

# Mindful Parenting in Mental Health Care: Effects on Parental and Child Psychopathology, Parental Stress, Parenting, Coparenting, and Marital Functioning

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**Abstract** This study evaluated the acceptability and effects of a Mindful Parenting course in mental health care. Parents ( $n=86$ ) referred to secondary mental health care because of their children's and/or their own psychopathology, or parent-child relationship problems, followed a Mindful Parenting course in a group format (10 groups). Assessments took place just before the course (pre-test), immediately after the nine-week course (post-test), and at 8-week follow-up. A waitlist assessment took place only for those parents who had to wait for a course ( $n=23$ ). Measures concerned parent report of psychopathology symptoms of their target child, as well as their own psychopathology symptoms, parental stress, parenting behaviors, coparenting, and marital functioning. Only one parent dropped out and parents evaluated the program as valuable and effective in many areas of family functioning. No improvement was reported during waitlist, except for an improvement in parental externalizing symptoms. Improvements after the course occurred in the target child's internalizing and externalizing psychopathology symptoms, parents' own internalizing symptoms and further improvement on their externalizing symptoms. Also, improvements occurred on parental stress, parenting, and coparenting, but not on marital functioning. Improvements were generally maintained at follow-up. In conclusion, the

very low dropout rate as well as the positive evaluations, suggest that Mindful Parenting is an acceptable and feasible intervention in mental health care. Mindful Parenting appears a promising new intervention for parents in mental health care, as it seems effective on a broad range of child, parent, and family variables. Studies comparing Mindful Parenting to other effective interventions, such as Parent Management training, are needed to gain more knowledge about its relative and differential effectiveness.

**Keywords** Mindful Parenting · Child psychopathology · Parental psychopathology · Parenting · Coparenting · Parental stress

## Introduction

Parenting is an amazingly complex, exhausting, responsible, and at times unrewarding job, yet is accomplished by most of humanity with dedication, pleasure, and love. While parenting is a challenging task in general, it can be further complicated by child or parent difficulties such as mental disorders in the child as well as in the parent, and their interaction. For example, a child with oppositional behavior problems may require more consistent parenting than other children, a parent who suffers from attention deficit and hyperactivity disorder (ADHD) or alcohol abuse may have more difficulty with consistent parenting than other parents, and the interaction of the two is likely to accelerate the existing problems in both sides of the dyad.

Various parent training programs have been developed to teach parents how to better deal with the mental disorder of their child, mostly focusing on externalizing problem behavior (Barkley et al. 2004; Chronis et al. 2004; Serketich

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and Dumas 1996), and less often focusing in internalizing problem behavior (Lundahl et al. 2005). However, these trainings are in general less effective for parents who suffer from certain mental disorders themselves, and the disorder may make it unlikely that the parent will attend or complete the training. For example, children of parents with ADHD benefit less from a Parent Management training in guiding their ADHD child (e.g., Sonuga-Barke et al. 2002; Van den Hoofdakker et al. 2010) and parents with a history of anti-social behavior drop out more often from parent training (Kadzin et al. 1995). Another example, children of depressed mothers benefit less from parent training, relapse more, and are more often classified by their mothers as nonresponders (Forehand et al. 1984; Owens et al. 2003; Webster-Stratton 1990; see also a meta analysis of Reyno and McGrath 2006). Parent training is also less effective if parents suffer from underlying marital problems (Reisinger et al. 1976; Webster-Stratton 1985), although other studies failed to find an association between marital distress/dissatisfaction and parent training outcomes (Brody and Forehand 1985; Firestone and Witt 1982). In general, marital problems have consistently been found to have a negative effect on parenting (e.g., Perren et al. 2003) and on child behavior problems, both internalizing and externalizing (e.g., Cummings 1994; Restifo and Bögels 2009).

While child or parental mental disorders and marital problems may negatively affect parenting in very different ways, one underlying commonality is the central role of attention in these processes (for a review see Wahler and Dumas 1989, for an example of an empirical study see Dearing and Gotlib 2009). Parental attention can become biased as a result of child problem behavior (e.g., Freeman et al. 1997). For example, a parent may selectively attend to the negative behavior of a child with ADHD or oppositional defiant disorder (ODD). Parents' own mental problems can also bias attention for negative child behaviors. For example, depressed parents may ruminate over negative child behaviors and be less mentally present; parents with ADHD may be less attentive to their children in general, except when their children's acting out behavior requires attention. In case of marital or divorce-related problems, parents may have biased attention for negative aspects of their partner or ex-partner, which may make them less attentive towards the needs of their child and at risk for undermining coparenting (Majdandzic et al. 2012; Restifo and Bögels 2009). Finally, biased parental attention towards negative child behaviors may be an unintended consequence of involvement in child mental health services, as negative behaviors are typically the focus of diagnosis and treatment (Bögels et al. 2010). That is, mental health professionals may inadvertently "train" parents to attend to negative behaviors, and to apply a diagnostic label on such behaviors or the child himself ("ADHD", "autistic", "oppositional"),

thereby narrowing parents' view of their children to the most negative aspects of their behavior.

