders (Hofmann et al., 2010), and the established associations between self-compassion and anxiety symptoms in adults (Kirby et al., 2017; MacBeth & Gumley, 2012), this approach seems appropriate for further inquiry. Thus, this chapter first explores the need for mindfulness in CAD and provides definitions of mindfulness and self-compassion. It then moves forward to the description of the approach including highlighting recent initiatives to train mindfulness and self-compassion in children with CAD. Further, we review the scarce evidence base and candidate moderators and mediators of mindfulness therapy in CAD and of self-compassion. A case is described demonstrating the application of mindfulness and its possible working mechanisms. As mentioned, scientific investigations of mindfulness in CAD are almost nonexistent so a large part of this chapter is based on theory and our clinical experience with anxious youth and mindfulness. In this chapter, we hope to provide clinicians with a guide for implementing mindfulness and self-compassion in CAD, and moreover, highlight areas for future research.

### **Overview of the Issue and the Need for Innovation**

Over six decades of research into the efficacy of interventions for CADs have taught us that the most (cost-)effective treatment for CAD is cognitive behavioral therapy (CBT; e.g., Bodden et al., 2008; Hollon & Beck, 2013). Existing CBT protocols generally include elements of cognitive restructuring and exposure activities aimed at targeting common anxiety symptoms such as fearful cognitions and avoidance of anxiety-provoking situations, respectively (e.g., Barrett, 2005; Bögels, 2008; Kendall & Hedtke, 2006). Occasionally, other techniques such as progressive muscle relaxation and social skills training are also included in the protocols (e.g., Heyne et al., 2014). Moreover, involving the parents or family in CBT for CAD has been found to be beneficial only under certain conditions (Manassis et al., 2014; Maric, Van Steensel, & Bögels, 2015) and does not appear cost-effective (Bodden et al., 2008); thus, the conclusion is that child-focused CBT is overall the best we have to offer at this time.

However, the tremendous advances in CBT research have brought to light several gaps in our knowledge. First, while CBT is effective for most children, on average about one-third of children with anxiety disorders do not respond at posttreatment (Walkup et al., 2008) or at follow-up (range 2–19 years; Gibby, Casline, & Ginsburg, 2017). Although many of these children have benefited from the treatment in terms of reduced anxiety symptoms, they still meet criteria for either their primary or other secondary anxiety disorders. Second, children with social anxiety disorder have been found to benefit less well from CBT than children with other disorders (e.g., Hudson et al., 2015), and given that social anxiety disorder is among the most prevalent and in many ways the most debilitating of the anxiety disorders (Detweiler et al., 2014),

interventions that specifically improve the effectiveness of CBT for children with social anxiety disorder are needed. And third, from a scientific perspective, an interesting question is whether there are novel theories and theoretical constructs that could help explain the etiology or maintenance of anxiety disorders in children. A long tradition exists in explaining the etiology of anxiety disorders in children and adults from a cognitive-behavioral perspective, which highlights the importance of negative cognitions, avoidance of challenging situations, physiological responses, and anxious feelings, while, at the same time, other, yet to be discovered phenomena, may also be involved in the emergence and/or maintenance of CAD, such as the role of attention and self-compassion (Van Bockstaele & Bögels, 2014).

Attention problems play an important role in most anxiety disorders. Examples include attentional bias toward ambiguous or threatening stimuli in social anxiety disorders or poor concentration in generalized anxiety disorders (Bögels & Mansell, 2004; Semple & Lee, 2008). As mindfulness is defined as an ability to pay attention in a specific way, and mindfulness trainings are targeting this mindful attention, this link between anxiety disorders and attention can be a direct rationale for implementing mindfulness with anxious individuals.

Mindfulness is defined by Kabat-Zinn (1982) as awareness that arises through paying attention in a specific way: (a) on purpose, (b) in the present moment, and (c) nonjudgmentally. In a therapeutic context, it is a mental state achieved by focusing one's awareness on the present moment, *while calmly acknowledging and accepting one's feelings, thoughts, bodily sensations, and action tendencies*. Mindfulness is a quality of attention that in some ways children are born with and therefore do not need to purposely practice: babies appear very much in the here and now of their experience. For example, when walking with a toddler to some place, we may notice how the child is very much in the here and now, stopping to pay purposeful attention to whatever catches his or her interest on the way: a flower, an animal, or a sound. The toddler will also likely not be busy with what happened before or what will happen next, or what time we need to be at our destination, but present in the current experience. The toddler will also pay attention nonjudgmentally; for example, a piece of garbage may be just as interesting as a flower. Of course, the toddler may judge, such as deciding that dog poop smells bad, or that the piece of garbage tastes bad; however, she/he will *postpone* judgment until she or he has experienced it. Further, the toddler does not need to practice "beginners mind" – a quality that is highly valued in mindfulness training, defined as opening oneself to an experience as if it were the very first experience. Zen Master Shunryu Suzuki said, "In the beginner's mind there are many possibilities. In the expert's mind there are few" (Suzuki, 2011). In fact, we parents and teachers teach children quite the opposite of being mindful: "Don't stop all the time or you will be late for school," "Yuck, don't eat that or you will be sick," and "Don't pick that flower or people will be angry at you." Similarly, when a child is expressing interest in playing the piano, we give her a piano teacher, and the teacher gives the child assignments and grades and diplomas for a certain performance, and this makes the child judgmental about his piano playing. Therefore, in many ways, it makes more sense to teach mindfulness to parents, teachers, and therapists than to children!

But, children grow up in an adult world that teaches them to meet our standards rather than developing their own standards (Bögels, 2017). We inadvertently provide them endless conditional love, rather than unconditional love messages, whereby the experience of living may lead to biased appraisals of themselves, the world, and their future, at the loss of their beginners' minds and mindful awareness. Many young children develop clinically significant anxiety (Cartwright-Hatton, McNicol, & Doubleday, 2006), and as such, mindfulness training may help them deal with such anxieties and fears.

### **Description of the Approach and Assessment Phase**

The mindfulness-based approach to treating children with anxiety disorders can take a number of forms, depending on the child, their specific diagnosis, age, their level of engagement and functioning, and existing support already in place. The primary goals of treatment include helping the child and system recognize triggers for anxiety and identify skills to use in those situations, while simultaneously working to reduce heightened physiological arousal. In the case illustration later, we describe a somewhat ideal scenario of a case; here, we will first offer some thoughts on how a mindfulness training for CAD could be shaped.

The most effective mindfulness-based therapy should begin with interviewing not only the child but also the parents/caregivers. This includes collecting data from the child and family including developmental and family history, as well as the course of the anxiety and past treatments. Because mindfulness should be practiced every day and become an integral part of the daily life, identifying symptoms and triggers of anxiety offers clinicians insight into the best ways and times to help the child integrate mindfulness skills into daily life and anxiety-provoking situations. Mindfulness-specific measures that can be used in this initial phase to assess the levels of mindfulness and self-compassion include, for example, Mindful Attention Awareness Scale for Adolescents (Brown et al., 2011) and Self-Compassion Scale (Neff, 2003). Engaging caregivers and educators will reinforce practice and progress in the child and their level of involvement will likely lead to more optimal outcomes. For families and children that might not understand anxiety or mental health issues, some basic psychoeducation by the clinician will help.

Once anxiety as a disorder and its unique course in the child is more fully understood by the child and caregivers, teaching of mindfulness practices can begin. Sessions can be with the child and caregivers together, or may involve caregivers joining in at the end of each session or at some of the sessions, or may involve separate sessions with caregivers, or without caregivers, depending on the child's age and the family's comfort and needs. To keep children engaged, mindfulness practices can be interwoven with other therapeutic activities as well.

## Mindful Systems: Involving Caregivers, Teachers, and Clinicians

While the goal of a mindfulness-based treatment might be a child practicing mindfulness on his or her own to regulate anxiety and avoidance independently, the reality is that children, anxious children in particular, likely need significant clinician and systemic support and reinforcement toward that goal (Willard, 2016). A mindfulness-based approach thus may include working with caregivers, parents, clinicians, educators, and other relevant adults to help children recognize and understand the triggers of anxiety, and reinforce using mindfulness skills. This means in-session practice of mindfulness exercises, as well as out-of-session practices. This includes careful consideration with the child and system on when and how to practice mindfulness regularly, so that the exercises become readily accessible in the more challenging or triggering moments.

Following the results from research into CBT for child anxiety disorders more broadly, one could argue that given the lack of evidence that involving parents is beneficial it might be best to deliver mindfulness to the child alone. However, our experience is that the mindful parenting approach as developed by Bögels and her team (Bögels et al., 2014; Bögels, Lehtonen, & Restifo, 2010) is not primarily focused on helping the parents help their child, as is typical for parental involvement in CBT for children with anxiety disorders in general, but in developing mindfulness in the parents themselves. Children who suffer from severe anxiety disorders can have enormous impact on their families. For example, they may refuse to go to school, do not have a social life, constantly ask their parents for reassurance, force their parents to stay home, sleep in their parents' bed, or express that they do not want to live anymore. Parents often think that they have caused or, in the least, maintain their child's level of anxiety (or we therapists make them think that!), and feel guilty as a result. Parents suffer from high stress levels if their children have severe anxiety disorders, and their stress gets in the way of approaching their child mindfully, with beginner's mind. "Oh no, not again" they may think when their child refuses to go to school because of a test that day, rather than approaching the situation with an open mind. Parents who participate in a mindful parenting group training, either parallel to their children's mindfulness group training (Bögels et al., 2008; Van der Oord, Bögels, & Peijnenburg, 2012; Van de Weijer-Bergsma et al., 2012), or as a stand-alone training (Bögels & Restifo, 2014), learn to meditate in order to become aware of their own stress and their own cognitive, emotional, and behavioral responses toward the anxiety problem of their child, and how their child's anxiety may trigger their own anxiety. They learn to become more aware of what their child, they themselves, and their combined interactions need when the child and/or they themselves have high anxiety levels. Rather than responding automatically when their child is anxious, they learn to take a breathing space so that they open themselves to more possibilities of responding. Because of their own mindfulness practice, they become a model for their child in how to apply mindfulness skills in stressful situations, and they are in a better position to guide their child's mindfulness practice.

Clinicians can pay particular attention to which practices the child finds most helpful and the most fun, both of which will motivate further practice outside of the

clinical hour. This phase may also involve practice through “symptom activation” and response prevention, such as discussing and visualizing moments of minor anxiety, then using mindfulness or breathing practices to regulate arousal. This can be augmented by systemic support and reinforcement. Perhaps the child can practice with family members or teachers in integrating mindfulness into their regular school day. The caregivers are regularly brought in, for example at the end of sessions, and the child is encouraged to teach the caregiver mindfulness practices and all together identify times to practice outside of treatment. The last stage of mindfulness treatment focuses on the child practicing and utilizing mindfulness skills independently and applying the practices proactively in situations of anticipated anxiety, as well as responsively when anxiety strikes.

### **Examples of Existing Mindfulness Programs for CAD**

When integrating mindfulness into treatment for anxiety, we can bring mindfulness into a range of existing therapy models, although a lightly structured cognitive behavioral approach appears to have the strongest research support and theoretical rationale. To our knowledge, three different mindfulness programs for childhood anxiety exist. Manualized approach like Randy Semple’s *Mindfulness Based Cognitive Therapy for Anxious Children* (MBCT-C) has gained considerable recognition in the recent years. It was developed for the population of children 9 through 12, although, as described on page 274, it was also implemented with younger children aged 7 to 8. Concepts and techniques for the program (Semple and colleagues, 2005; 2010) were adapted from two adult programs: Mindfulness-Based Stress Reduction (Kabat-Zinn, 1990) and Mindfulness-Based Cognitive Therapy (Segal et al., 2002). The training consisted of 6 weekly 45-minute sessions and was developed to train the children’s attention by focusing on bodily sensations and perceptions. Mindfulness was integrated into breathing exercises, walking, and sensory experiences. The emphasis was on learning through experience (instead of information or theory), describing experiences and not labeling or judging them. Both in-session instructions and exercises were offered, as well as homework activities. Developmentally sensitive adaptations of the training included shorter sessions (i.e., 45 minutes), briefer, more repetitious activities, and smaller groups (up to 8 children) as opposed to adult mindfulness training, which typically involves 8 2-hr weekly group sessions with 9–15 clients. Further, group interactions in MBCT-C included games and physical activities. Parents of MBCT-C members are invited to engage in the training in the following ways: (a) psychoeducation about mindfulness; (b) attending to therapist-conducted mindfulness sessions; (c) learning about different mindfulness exercises; (d) participating in homework activities of the children; and (e) participating in post-training qualitative interviews on the merits of mindfulness.

Our group utilizes two different programs in our everyday clinical practice. The first one is an 8 weekly 2 hr session group program (with one booster session 8 weeks post-training) used at our clinic – UvA minds – to teach mindfulness skills to adolescents with internalizing problems. The aim is to teach participants to deal with



the feelings of stress, somberness, and failure. The program is also directed toward teaching adolescents to cope with difficult and worrisome thoughts, and learning how to relax, sleep, and concentrate better. Each session consists of 30 minutes of Mindful and Active Physical Exercises (outdoor), 30 minutes of Yoga Exercises, and 60 minutes of practicing Mindfulness Exercises such as body scan, breathing exercises, and walk meditation. The adolescents learn to know their inner world, their thoughts, feelings, and bodily symptoms, and learn strategies of how to engage in difficult feelings and thoughts (e.g., treat thoughts as passing events in the mind, and not accurate representations of the reality). ABC (thoughts-feelings-behaviors) schemes, but also writing exercises (write for 5 minutes everything that comes into your mind) are implemented to make adolescents aware of their difficult thoughts. Homework includes 20 minutes daily practice of physical exercise, yoga, and mindfulness. As part of the standard procedure the clients are asked to fill in assessments pre- and post-training, and at 8 weeks follow-up. Assessments generally include measurements of psychopathology (Youth Self-Report; Achenbach et al., 2008), mindful attention (Mindful Attention Awareness Scale; Brown et al., 2011), self-compassion (Self-Compassion Scale; Neff, 2003), general satisfaction (Subjective Happiness Scale; Lyubomirsky & Lepper, 1999), and sleep (The Chronic Sleep Reduction Questionnaire; Dewald et al., 2012).