Unbiased, open attention may be one of the most crucial foundations of good parenting (Kabat-Zinn and Kabat-Zinn 1997). When parents are attentive towards *all* expressions of their child without prejudice, they can respond more sensitively to their needs, and children will feel understood and contained (Duncan, Coatsworth and Greenberg 2009). In support of this idea, several studies have found that (clinic-referred) parents who report to be more mindful on one of the validated mindfulness questionnaires, report more positive parenting skills (e.g., Williams and Wahler 2010). Moreover, parents who report to be more mindful specifically in their parenting, using the Interpersonal Mindfulness in Parenting scale (Duncan 2007) report less dysfunctional parenting (Bruin et al., 2012).

In addition to attentional biases, heightened stress in parents related to their own or their children's mental disorder, their marital problems, or other sources, may also interfere with good parenting (Bögels et al. 2010). Under high stress, parents may revert to automatic, negative patterns of interaction with their child. These patterns may have developed in the parent-child dyad in part in reaction to the child's or parent's mental disorder, or may have originated in the parents' own interactions with their parents in their family of origin (Siegel and Hartzell 2004). For example, parents with maltreatment histories are more likely to repeat maltreatment of their own children, and dysfunctional parenting may repeat in subsequent generations (see Bögels et al. 2010).

Becoming a parent involves a shift of attention and resources from the self towards one's child (Bardacke 2012), thereby reducing self-nourishing attention. Taking care of oneself while taking care of one's child may be a prerequisite for good parenting. Self-nourishing attention may be particularly important for parents suffering from mental disorders, as they may have grown up in environments lacking in positive attention from parents. As a consequence, they may lack the ability to provide positive attention to themselves. Parents of children with mental disorders may also have greater difficulty providing themselves with self-nourishing attention, due to the increased demands and stresses of raising a child with a mental disorder (e.g., Baker-Ericzen et al. 2005), and may be more self-critical, due to the greater difficulties of the child and in the parent-child interaction. Developing self-compassion and being able to take care of oneself is an important parenting skill, particularly when times are difficult (e.g., Germer 2009; Neff 2003). Mindfulness interventions teach participants to adopt a more accepting, non-judgmental, and compassionate stance toward themselves (Segal et al. 2002, 2012). By devoting time to the meditation practices, parents learn to devote positive attention to the self, and to begin to experience self-compassion. This may bring about a restored balance between attention for the child and self-attention.

Taken together, parents who suffer from mental or marital problems or who have children with mental disorders are likely to have attentional biases and stress levels that interfere with good parenting, may be impulsive and reactive to their children, and may be more likely to have experienced dysfunctional relationships with their own parents growing up. Furthermore, these parents may be self-critical and they may have difficulty soothing themselves and being compassionate towards their own imperfections as parents, and may have difficulty taking care of their own needs for comfort, pleasure, or relaxation.

### What is Mindful Parenting?

Mindful Parenting training is a new application of mindfulness which aims to improve parenting by improving the quality of parental attention, increasing awareness of parental stress, reducing parental reactivity, and decreasing the intergenerational transmission of dysfunctional parenting (Bögels et al. 2008; 2010). Kabat-Zinn and Kabat-Zinn (in Bögels and Restifo 2013) define Mindful Parenting as: Mindful Parenting is an ongoing creative process, not an end point. It involves intentionally bringing non-judgmental awareness, as best we can, to each moment. This includes being aware of the inner landscape of our own thoughts, emotions, and body sensations, and the outer landscape of our children, our family, our home, and the broader culture we inhabit. It is an on-going practice that can grow to include (1) greater awareness of a child's unique nature, feelings, and needs; (2) a greater ability to be present and listen with full attention; (3) recognizing and accepting things as they are in each moment, whether pleasant or unpleasant; and (4) recognizing one's own reactive impulses and learning to respond more appropriately and imaginatively, with greater clarity and kindness.

We hypothesized six mechanisms of change through which a Mindful Parenting course may improve parenting (Bögels et al. 2010). Mechanisms of change are defined as the basis for the effect, i.e., the processes or events that are responsible for the change; the reasons why change occurred or how change came about (Kazdin 2007). First, reducing parental stress will result in less parental reactivity, as under parenting stress parents may fall back on a flight/fight/freeze response. The assumption is that parents' wisdom and skills in how to parent is not available under high stress, and will become accessible when they have learned to recognize their stress and take a breathing space while stressed, and/or have lowered their general stress levels through the course. The second mechanism of change concerns reducing parental preoccupation resulting from parental and/or child psychopathology. In Mindful Parenting parents become aware of their biases and

preoccupations, and learn to use "beginners mind", first while observing and playing with their child, and later on in difficult parenting situations. The third proposed mechanism of change is improving parental executive functioning in impulsive parents. Parents of children suffering from psychopathology related to executive functioning problems, such as ADHD, autism, and oppositional and conduct disorders, may have similar executive functioning problems because of shared genes. Also, parents may be referred to Mindful Parenting because of own psychopathology that is related to executive functioning problems. Improved attention and reduced impulsivity through mindfulness meditation, is assumed to improve parenting. The fourth mechanism of change assumed is breaking the cycle of intergenerational transmission of dysfunctional parenting schemas and habits. In Mindful Parenting, parents become aware of how dysfunctional parenting schemas and habits are activated under stress and strong emotions, and automatically repeated. Recognition of these patterns, as well as learning to breathe under such intensity, interferes with automatic intergenerational transmission and as such improve parenting. The fifth mechanism is increasing self-nourishing attention. Parenting requires enormous attention and care for the child and may leave parents depleted of energy, which may be even more the case for parents of children with severe problems such as autism, and for parents who have missed that care when they were young. Taking care of oneself is a precondition for taking care of a child. Meditating is a way of taking care of oneself, and may thereby improve parenting. The sixth mechanism concerns improving marital functioning and coparenting. Parents may use mindfulness not only in the relationship with their child, but also with their partner, which may improve the partner and coparenting relationship. When parents feel supported by their partner and feel a team as parents, this is found to improve their parenting skills.

### Mindful Parenting: Empirical Findings

Mindful Parenting is a relatively new concept and for this reason no more than a few case studies and open trials have been conducted on the effects on parents and children, which we will discuss below.

In a preventive context, Coatsworth et al. (2010) evaluated the efficacy of the Strengthening Families Program that added mindfulness principles and practices to the original program and a delayed intervention control group. This was a randomized pilot intervention trial, with 36 mothers with children between 10 and 14 years old and their parents. Results showed the parent program that added mindfulness principles generally demonstrated stronger effects on maternal self-report measures of Mindful Parenting and mothers and youth reported parent–youth relationships, and

comparable effects as the original parent program on maternal self-report measures of child management practices.

Another preventive study evaluated the effects of a Mindful Parenting program, given to 12 recently divorced or separated parents (Altmaier and Maloney 2007), in an uncontrolled open trial. Potential effects were measured using questionnaires about the participants' mindfulness, their perceived stress in the parent-child system and program evaluation questionnaires. Furthermore, behavioral home observations were made by trained raters, prior to and at the conclusion of the treatment. Besides an increase in parents' mindfulness, no positive results were found. Parents however, reported that they considered the program overall helpful and thought that it positively affected their relationship with their child.

In a mental health care setting, using individual single-subject designs, Singh et al. (2006; 2007; 2010) showed Mindful Parenting training to be effective for children with autism (2006), developmental disabilities (2007) and ADHD (2010), and their parents. After completing the training children showed a decrease in aggression, non-compliance, and self-injury, according to maternal real-time event recording using a palm DPA, and an increase in positive social interactions, as rated by professionals during interactions with siblings. Positive effects were also found in the mothers, who reported increased satisfaction in their interactions with their child and increased happiness with parenting. In the crossover study of Singh et al. (2010), after a 12-session Mindful Parenting training for mothers, the children were subsequently given a Mindfulness training. Results show that Mindful Parenting for the mothers enhanced compliance in their children. When the children received Mindfulness training, compliance of the children increased even more markedly. These effects were maintained during follow-up.

Three studies in mental health care settings combined Mindful Parenting for parents of children and adolescents with ADHD and other externalizing disorders with parallel Mindfulness training for the children or adolescents themselves. First, Bögels et al. (2008) investigated this approach in 14 families of adolescents with externalizing disorders, using a quasi-experimental waitlist control without randomization. After the combined Mindful Parenting and Mindfulness for adolescents training, adolescents self-reported substantial improvement on personal goals on the Goal Attainment Scale, on internalizing and externalizing complaints on the YSR, on attention problems, happiness, and mindful awareness, and performed better on a sustained attention test. Likewise, parents reported improvement on children's goals, their children's externalizing and attention problems using the CBCL, self-control, attunement to others, and withdrawal. In addition, parents reported large improvements on their own goals concerning their parenting and the parent-child

relationship. Second, Van der Oord et al. (2012) applied a similar combined Mindful Parenting/Mindfulness for children approach in families of children aged 8–12 with ADHD, using again a quasi-experimental waitlist control without randomization. Results showed a significant reduction, after the combined intervention, in parent-rated inattention and impulsivity/hyperactivity of themselves, using the ARS, and of their child, using the DBDRS. Further, parents reported a significant increase of mindful awareness and a reduction of parental stress and parental overreactivity. Teachers reported improvement on children's inattention but not on impulsivity/hyperactivity on the DBDRS. Third, Van de Weijer-Bergsma et al. (2012) tested the same approach in families of adolescents ( $n=10$ , aged 13–18) with ADHD, and found significant improvement in adolescents' self-reported, and father-reported attention and externalizing symptoms as measured with the YSR/CBCL, and in adolescents' executive functioning as measured with the BRIEF (adolescent, father, and teacher report), on paternal (but not maternal) self-reported parenting stress, and on maternal (but not paternal) self-reported parental reactivity. In all three studies, effects were maintained at 8-week follow-up. Although the effects of these three studies are promising, it remains unclear to what extent they can be attributed to the Mindful Parenting intervention, to the Mindfulness intervention for the children or adolescents, or to the combination of the two interventions.