The second approach is one that can be used to help (anxious) children, adolescents, parents, and school personnel learn how to embody and share mindfulness skills (Willard, 2014; 2016). Materials offer a broad range of exercises that can be used with anxious youth and their families, and tips on how to best implement them in day-to-day activities. (See Table 12.1.)

What becomes clear after reviewing these approaches is that mindfulness techniques are easily combined with cognitive behavioral and other systemic approaches. In Table 12.1, we present the most commonly used mindfulness exercises in children and adolescents with anxiety symptoms or disorders. It is not that other types of mindfulness exercises cannot be found effective in fighting anxiety; it is that for these exercises some rationale exists about why they would be helpful in anxious children, and that we have experience in using them with anxious youth. The reader should be aware that this list emerged as a result of theoretical reviews and our clinical experience with mindfulness and anxious youth; so far, no research has been done on the most helpful ingredients of mindfulness treatment for youth anxiety disorders.

## **Self-Compassion for Children with Anxiety Disorders**

Self-compassion is often considered as an integral part of mindfulness interventions. For instance, adopting a nonjudgmental and friendly attitude toward our experience, or kindness and compassion of the trainer can be seen as examples of self-compassion approaches within mindfulness trainings. According to Germer and Neff (2014, p. 48), “A common healing element found in both mindfulness and self-compassion is the gradual shift from resistance to friendship with emotional pain. However, mindfulness primarily invites the question *What are you experiencing?*”



Table 12.1 *Mindfulness Exercises Commonly Used in Youth with Anxiety*

Name Exercise	Description	Rationale for CAD
Body scan	Bringing attention to different places in/on your body and just sensing how they feel	Grounding, body awareness, letting go
Breathing exercises	Breathing into the place in the body where a child feels anxiety; breath calm into the area when breathing in, breath out fear and anxiety	Awareness of effects of anxiety on the body
Single raisin exercise	Using all five senses to increase awareness of the whole experience	To approach new situations with beginners' minds rather than anxious apprehension
Various meditations – walking, sounds, looking, touch	Practicing awareness of senses	Sensory experience rather than thinking/worrying
ABC schemes: cognition and emotion	<ul style="list-style-type: none"> <li>– Seeing thoughts and feelings as they really are, deciding which thoughts to give attention to, and to which no attention.</li> <li>– Disengaging from the thoughts, they are not the reality (e.g., thoughts as clouds or boats passing by)</li> </ul>	
Imagination	Compassionate friend entering the room	Taking care of oneself when anxious
Poems	Rumi, “The Guesthouse” Cherokee Indian legend, “Two Wolves”	Pointing at important learning points in a playful way
Yoga	Mindful moving of the body	Feeling of control over the body, stilling the mind while focusing on the body
STOP	Stop what you're doing; Take a Breath; Observe; Plan and proceed	
RAIN	<b>R</b> ecognize; <b>A</b> llow and accept; <b>I</b> nvestigate with kindness, <b>N</b> onidentify	
Contact	Notice three places where your body makes contact with the world	Grounding, body awareness
Diaries – thoughts, feelings		Awareness of experience, distancing from anxiety

and self-compassion asks, *What do you need?*” Recently, with the growing body of research on self-compassion showing its protective function against psychopathology in both child (e.g., Bluth et al., 2016) and adult populations (Westphal et al., 2015), researchers and practitioners have acknowledged the importance of targeting self-compassion in stand-alone interventions.

Neff (2003) defines self-compassion as including three elements: (1) self-kindness or treating oneself with care and compassion when experiencing challenges as opposed to self-judgment, (2) sense of common humanity or understanding that our struggles are part of the human experience as opposed to isolation, and (3) mindfulness or maintaining a balanced perspective when faced with difficulties as opposed to overidentification (i.e., being carried away by the dramatic storyline of the occurred difficulties). Within the child literature, the self-compassion concept has also been expressed as “social support turned inwards” (Bluth, Roberson, et al., 2016; Breines et al., 2014).

As in the case with the mindfulness approach, self-compassion exercises such as guided meditation, visualizations, or compassionate letter writing can be integrated into traditional therapies. Clinical experience shows that the introduction of self-compassion skills works best when all individuals with whom the patient interacts on a daily basis (e.g., teachers, family members) are involved and engaged in the treatment. However, it is important to note that some children might encounter difficulties in connecting with self-compassion, or can experience mental, physical, or emotional uneasiness arising during the practice. Indeed, individuals high in self-criticism (Warren et al., 2016) might experience “fear of compassion” (Gilbert et al., 2012) or “back draft” (Germer et al., 2014). This phenomenon can be defined as an intense pain that is released because the unconditional love (i.e., self-compassion) that is practiced reveals the conditions under which one was unloved in the past (Warren et al., 2016). Therefore, clinicians should be aware of this phenomenon, and apply recommended procedures provided during self-compassion training to help children deal with overwhelming emotions that might occur during the practice of self-compassion. Both self-compassion programs described as follows address this issue in their protocols.

### **Examples of Self-Compassion Programs**

Although other therapies such as Dialectical Behavioral Therapy (Dimeff & Linehan, 2001) or self-esteem programs (McKay & Fanning, 1992) focus on the development of self-compassion skills during the therapeutic process, Mindful Self-Compassion (MSC) developed by Neff and Germer (2013) and Compassion Focused Therapy (CFT) developed by Gilbert (2009) can be identified as the two most well-known self-compassion interventions for adults. The first program targets nonclinical population and uses the meditation exercises and daily life practices such as soothing touch practice or compassionate movement exercise to develop self-compassion skills within an 8-week time period. The second program is designed to teach self-compassion in clinical population in different types of disorders by using imagery and meditation combined with psychoeducation.

Regarding child populations, recently a manualized and empirically validated version of the MSC program has been adapted for the teenage population by Bluth and colleagues (2016). This 8-week program of 1.5 hour is designed for teens from 11 to 19 years of age. The sessions contain guided meditation, art, and movement activities, and youth can learn mindful self-compassion across the following 8 themes: (a) definitions of mindfulness and self-compassion, (b) paying attention on purpose, (c) loving kindness, (d) self-compassion, (e) self-esteem/self-compassion, (f) living deeply, (g) working with difficult emotions, and (h) embracing your life with gratitude. Other recent attempts include adapting the CFT manual to the needs of adolescents from the clinical population who mainly experienced abuse and who score high on shame and self-criticism (Welford & Langmead, 2015; Welford, 2016).