Finally, Srivastava et al. (2011) conducted an uncontrolled open trial without waitlist assessment to examine the effects of a Mindful Parenting program of 24 individual sessions on the behavioral problems of 60 children aged 3–6 referred to pediatric care. Results showed a decrease in total disturbed behavior, and in hostile/aggressive behavior, anxious behavior, and hyperactive/distractible behavior in the children, according to ratings of mental health professionals on the Preschool Behaviour Questionnaire. No follow-up took place.

In sum, Parent Management training, although effective for reducing child behavior problems, appears to be less effective or ineffective in parents who suffer themselves from mental disorders, particularly when related to executive functioning, such as ADHD. Mindful Parenting is an alternative approach to work with parents of children with or at risk of developing mental disorders, and with parents with mental disorders. Mindful Parenting may have broader effects than Parent Management training, not only on child but also on parental mental disorders, and may affect parental stress, and parenting quality, and the co-parental and marital relation. A few controlled case studies and open trials have studied the effect of Mindful Parenting programs focusing on children of various ages and problems, and reported significant reductions in problem behavior of the children and parental measures such as parental stress in preventive and clinical contexts, aside from a preventive study on

recently divorced parents. Most studies in clinical contexts have combined Mindful Parenting with Mindfulness for children, therefore, the effects of solely Mindful Parenting on child and parental mental health problems remain unclear. The studies that examined Mindful Parenting as a single intervention did not have follow-up measurements, so it is unknown whether effects are maintained, and did not assess outcomes on parents' own mental health.

### Current Study

The goal of the current study was to evaluate the effects of an nine-session weekly group Mindful Parenting program in a child and parent secondary mental health care context, for a broad range of child and parent problems. We assessed the effects on a wide range of parent-rated outcomes including: child internalizing and externalizing problems, parents' own internalizing and externalizing problems, parental stress, parenting, coparenting, and marital satisfaction. A quasi-experimental design was used in which those families who had to wait at least 5 weeks before the intervention started completed a waitlist assessment, and all families were assessed at pre-test, post-test, and at 8-week follow-up. We hypothesized that Mindful Parenting would somewhat decrease (parent-rated) internalizing and externalizing symptoms of the child for which parents were referred. While in some children with mental disorders improvements in symptoms can be expected when parents become more mindful, in other children the improvement through Mindful Parenting would be that the parent becomes more accepting of the child's problems. We also hypothesized some improvement in parents' own internalizing as well as externalizing symptoms of psychopathology. As not all parents will have such symptoms, we expected improvements to be in the medium effect range. We expected larger improvement on parental stress, as parents who are referred to Mindful Parenting, generally experience elevated parental stress levels. We also anticipated some improvement on parenting, that is, that parents would become more accepting and less rejecting of their child, as well as more autonomy encouraging and less overprotective. We expected that if parents would apply the mindfulness skills they learned to deal with strong emotions, stress, and conflict with their child, also with their partner, we would find improvements in coparenting and marital functioning.

## Method

### Participants

Parents referred to a child and youth secondary mental health care center, who experienced stress or difficulties

in raising (one of) their children, were offered Mindful Parenting. The parenting stress or difficulties could be related to their child's and/or their own psychopathology. Of the 98 parents who participated in the intervention, 86 agreed to participate in the research as well and signed informed consent. Research participants were 77 (89 %) mothers and nine (11 %) fathers. Of the 86 parents, seven participated in the Mindful Parenting training as a couple, so that there are 79 families in the sample. Fifty participants (63 %) were living together with the other parent, 19 (24 %) were separated or divorced, three (4 %) had a relationship with the other parent but were living apart, and seven (9 %) were widows. Of the divorced/separated participants, six had a new relationship.

Parents were on average 45 years old (SD 6.6, range 28–64). Parents' educational level was 7.1 (0.8) for fathers, and 6.9 (1.4) for mothers, on a scale ranging from 1=elementary school to 8=university college. Fathers' average professional level was 8.7 (2.3) and mothers' 8.2 (2.5), ranging from 1=no labor to 11=university degree required. The majority of the parents were born in the Netherlands (70 parents, 81 %), 10 were born in other European countries (12 %), two in South-America (2 %), two in North-America (2 %), one in Asia (1 %), and one in Africa (1 %).