### **Evidence Base for Innovation**

To our knowledge, only two studies from the same research team have tested whether mindfulness intervention can be useful with children – and then only with children who have subclinical levels of anxiety. No studies of mindfulness in children with clinically referred anxiety disorders exist at this time, and this is for sure an important area for future research.

#### **4.1 Evidence Base for Mindfulness Training in CAD**

In the first open trial study, Semple and colleagues (2005) tested the feasibility and acceptability of 6 weeks of a mindfulness group training program in five anxious children aged 7 to 8 years old. The children received six 45-minute sessions of mindfulness training aimed at increasing attention to bodily sensations and perceptions. Teacher reports of behavioral problems (i.e., CBCL) indicated reductions in scores posttreatment for four of the five participants. Co-therapists observed enthusiasm and interest in practicing mindfulness by all children and an interest to continue to do so after the training. In the second trial, Semple and colleagues (2010) randomized 25 children aged 9 to 13 years old to a 12-session group mindfulness based cognitive therapy (described previously) or to a wait-list. Children were referred to the university clinic-based remedial reading tutoring program for significant reading difficulties and associated stress or anxiety feelings. At posttreatment and at 3-month follow-up, children in the mindfulness therapy group showed fewer attention problems (as assessed with CBCL Attention Problems scale;  $d = .42$ ) as compared to the wait-list control; however, for other social-emotional problems or anxiety symptoms no differences were found between the two groups. Therefore, this controlled study does not provide compelling evidence for mindfulness as an effective treatment for child anxiety.

Thus, so far, the effectiveness of mindfulness training in anxious children is under researched. The two studies should be interpreted with caution because of the small

sample of anxious children and the amount and type of different analyses conducted on that sample. Larger studies using more rigorous methodological principles are needed in order to understand whether mindfulness in (some) children with anxiety disorders is an effective approach or a helpful addition to CBT.

### **Evidence-Base for Self-Compassion Programs**

So far, only a few studies shed light on the potential effectiveness of self-compassion approaches for child anxiety as well. First, the meta-analysis with adults (MacBeth & Gumley, 2012) shows a large effect size for the relationship between self-compassion and anxiety symptom reductions ( $r = -.51$ ). The negative direction of the relationship indicates that higher levels of self-compassion are accompanied by lower levels of anxiety symptoms, which supports the importance of self-compassion in reduction of anxiety. Second, a recent meta-analysis on compassion-based interventions including 21 randomized control trials with adults (Kirby et al., 2017) shows significant moderate effect size for reduction of anxiety symptoms, with results remaining after including active control comparisons. The authors also conclude that although more research is needed, the existing studies highlight the potential benefits of compassion-based interventions, for various outcomes, including anxiety. Third, in light of the few studies that have investigated self-compassion in relation to anxiety symptoms and other psychopathologies in youth (e.g., Muris et al., 2016), the results showed that higher levels of self-compassion were associated with lower levels of psychopathology. Moreover, the results of the pilot study with the MSC protocol for teens showed (Bluth et al., 2015) that, among other outcomes, the anxiety symptoms decreased significantly after the intervention with a small to medium effect size ( $g = -0.39$ ), and that self-compassion predicted decreases in anxiety. However, in a recent study using the same intervention protocol with 44 adolescents between 11 and 17 years old from nonclinical population (Bluth & Eisenlohr-Moul, 2017), these results were not confirmed. Indeed, only a significant decrease of perceived stress but no decrease in anxiety symptoms were observed from pre- to post-intervention or from pre- to follow-up. Finally, when taking into consideration studies in adult clinical population such as social anxiety disorder (Koszycki et al., 2016), post-traumatic stress disorder (Hirakoa et al., 2015), or generalized anxiety disorders (Hoge et al., 2013), self-compassion shows promising results and could be therefore considered as a potentially useful intervention for youth anxiety disorders.

In sum, the research on self-compassion in children and adolescents is relatively new and the results have to be interpreted with considerable caution. The studies show some preliminary support for the potential of self-compassion as a protective psychological factor, and effective intervention for anxiety disorder in youth. However, before making any firm evidence-based conclusions, more studies with both clinical and nonclinical samples with rigorous methodology are sorely needed.

## Mediators and Moderators of Change

To date, there have been no studies that have systematically evaluated predictors, mediators, and moderators of mindfulness approaches to CADs in appropriately designed and powered trials. However, potential variables of interest for future research are explored here.

### Potential Mediators and Moderators of Mindfulness Training Outcomes for CAD

How does mindfulness training for childhood anxiety disorders work, and through which mechanisms? As the primary target of mindfulness training is to increase mindful attention in the proposition that this would reduce psychopathology, one could argue that changes in attentional processes could be an important mediator of mindfulness training outcomes for childhood anxiety. Indeed, this hypothesis was tested, at least in a preliminary manner, in Semple et al.'s (2010) study in which pre- to post-changes in attentional problems (as assessed via CBCL Attention scale) were tested as a mediator of posttreatment behavior problems (CBCL total score). While mindfulness training was able to decrease attention problems over the course of the training, these decreases were not associated with decreases in behavior problems posttreatment. It should be noted that this test of mediation was weak on a number of grounds including a small sample ( $n=20$  treatment completers) and use of a traditional data-analytic technique not suitable for small samples. The question also arises whether a subscale of the CBCL is the best assessment tool to assess changes in attention problems and whether other, perhaps experimental, assessment tools should be used.

As other authors suggest (Bögels, Lehetonen, & Restifo, 2010; Duncan, Coatsworth, & Greenberg, 2009), some parental variables such as acceptance and awareness could also be important processes underlying mindfulness training outcomes in children. It would be worthwhile to investigate whether existing and yet to be developed mindfulness trainings in children with anxiety disorders and their parents are able to positively influence these phenomena both in children as well as in their parents.

In terms of variables that determine for which anxious child the mindfulness training is the most and least effective, a few potential moderators have been explored, such as the severity of anxiety problems. In Semple et al.'s (2010) study, anecdotal evidence showed that the subset of children who reported clinically elevated levels of anxiety on a questionnaire at pretreatment showed the greatest reductions in anxiety symptoms and behavior problems. Further, the types of childhood anxiety disorders may be a potential moderator. As social anxiety disorder is associated with a whole range of attentional difficulties (attentional bias, self-focused attention, attentional avoidance; see Bögels & Mansell, 2004) and mindfulness training is primarily directed at targeting attention, it is possible that children suffering from social anxiety disorder may benefit the most from mindfulness interventions. As children with social anxiety disorder appear to do less well in

CBT (Hudson et al., 2015), there is a strong rationale for examining mindfulness as an alternative approach for them. Other child anxiety disorders in which pervasive rumination or worrying is the primary target of intervention (as in generalized anxiety disorder) may also benefit from mindfulness. Children with anxiety disorders in which lack of body awareness or bodily sensory integration may be an issue, as in illness anxiety disorder or in children with autistic spectrum disorder and comorbid anxiety disorders, may also particularly benefit from mindfulness. Additionally, children with anxiety disorders and comorbid externalizing problems such as ADHD may be another group for which mindfulness may be indicated, given the effects of mindfulness for youth with externalizing problems and their parents (e.g., Bögels et al., 2008). Finally, children with anxiety disorders and comorbid depression may specifically benefit from mindfulness, given the potential effectiveness of mindfulness in reducing self-criticism (a central feature of depression) and the potential effectiveness of mindful parenting for helping parents break the negative cycle of interaction with their depressed child, which may be maintaining childhood depression (Restifo & Bögels, 2009). Although such possibilities exist, none of these have been investigated to date and await experimental examination.