Parents had on average 2.2 (SD 0.8, range 1–4) children. Of these children, 82 (57 %) are boys and 61 (43 %) girls, with an age ranging from 2 to 21, mean 9.9 (4.2). In 64 families (81 %) parents experienced problems with specifically one or two of the children. These children were labeled the target children, 42 (60 %) are boys and 28 (40 %) girls, their age ranging from 2 to 21 with a mean of 10.7 (4.6).

All parents experienced parent-child relationship problems and 50 (58 %) of the parents were diagnosed with a parent-child relational problem (DSM-IV V-code 61.20). Furthermore, 31 % of the parents had a diagnosis concerning their own psychopathology: seven (8 %) adjustment disorder, one (1 %) ADHD, 11 (13 %) depression, three (3 %) dysthymia, two (2 %) bipolar disorder, and one (1 %) borderline personality disorder. The primary diagnoses of the target children were: 33 (47 %) ADHD, 15 (21 %) autistic spectrum disorder, five (7 %) anxiety disorder, one (1 %) depression, three (4 %) dysthymia, three (4 %) ODD, one (1 %) conduct disorder, three (4 %) learning disorder, and one (1 %) schizophrenia. DSM-IV classifications were established by a multidisciplinary staff, and were based on interviews with parents and child, observations, previous information and testing in other mental health services, psychiatric consults, as well as the semi-structured diagnostic interviews ADIS-C and P (Silverman and Albano 1996) to assess anxiety, mood, and behavior disorders, and the ADI-R (Lord et al. 1994) to assess autism-spectrum disorders.

## Procedure and Design

After obtaining informed consent, 23 parents (27 %) had to wait for the treatment at least 5 weeks and conducted waitlist assessments, in order to control for the effects of time and assessment. Immediately before the Mindful Parenting course all 86 parents were (re)assessed. After the 8-week course a post-test took place, and 8 weeks later follow-up assessments. The questionnaires were completed at home. In total one parent (1 %) dropped out of treatment, which means missing four or more sessions. This parent did not complete further assessments.

## Intervention

The Mindful Parenting training is an adaptation for parents of the Mindfulness-Based Cognitive Therapy (MBCT) for depression (Segal et al. 2002, 2012), and the Mindfulness-Based Stress Reduction program (MBSR; Kabat-Zinn, 1990). The Mindful Parenting course consists of 8-weekly 3-h group sessions in groups of eight to 14 parents, plus a follow-up session 8 weeks later. Groups were led by one or two psychotherapists, who were experienced Mindfulness teachers with a background in cognitive behavior treatment for children and parents, in family treatment, and in group psychotherapy. The mindfulness teachers met weekly to ensure treatment integrity, discuss the group process, application of techniques, and individual group members.

The Mindful Parenting training retains the basic structure of the MBCT and MBSR programs in the sense that the same general meditation and yoga exercises are practiced, according to a similar build-up (see Table 1). Similar attitudinal foundations are addressed, but focused on parenting, for example automatic pilot parenting, parental doing and being mode, parental self-compassion, and beginners mind parenting. The rationale as to why participants may benefit from mindfulness is tailored towards parenting. Next to the MBCT/MBSR meditation practices, such as the body scan, the 3-min breathing space, specific in-session and homework practices are added to promote mindful parenting. Parents are instructed to apply mindfulness to interactions with their children, their partner or ex-partner, and the everyday tasks associated with parenting. One example of such a practice is observing one's child with beginner's mind, as was done with a raisin in the first session. Parents are encouraged to become aware when they responded to their child in an automatic, mindless manner, when occupied by their own thinking, when stressed, and based on their own upbringing experiences, and their previous experiences with the child. Parents are invited to pay full attention first to themselves as a parent, and second to the child and the interaction with their child, and, based on this broadened

awareness, to respond rather than react. The first sessions focus on helping parents become aware of their body while parenting, and particularly of parenting stress and stress signals in their bodies and minds. Then, parents are encouraged to become aware of automatic patterns in their interactions with their child, and to use the breathing space to delay reacting to their children (or partner) automatically. Using experiential and writing exercises, parents are invited to explore whether the current parent-child patterns were related to patterns in their own youth. The theme of conflict in parent-child relationships is introduced later on in the course, and parents practice going back to their child to repair the relationship after a difficult conflict ("rupture and repair", Siegel and Hartzell 2004). Finally, mindful limit-setting in parenting is addressed. Parents are asked to practice meditation and yoga exercises at home, six times per week for approximately 1 h. They are also asked to practice informal Mindful Parenting exercises, such as "seeing your child with beginner's eyes" and mindfully performing daily parenting tasks. For a full description of the program, including the similarities and differences compared to MBCT and MBSR, see Bögels and Restifo (2013).