### **Mediators and Moderators of Self-Compassion Program Outcomes**

The main goal of self-compassion approaches is decreasing psychopathology levels through targeting self-compassion in children and adults. The potential important role of self-compassion as a mediator or mechanism of self-compassion trainings has been investigated in a few studies so far.

Self-compassion practices increase the ability to deal with negative emotions in general, but also influence an enhancement in positive emotions (Warren et al., 2016). In this way practicing self-compassion can decrease rumination and emotion suppression but also increase positive psychological qualities such as happiness. Self-compassion has been addressed as a mechanism of change in mindfulness-based interventions studies; however, none of them target child anxiety disorders. For instance, Kuyken and his colleagues (2010) show that the decrease of depression symptoms after Mindfulness-Based Cognitive Therapy were mediated by both mindfulness and self-compassion. However, two other studies show that although self-compassion increased significantly after mindfulness interventions, it did not mediate the effect of intervention on anger (Keng et al., 2012) or anxiety (Bergen-Cico & Cheon, 2014). Finally, a recent study (Duarte & Pinto-Gouveia, 2017) shows that self-compassion did mediate the impact of the mindfulness intervention on burnout, depression, anxiety, stress, and satisfaction with life in adults. Still, this relatively modest number of studies provides initial support for the role of self-compassion as a potential mechanism being targeted during self-compassion interventions.

Although the research on the topic of potential moderators of self-compassion intervention is relatively new, some studies provide preliminary answers. In the recent meta-analysis of gender differences in self-compassion, Yarnell and colleagues (2015) reported that self-compassion levels are slightly lower for women than

men, with the difference being larger in populations with higher levels of ethnic minorities. Thus, the authors suggest taking these differences into account during self-compassion interventions, without overemphasizing their effect. Regarding adolescent population, Bluth and colleagues (2017) addressed the issue of age and gender in a correlational study. They showed that older female adolescents have lower self-compassion levels than younger female adolescents, or males at all ages. The authors recommend early intervention especially with female adolescents in order to help prevent maladaptive behavioral and emotional trajectories. Since all anxiety disorders occur more frequently among females than males and there is an important peak in adolescence, reaching ratios of 2:1 to 3:1 (Beesdo et al., 2009), self-compassion can be considered as a potential intervention to prevent and treat anxiety disorders especially in young at risk females.

### Clinical Case Illustration

In this clinical case example, we describe how a mindfulness approach based on *Growing Up Mindful* (Willard, 2016) was used with an 8-year-old boy (Toby) and his parents. Toby was referred to a private practice on the recommendation of his school counselor. Toby's anxiety had been affecting everything from his academic work to his social life as he became panicky throughout the school day, then back at home would become anxious and tearful again as he recalled the shame of struggling throughout the school day. Toby's overall functioning was high, but the anxiety was escalating and increasingly taking a toll on him, his family, and his schoolteachers as they struggled to understand and accommodate his anxiety. The bulk of treatment was done and progress made in weekly 45-minute sessions, though Toby and the therapist continue to check in about once a month.

The approach the therapist took was slightly different in this case as Toby had already had some mindfulness in school, mindful breathing as part of a classroom exercise, and there was little need for introduction or orientation to the idea of mindfulness. The therapist chose a mindfulness-based treatment based on Toby's very positive attitude toward mindfulness in school and at home. The sessions would also be less formally structured than manualized approaches such as Semple's (2005), but filling in gaps from what knowledge and practice Toby had gained in school.

After some basic intake and rapport building in the opening session, Toby spotted the therapist's "mindfulness bell," a simple metal and wood chime, on the therapist's desk immediately. *Is that a mindfulness bell?* he cautiously inquired. The therapist responded that it was, and Toby explained that his teacher sometimes taught mindfulness in school. *Will you show me?* the therapist asked him, hoping Toby could start to feel some ownership and empowerment in his practice by demonstrating mindfulness, while the therapist assessed his knowledge.

Gently and solemnly ringing the bell, Toby patiently instructed the therapist to *feel your breath go all the way in . . . and feel your breath go all the way back out*. With a head start on mindfulness from his school, the therapist and Toby discussed



different practices he had done (mostly just simple breath awareness) and agreed to explore more practices together. They also agreed that during the sessions that were largely focused on play and drawing, either he or the therapist could grab the bell, give it a ring, and they would have to do three mindful breaths.

But they did not stop there. Each week the therapist and Toby would learn and practice a new short and a new longer practice. For example, the next week it was the “hot chocolate breath.” To open their session, the therapist and Toby held a cup in their hands as if holding an invisible mug, raised them to their mouths, and closed their eyes. They would breathe in imagining that they were smelling the delicious drink in their hands, then gently blowing out through their mouths, cooling off the imaginary beverage in front of them, as they cooled off their minds and bodies from any “hot” emotions like anxiety that had been building. At the end of the session, Toby and the therapist would typically practice something longer, usually about five to ten minutes of a guided visualization, with many cues and prompts on the therapist’s part. The therapist would record these on his phone and share them with Toby’s parents. We would follow up with a brief inquiry about any changes in or with his mind and body after each practice, rating for himself how helpful he found them and brainstorming times to use the various practices.

Often, one parent would join the therapist and Toby at the end of the session, Toby would teach them the short practice like the hot chocolate breath, and as a group they would brainstorm the most helpful times to practice during the week. These included before meals, homework, and at bedtime at home, and moments in the school day when things might get challenging like before independent work in math, or before unfamiliar social events. For the most part, Toby reported using practices at the suggested times to good benefit. The therapist would also send Toby’s parents home with the week’s recording, so they could practice as a family, trying to lower baseline levels of anxiety outside of the moments. Toby wrote simple reminders on his notebook, and sometimes carried an index card with his favorite practices with him to school, especially on days that all had determined to be most “triggering.” By about the fourth week, at one school meeting the therapist attended, the family and therapist also shared Toby’s favorite mindfulness practices with his teachers, so they could prompt him to access them during the busy day when they could see his anxiety rising and reinforce practices Toby found effective.

Week by week Toby learned new short practices, ranging from mindful breathing to mindful eating and mindful walking, which was described as feeling the bottoms of his feet when he walked. We continued exploring the five senses in depth with “superhero listening” trying to notice the five most distant sounds he could hear off in the distance as a way to focus the mind when it wandered to anxiety or just off the topic at school. The therapist and Toby would practice mindfully grounding themselves in the present by focusing on all the sensations of their feet on the floor, exploring temperature, texture, moisture, pressure, as they shifted thoughts from the future and past to ground themselves in their bodies as a practice to use before tests or speaking in class. These and other practices made up parts of the sessions, which

were otherwise filled with game playing of UNO or checkers, drawing, and simple play with stuffed animals and Legos to build rapport, maintain trust, and keep up motivation. Toby also would review when he used mindfulness during the week, occasionally drawing elaborate comic books about events like using his mindfulness in rock climbing class and then feeling confident and calm enough to try rappelling.

With the introduction of each new short practice came discussions of when and how to use the practice outside of the sessions, and reviews afterward. Toby liked focusing on sounds before diving into schoolwork, feeling sensations in his feet during social events or when he had to speak in front of the class, and doing mindful breathing at other times like on the drive to school. However, breathing was not a favorite; rather he tended to prefer listening to sounds as his preferred method of grounding, and by week six or seven, this was the main practice he used outside of sessions. In the evenings, often with his family, he would listen to the recordings the therapist and he made together. Each week the therapist sent home with him a different and slightly longer visualization, and Toby would report back his favorites.

As Toby practiced between sessions, his ability to focus for longer gradually improved, up to eight minutes or so by week eight or nine with guidance and with others practicing around him. The confidence built momentum, and also helped him remember to use the shorter practices during more challenging moments in his day-to-life at school and home. As his parents liked to practice the recordings with him, as well as remaining willing to do short practices at the dinner table as a family, they too were able to enjoy the benefits and reinforce the importance of practice, making the therapist's job far easier.

Toby himself reported less anxiety after only a few weeks, while more objective observers like family and teachers reported more significant changes at around ten or twelve weeks. Toby reported that he could stay calm through school assessments, using practices to help him before challenging situations and in the moment when he felt his anxiety rising. Teachers also reported to parents fewer somatic complaints of stomach aches or nausea during school, and parents reported that Toby's mood had improved with fewer complaints of worry or somatic symptoms. Eventually, after about twelve sessions, the therapist and Toby shifted their meetings from weekly to monthly, even that primarily just because Toby enjoyed coming and practicing together. Toby and this therapist continue to check in monthly and review skills and progress, even almost two years later, though almost entirely at Toby's request.

In the end, treatment goals were largely met. Toby and his parents better understood his anxiety, as well as how to reduce it. Through practice, everyone around Toby learned how to help him identify and manage his triggers with exercises that were fun and practical, and that he began finding more of his own uses beyond just the most difficult moments of anxiety in his life that had brought him into treatment. What's more, the rest of the family, and even his teacher gained a useful skill for helping themselves and their kids manage mild to moderate anxiety.

## Challenges and Recommendation for Future Research in This Area

So, could mindfulness also be beneficial for childhood anxiety disorders (CADs)? The answer is “yes,” but our response is mainly based on theory and our limited clinical expertise with anxious youth and with applications of mindfulness techniques. As opposed to CBT that has earned the status of “well-established” in laboratory settings and is finding its way into usual clinical practice, exactly the opposite is happening with mindfulness. Given its perceived merits and the relative ease in applying mindfulness techniques in different settings, the popularity of mindfulness is growing even while researchers are in the early stages of examining what mindfulness exactly is and how it works in child populations. So the first remark we want to make is that more rigorous intervention studies (either RCTs or controlled single-case experimental designs) are needed in order to investigate the efficacy, mediators, and moderators of mindfulness training outcomes in childhood anxiety disorders. Second, assessments of the proposed mechanisms should be carefully designed and should involve both self-reports as well as experimental tasks (e.g., dot probe paradigms, emotional stroop tasks) targeting main change processes. Third, from our literature review and clinical experience, it seems that mindfulness and self-compassion approaches can best be integrated with existing cognitive-behavioral procedures for childhood anxiety disorders. The question remains for which anxious children is it most beneficial to receive mindfulness in addition to CBT? Ongoing studies such as the one conducted by our research team could help shed light on this. In this study with 130 anxious children and adolescents between 8 and 18 years with both clinical as well as subclinical anxiety levels (Telman et al., *in preparation*), therapists are provided with a range of therapy modules (e.g., cognitive therapy, exposure) based on a CBT protocol (Bögels, 2008). Besides the traditional CBT modules, a mindfulness module has been added to this treatment package. For each client the therapists personalize the therapy through use of specific module(s) and based on clinical expertise, pretreatment assessments and (in half of the cases) regular, during-treatment, client feedback.

Other interesting research questions are whether mindfulness and self-compassion practices can be used specifically to enhance the outcomes of certain CBT techniques in anxious youth such as exposure activities. Further, is there an effect of mindfulness on avoidance behavior in children with anxiety? For which anxious children is mindfulness in combination with CBT the most effective? As mindfulness is rapidly being disseminated into clinical practice, and among therapists in training and students of clinical child and adolescent psychology and psychiatry, it seems that the clinical researchers are the ones who should make a catch-up effort. Because we do not know for sure how and why mindfulness could work in anxious children, the above-noted research questions could initially be examined in a range of single-case studies prior to design and conduct of a randomized clinical trial. Interaction between research and practice is hereby an essential requirement given the rich experience of clinicians with mindfulness.

## Key Practice Points

As discussed previously, developing best-practice recommendations for mindfulness in CAD has been hampered by the absence of scientific evidence about the efficacy and effectiveness of mindfulness in children with anxiety disorders. While keeping these limitations in mind, a few recommendations based on clinical experience and theory can be made. First, during the intake phase of the treatment, assessments of mindfulness, self-compassion, and other related constructs such as self-criticism should be obtained as well as a child's, family's, and school's interest and possibilities in practicing mindfulness. Second, at this point in time, it seems that mindfulness can best be implemented in a manualized manner and in combination with cognitive-behavioral strategies such as exposure. The concept of homework is especially important in mindfulness approaches as regular daily practice of mindfulness helps develop skills that children can then apply when feeling anxious.