## Measures

### *Child Psychopathology*

Parents' perceptions of their child's emotional and behavioral problems were measured using the Child Behavior Checklist (CBCL; Achenbach and Rescorla 2000, 2001). Both the CBCL/1.5–5 (targeting children from 1.5–5 years old) and the CBCL/6–18 (targeting children from 6–18 years old) were used in the current investigation. The CBCL/1.5–5 consists of 100 items and the CBCL/6–18 of 113 items. All items are rated on a 3-point Likert scale, ranging from 0 (*not true*) to 2 (*very true or often true*). We used the "internalizing" and "externalizing" syndrome scale. Good scale reliability and validity of the Dutch translation of the CBCL have been reported (Verhulst et al. 1996).

### *Parental Psychopathology*

Parents' own psychopathology was assessed with a Dutch shortened version (Ferdinand et al. 1995) of the Young Adult Self Report (YASR; Achenbach 1997), an upward extension of the YSR for 18 years and older. Syndrome items (52) were rated on a 3-point Likert scale ranging from 0 (*not true*) to 2 (*very true or often true*). The YASR is based on the CBCL, measuring "internalizing" (social withdrawal, somatic complaints, and anxiety/depression) and "externalizing" (delinquent and aggressive behavior) symptoms.

**Table 1** Outline of the nine-session mindful parenting program

1. <i>Themes: Automatic pilot versus non-reactive parenting, awareness of each moment, perceiving with a 'fresh' view.</i> Getting to know each other, rationale, raisin exercise, body scan
2. <i>Themes: Beginners mind parenting, perception vs. interpretation, obstacles to practice.</i> Body scan, interactive review of homework, exploration of obstacles to practice, attitudinal foundation of mindfulness, seeing your child with beginner's mind, 10-min sitting meditation on the breath
3. <i>Themes: Watching the body during parenting stress, mindful seeing.</i> Exercise seeing with a 'fresh' view, 20-min sitting meditation with focus on breath and body sensations, interactive review of homework (meditation exercises and pleasant event calendar), yoga practice (lying) with theme of limits, 3-min breathing space
4. <i>Themes: Responding vs. reacting to parenting stress.</i> 30-min sitting meditation with awareness of breath, body, and sounds; interactive review of homework; discussing negative events; 3-min breathing space; 3-min coping space; flight–fight–freeze–dance demonstration, yoga practice (sitting and standing) with theme of balance
5. <i>Themes: Recognizing patterns, responding with acceptance to self and child</i> 40-min sitting meditation with awareness of breath, body, sounds, and thoughts; interactive review of homework; discussing stressful interactions with child; experiential practice of accepting emotions of parent and child; 3-min coping space using the most difficult behavior of your child, interactive discussion of parent–child patterns
6. <i>Themes: Dealing with difficult emotions</i> 40-min sitting meditation with awareness of breath, body, sounds, and thoughts; choiceless awareness; interactive review of homework; discussing stressful situations with partner/child; experiential awareness of automatic reactions from parents' own childhood; walking meditation; meditation practice of mindfulness applied to a stressful parenting event; 3-min coping space, allowing emotions to be there, "doors"
7. <i>Themes: Rupture and repair; acceptance and limits</i> 40-min sitting meditation with awareness of breath, body, sounds, and thoughts and choiceless awareness; interactive review of homework; rupture and repair exercise for parent–child conflicts; awareness of limits
8. <i>Themes: What has been learned and the future</i> Body scan, review of homework, meditation on goals and hopes, evaluation of personal process via symbolic objects and process description, make plans for continuing mindful parenting practice for the next 8 weeks, and bring intention to them
9. Follow-up meeting (8 weeks after session 8): Sitting meditation, discussion of home practice in the past 8 weeks, setting intentions for the coming 8 months, mountain meditation, stone meditation, individual feedback on the assessment results, final questions or help needed

Good reliability and validity for the American YASR have been reported by Achenbach (1997) and were supported for the Dutch version (Ferdinand et al. 1995; Wiznitzer et al. 1992). Although the YASR version used was not validated for the age group of the present study, all items seemed applicable, and the YASR syndrome scales items are highly similar to the Adult Self-Report (ASR) syndrome scale items (Achenbach and Rescorla 2003). In line, Achenbach and Rescorla (2003) report very high correlations between the YASR and ASR syndrome scales internalizing (.99) and externalizing (.97). In this study the Cronbach's alpha coefficient was .90 for internalizing and .78 for externalizing problems.

#### Parental Stress

Parental stress was assessed with the Dutch Parenting Stress Index (PSI) (Brock et al. 1992), based on the American Parenting Stress Index (Abidin 1983). We used the 15-item scale "Sense of Competence", measuring the extent in which the parent feels incompetent in parenting the child, which possesses good reliability and validity (Dekovic et al. 1996). An item example is: "Raising my child is more difficult than I expected". Parents rated each item on a 6-

point Likert scale, ranging from 1 (*totally disagree*) to 6 (*totally agree*). In this study the Cronbach's alpha was .89.

#### Parenting Style

The Rearing Behaviour Inventory (RBI, Bögels and van Melick 2004) was applied to measure aspects of overprotective and rejecting parenting. The RBI is rated on a 4-point scale, ranging from 1 (*not at all true*) to 4 (*very true*). A four-factor model was found to fit the RBI best, the factors being autonomy encouragement (seven items, "I encourage my child to make his/her own decisions"), overprotection (seven items, "I am overprotecting"), acceptance (five items, "I don't approve some of the things my child does, but I don't reject him/her as a person"), and rejection (nine items, "I don't look at my child, if he/she has disappointed me") (Verhoeven et al. 2012). In this study alpha coefficients were .76 for autonomy encouragement, .63 for overprotection, .65 for acceptance, and .78 for rejection.

#### Coparenting

The Coparenting Scale from McHale (1997) measures the parental behaviors thought to promote or undermine children's

sense of the coparental and family unit. Both overt coparenting (displayed by the parent in the family triad) and covert coparenting (displayed by the parent when alone with the child) are measured. We used a Dutch version of the Coparenting Scale (Karreman, Tuijl, Van Aken, and Dekovic, 2008), containing 18 items. Parents rated each item on a 7-point scale, ranging from 1 (*absolutely never*) to 7 (*almost constantly*). The Coparenting Scale consists of four subscales: family integrity, disparagement, conflict, and reprimand. Family integrity reflects active parental attempts at promoting a sense of togetherness among family members. Disparagement contains items that reflect active disparagement of the coparent and undermining of his or her authority or credibility. Conflict measures overt interparental disagreement or conflict in the child's presence. Reprimand captures interparental involvement in limit-setting and discipline. McHale (1997) reported alpha's of .82 for family integrity, .75 for disparagement, .79 for conflict, and .62 for reprimand. In this study, we found an alpha of .81 for family integrity, .68 for disparagement, .67 for conflict, and .34 for reprimand. Because of the low alpha of reprimand, this scale was left out for analyses.

#### *Marital Conflict*

Marital conflict was measured with the "spouse/partner" scale of the Young Adult Self-Report (Achenbach 1997). The scale spouse/partner consisted of nine items, of which we used the items that truly measured conflict (e.g., "My partner and I disagree about money"), and left out two positive items: "I feel satisfied with my partner" and "My partner and I enjoy similar activities". Also, we left out the item "My partner and I disagree about having children" as participants had children. The six items are rated on a 3-point Likert scale, ranging from 0 (*not true*) to 2 (*very true or often true*). In the current study we found an alpha of .61 for marital conflict.

#### *Marital Quality*

Marital quality was measured by the Marital Satisfaction and Communication Questionnaire (MSCQ, Gerris et al. 1993). The 24 items are rated on a 6-point Likert scale, ranging from 1 (*totally disagree*) to 6 (*totally agree*). A three-factor model of the MSCQ was used, with the dimensions marital satisfaction ("In general I am dissatisfied with the relationship with my partner"), negative communication ("If my partner and I disagree, we often get mad with each other"), and open communication ("I often talk with my partner about personal problems"). Van den Troost (2005) provided evidence for these three scales based on exploratory and confirmatory factor analyses. In this study alpha's were .91 for marital satisfaction, .86 for negative communication, and .84 for open communication.

#### Data-Analytic Approach

The marital measures were only completed by parents who had a partner, whereas the coparenting measure was also filled in by parents without a current, but with an ex-partner, as coparenting remains possible when parents have split up. The unit of analysis is parent. When parents had more than one "target child" on which they reported, the CBCLs of these children were averaged.

To be able to incorporate all available data in the analysis, data were analyzed using multilevel modeling in SPSS. It was first tested whether participants with and without waitlist were different in their pre-test characteristics or their response to the intervention, which was not the case. Measurement occasions were treated as fixed. Each model consisted of four coefficients (waitlist, pre-test, post-test, and follow-up), representing the deviations from the overall mean at pre-test. The intercept was considered random, with its mean fixed at pre-test, thus taking the overall mean at pre-test as point of reference. Scores on each questionnaire were standardized across pre- and post-treatment assessments by converting to Z scores. Parameter estimates can be interpreted as effect sizes.

#### Results

Table 2 presents means and standard deviations of all measures at the different measurement occasions, and Table 3 presents the results of the multilevel analyses. Waitlist did not have an effect on most variables, except for a decrease in parental externalizing problems between waitlist and pre-test, and a decrease in family integrity.