## Acknowledgments

The authors of this chapter have received funding from the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No. 656333

## References

- Achenbach, T.M., Becker, A., Döpfner, M., Heiervang, E., Roessner, V., Steinhausen, H., & Rothenberger, A. (2008). Multicultural assessment of child and adolescent psychopathology with ASEBA and SDQ instruments: Research findings, applications, and future directions. *Child Psychology and Psychiatry, 49*, 251–275.
- Barrett, P. (2005). *FRIENDS for Life: Group leaders' manual for children*. Caulfield South: Barrett Research Resources Pty Ltd.
- Beesdo, K., Knappe, S., & Pine, D. S. (2009). Anxiety and anxiety disorders in children and adolescents: Developmental issues and implications for DSM-V. *The Psychiatric Clinics of North America, 32*, 483–524.
- Bergen-Cico, D., & Cheon, S. (2014). The mediating effects of mindfulness and self-compassion on trait anxiety. *Mindfulness, 5*, 505–519.
- Bluth, K., Roberson, P. N. E., Gaylord, S. A., Faurot, K. R., Grewen, K. M., Arzon, S., & Girdler, S. S. (2016). Does self-compassion protect adolescents from stress? *Journal of Child and Family Studies, 25*, 1098–1109.
- Bluth, K., Campo, R., Futch, W., Gaylord, S. (2017). Age and gender differences in the associations of self-compassion and emotional well-being in a large adolescent sample. *Journal of Youth and Adolescence, 46*, 840–853.
- Bluth, K., Gaylord, S. A., Campo, R. A., Mullarkey, M., & Hobbs, L. (2015). Making friends with yourself: A mixed methods pilot study of a mindful self-compassion program for adolescents. *Mindfulness, 7*, 479–492.

- Bluth, K., and Eisenlohr-Moul, T. (2017). Response to a mindful self-compassion intervention in teens: A within-person association of mindfulness, self-compassion, and emotional well-being outcomes. *Journal of Adolescence*, *57*, 108–118.
- Bodden, D. H. M., Dirksen, C.D., Bögels, S.M., Appelboom, C., Appelboom-Geerts, K. C. M. M. J., Brinkman, A.G., ... Nauta, M.H. (2008). Costs and cost-effectiveness of family CBT versus individual CBT in clinically anxious children. *Clinical Child Psychology and Psychiatry*, *13*, 543–564.
- Bögels, S. M. (2008). *Treatment of anxiety disorders in children and adolescents with cognitive-behavioral protocol Thinking + Doing = Daring*. Houten: Bohn Stafleu van Loghum, The Netherlands.
- Bögels, S. M. (2017). *Mindful opvoeden in een druk bestaan: een praktische gids voor mindful ouderschap*. Ambo/anthos uitgevers, Amsterdam, The Netherlands.
- Bögels, S. M., Helleman, J., van Deursen, S., Römer, M., & van der Meulen, R. (2014). Mindful parenting in mental health care: effects on parental and child psychopathology, parental stress, parenting, coparenting, and marital functioning. *Mindfulness*, *5*, 536–551.
- Bögels, S., Hoogstad, B., van Dun, L., de Schutter, S., & Restifo, K. (2008). Mindfulness training for adolescents with externalizing disorders and their parents. *Behavioural and Cognitive Psychotherapy*, *36*, 193–209.
- Bögels, S. M., Lehtonen, A., & Restifo, K. (2010). Mindful parenting in mental health care. *Mindfulness*, *1*, 107–120.
- Bögels, S. M., & Mansell, W. (2004). Attention processes in the maintenance and treatment of social phobia: Hypervigilance, avoidance, and self-focused attention. *Clinical Psychology Review*, *24*, 827–856.
- Bögels, S. M., & Restifo, K. (2014). *Mindful parenting: A guide for mental health practitioners*. New York: Springer, Norton.
- Breines, J. G., Thoma, M. V., Gianferante, D., Hanlin, L., Chen, X., & Rohleder, N. (2014). Self-compassion as a predictor of interleukin-6 response to acute psychosocial stress. *Brain Behavior and Immunity*, *37*, 109–114.
- Brown, K. W., West, A. M., Loverich, T. M., & Biegel, G.M. (2011). Assessing adolescent mindfulness: Validation of an adapted Mindful Attention Awareness Scale in adolescent normative and psychiatric populations. *Psychological Assessment*. doi:10.1037/a0021338.
- Cartwright-Hatton, S., McNicol, K., & Doubleday, E. (2006). Anxiety in a neglected population: Prevalence of anxiety disorders in pre-adolescent children. *Clinical Psychology Review*, *26*, 817–833.
- Detweiler, M. F., Comer, J. S., Crum, K. I., & Albano, A. M. (2014). Social anxiety in children and adolescents: Biological, developmental, and social considerations. In S. G. Hofmann, & P. M. DiBartolo (eds.), *Social anxiety: Clinical, developmental, and social perspectives*, 3rd edn. (pp. 729–751). London: Academic Press.
- Dewald, J. F., Short, M. A., Gradisar, M., Oort, F. J., & Meijer, A. M. (2012). The Chronic Sleep Reduction Questionnaire (CSRQ): A cross-cultural comparison and validation in Dutch and Australian adolescents. *Journal of Sleep Research*, *21*, 584–594.
- Dimeff, L., & Linehan, M. (2001). Dialectical behavior therapy in a nutshell. *The California Psychologist*, *34*, 10–13.
- Duarte, J., Pinto-Gouveia, J. (2017). Mindfulness, self-compassion and psychological inflexibility mediate the effects of a mindfulness-based intervention in a sample of oncology nurses. *Journal of Contextual Behavioral Science*, *6*, 125–133.

- Duncan, L. G., Coatsworth, J. D., & Greenberg, M. T. (2009). A model of mindful parenting: Implications for parent-child relationships and prevention research. *Clinical Child and Family Psychology Review, 12*, 255–270.
- Germer, C. and Neff, K. (2014). Cultivating self-compassion in trauma survivors. In J. Briere, V. Follette, J. Hopper, D. Rozelle, & D. Rome (eds.), *Transforming trauma: Integrating contemplative and Western psychological approaches*. New York: Guilford Press.
- Gibby, B. A., Casline, E. P., & Ginsburg, G. S. (2017). Long-term outcomes of youth treated for an anxiety disorder: A critical review. *Clinical Child and Family Psychology Review, 20*, 201–225.
- Gilbert P. (2009). Introducing compassion-focused therapy. *Advances in Psychiatry Treatment, 15*, 199–208.
- Gilbert, P., McEwan, K., Gibbons, L., Chotai, S., Duarte, J., & Matos, M. (2012). Fears of compassion and happiness in relation to alexithymia, mindfulness, and self-criticism. *Psychology and Psychotherapy: Theory, Research and Practice, 85* (4), 374–390.
- Heyne D. A., Sauter F. M., Ollendick T. H., Van Widenfelt B. M. & Westenberg P. M. (2014), Developmentally sensitive cognitive behavioral therapy for adolescent school refusal: Rationale and case illustration. *Clinical Child and Family Psychology Review, 17*, 191–215.
- Hiraoka, R., Meyer, E. C., Kimbrel, N. A., et al. (2015). Self-compassion as a prospective predictor of PTSD symptom severity among trauma-exposed US Iraq and Afghanistan war veterans. *Journal of Trauma Stress, 28*, 127–133.
- Hoge, E., Hölzel, B., Marques, L., et al. (2013). Mindfulness and self-compassion in generalized anxiety disorder: Examining predictors of disability. *Evidence Based Complementary and Alternative Medicine, 576258*.
- Hofmann, S. G., Sawyer, A. T., Witt, A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 78*, 169–183.
- Hollon, S., & Beck, A. (2013). Cognitive and cognitive-behavioral therapies. In M. J. Lambert (ed.), *Handbook of psychotherapy and behavior change* (pp. 393–443). Hoboken, NJ: John Wiley & Sons.
- Hudson, J. L. Keers, R., Roberts S., Coleman J. R. I., Breen G., Arendt K., Bogels S., . . . Eley T.C. (2015). Clinical predictors of response to Cognitive Behavioral Therapy in pediatric anxiety disorders: The Genes for Treatment (GxT) study. *Journal of the American Academy of Child and Adolescent Psychiatry, 54*, 454–463.
- Kabat-Zinn, J. (1982). An out-patient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *General Hospital Psychiatry 4*, 33–47.
- Kabat-Zinn, J. (1990). *Full catastrophe living*. New York: Bantam Doubleday Dell.
- Kendall, P. C., & Hedtke, K. (2006). *Cognitive-behavioral therapy for anxious children: Therapist manual* (3rd edn.). Ardmore, PA: Workbook Publishing.
- Keng, S., Smoski, M. J., Robins, C. J., Ekblad, A. G., & Brantley, J. G. (2012). Mechanisms of change in mindfulness-based stress reduction: Self-compassion and mindfulness as mediators of intervention outcomes. *Journal of Cognitive Psychotherapy, 26*, 270–280.
- Kirby, J., Tellegen, C., & Steindl, S. (2017). A meta-analysis of compassion-based interventions: Current state of knowledge and future directions. *Behavior Therapy*. 10.1016/j.beth.2017.06.003.



- Koszycki, D., Thake, J., Mavounza, C., Daoust, JP., Taljaard M., Bradwejn J. (2016). Preliminary investigation of a mindfulness-based intervention for social anxiety disorder that integrates compassion meditation and mindful exposure. *Journal of Alternative and Complementary Medicine*, 22, 363–374.
- Kuyken, W., Watkins, E., Holden, E., White, K., Taylor, R.S., Byford, S., et al. (2010). How does mindfulness-based cognitive therapy work? *Behavior Research and Therapy*, 48, 1105–1112.
- Lyubomirsky, S., & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research*, 46, 137–155.
- McKay, M., & Fanning, P. (1992). *Self-esteem: A proven program of cognitive techniques for assessing, improving, and maintaining your self-esteem* (2nd edn.). Oakland, CA: New Harbinger.
- Macbeth, A., & Gumley, A. I. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, 32, 545–552.
- Manassis K., Lee T.C., Bennett K., Zhao X.Y., Mendlowitz S., Duda S., . . . Wood J.J. (2014). Types of parental involvement in CBT with anxious youth: A preliminary meta-analysis. *Journal of Consulting and Clinical Psychology*, 82, 1163–1172.
- Maric, M., van Steensel, F. J. A., & Bögels, S. M. (2015). Parental involvement in CBT for anxiety-disordered youth revisited: Family CBT outperforms child CBT in the long term for children with comorbid ADHD symptoms. *Journal of Attention Disorders*, 1-9.
- Muris, P., Meesters, C., Pierik, A., De Kock, B. (2016). Good for the self: Self-compassion and other self-related constructs in relation to symptoms of anxiety and depression in non-clinical youths. *Journal of Child Family Studies*, 25, 607–617.
- Neff, K. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223–250.
- Neff, K., & Germer C. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, 69, 28–44.
- Restifo, K., & Bögels, S. M. (2009). Family processes in the development of youth depression: Translating the evidence to treatment. *Clinical Psychology Review*, 29, 294–316.
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York: Guilford Press.
- Semple, R. J., & Lee, J. (2008). Treating anxiety with mindfulness: Mindfulness-based cognitive therapy for children. In L. A. Greco & S. C. Hayes (eds.), *Acceptance and mindfulness interventions for children, adolescents, and families* (pp. 94–134). Oakland, CA: Context Press/New Harbinger Publications.
- Semple, R. J., Reid, E. F., & Miller, L. (2005). Treating anxiety with mindfulness: An open trial of mindfulness training for anxious children. *Journal of Cognitive Psychotherapy*, 19, 379–392.
- Semple, R. J., Lee, J., Rosa, D., Miller, L. F. (2010). A randomized trial of mindfulness-based cognitive therapy for children: Promoting mindful attention to enhance social- emotional resiliency in children. *Journal of Child and Family Studies*, 19, 218–229.
- Suzuki, S. (2011). *Zen mind, beginner's mind: Informal talks on Zen meditation and practice*. Boston: Shambala Publications Inc.



- Telman, L. G. E., Maric, M., Miočević, M., Bögels, S.M., & Van Steensel, F.J.A. (in prep.). Feedback informed modular cognitive behavioural therapy for childhood anxiety disorders. Manuscript in preparation.
- Westphal, M., Bingisser, M.-B., Feng, T., Wall, M., Blakley, E., Bingisser, R., et al. (2015). Protective benefits of mindfulness in emergency room personnel. *Journal of Affective Disorders, 175*, 79–85.
- Van Bockstaele, B., & Bögels, S. M. (2014). Mindfulness-based therapy for social anxiety disorder. In S. G. Hofmann, & P. M. DiBartolo (eds.), *Social anxiety: Clinical, developmental, and social perspectives*, (3rd edn.) (pp. 729–751). London: Academic Press.
- Van der Oord, S., Bögels, S. M., & Peijnenburg, D. (2012). The effectiveness of mindfulness training for children with ADHD and mindful parenting for their parents. *Journal of Child and Family Studies, 21*, 139–147.
- Van de Weijer-Bergsma, E., Formsma, A. R., de Bruin, E. I., & Bögels, S. M. (2012). The effectiveness of mindfulness training on behavioral problems and attentional functioning in adolescents with ADHD. *Journal of Child and Family Studies, 21*, 775–787.
- Walkup, J. T., Albano, A. M., Piacentini, J., Birmaher, B., Compton, S. N., Sherrill, J. T., et al. (2008). Cognitive behavioral therapy, sertraline, or a combination in childhood anxiety. *The New England Journal of Medicine, 359*, 2753–2766.
- Warren, R., Smeets, E., & Neff, K. (2016). Self-criticism and self-compassion. Risk and resilience. *Current Psychiatry, 15*, 19–33.
- Welford, M. & Langmead, K. (2015). Compassion-based initiatives in educational settings. *Educational & Child Psychology, 32*(1), 71-80.
- Welford, M. (2016). *Compassion focused therapy with youth workshop*. University of Twente, Twente, The Netherlands.
- Willard, C. (2014). *Mindfulness for teen anxiety workbook*. Oakland: New Harbinger.
- Willard, C. (2016). *Growing up mindful: Essential practices to help children, teens, and families find balance, calm, and resilience*. Louisville: Sounds True, Inc.
- Yarnell, L. M., Stafford, R. E., Neff, K. D., Reilly, E. D., Knox, M. C., & Mullarkey, M. (2015). Meta-analysis of gender differences in self-compassion. *Self and Identity, 14*, 499–520.