After the Mindful Parenting intervention, significant reductions in target children's internalizing were found, of medium effect size, and of children's externalizing problems, of small effect size. Also, significant reductions in parents' internalizing problems and further decrease in their externalizing problems occurred, of medium effect sizes. Significant improvements were reported on parental stress, of medium effect sizes, and on the rearing dimensions autonomy encouragement, overprotection, and rejection, of small to medium effect sizes. On the rearing dimension acceptance a borderline significant improvement only occurred at follow-up. Changes were observed in coparenting: significant improvements in family integrity [but note a deterioration during waitlist], in disparagement at post-test which however was not maintained at follow-up, and in conflict in front of the child. No changes in marital variables were found.

In order to get an impression of the clinical significance of the children's symptoms and their improvement, we calculated the percentage of children who were above the



**Table 2** Means and standard deviations of all variables at the four measurement moments, the mindful parenting training took place between pre-test and post-test

	Waitlist		Pre-test		Post-test		Follow-up		
	M	SD	M	SD	M	SD	M	SD	
Child psychopathology									
Internalizing	59.53	10.06	61.25	9.26	56.58	11.90	56.23	9.95	
Externalizing	60.42	7.28	61.43	9.05	57.42	13.28	56.30	11.17	
Parent psychopathology									
Internalizing	0.53	0.33	0.52	0.31	0.37	0.27	0.36	0.3	
Externalizing	0.26	0.20	0.26	0.19	0.20	0.17	0.16	0.14	
Parental stress	3.13	.80	3.27	.84	2.91	.80	2.82	.77	
Parental rearing									
Autonomy encouragement	3.02	0.51	2.97	0.52	3.11	0.56	3.23	0.46	
Overprotection	1.76	0.44	1.87	0.44	1.75	0.45	1.67	0.40	
Acceptance	3.30	0.43	3.36	0.50	3.37	0.48	3.46	0.49	
Rejection	1.62	0.61	1.64	0.64	1.47	0.36	1.45	0.46	
Coparenting									
Family integrity	4.56	0.97	4.33	1.06	4.48	1.05	4.69	1.16	
Disparagement	2.83	1.20	2.79	0.92	2.51	0.98	2.55	0.87	
Conflict in front of child	3.51	0.75	3.68	0.88	3.27	0.82	3.30	0.86	
Marital functioning									
Marital conflict	0.35	0.38	0.42	0.37	0.38	0.39	0.38	0.41	
Marital satisfaction	4.08	1.28	4.00	1.36	4.17	1.33	4.12	1.32	
Negative communication	3.94	1.06	3.70	1.24	3.85	1.19	3.92	1.24	
Open communication	4.78	1.02	4.66	1.15	4.64	1.13	4.76	1.06	

Child psychopathology are CBCL *t* scores, all other measures are mean item scores, in which the scale ranges were for parental psychopathology (YASR) 0–2, for parenting stress (PSI) 1–6, for parenting (RBI) 1–4, for coparenting 1–7, for marital conflict (YASR) 0–2, and for the other marital scales (MSCQ) 1–6. Autonomy encouragement, acceptance, family integrity, marital satisfaction, and open communication are positive scales (that is, the higher the score, the better) whereas the other scales are negative scales (the higher the score, the more problems)

subclinical or clinical threshold. At pre-test, 59 % of the target children had subclinical or clinical levels of internalizing and 63 % of externalizing symptoms, whereas at follow-up these numbers were respectively 39 and 43 %.

Parents filled in an adapted version of the post-program assessment of the stress reduction program, developed at the center for mindfulness of the University of Massachusetts medical school, to evaluate how they appreciated the Mindful Parenting program (see Appendix 1). The vast majority (over 90 %) felt the training gave them something of remaining value, that it changed their lives and parenting, and that they had become more aware of parenting issues. Also the vast majority (95 %) intended to remain aware in daily life, and 88 % intended to keep meditating. Moreover, two-third indicated that the Mindful Parenting course provided them sufficient help. Inspecting on what areas of their lives the training has been most helpful, most parents indicated some to big positive changes in taking better care of themselves, in feelings of hope and believing that the relationship with their child and family can improve, in periods of worry, stress, and frustration, in dealing with strong emotions, and in awareness

of and skills for dealing with parenting stress. Most parents practiced less than advised: one to four times a week. Parents gave the course a high grade (8.0 on a scale of 1–10) and found the sitting meditation, practicing awareness in daily life, and group conversations and education most useful.

## Discussion

This study evaluated a Mindful Parenting program, delivered in a group format, in 86 parents who were referred to mental health care because of their child's mental disorder and/or their own mental disorder, or because of a parent-child relation problem. The main findings of the study are: (1) there was almost no drop-out (1 %); (2) improvements occurred in child as well as parental internalizing and externalizing psychopathology, of small to medium effect size; (3) improvements occurred on parental stress, of medium effect size, and self-reported parenting, of small to medium effect size; (4) some improvements were observed in coparenting; however, no improvement on marital variables

**Table 3** Parameter estimates (standard error between brackets) followed by *t* values of multilevel models of treatment outcome predicted by measurement occasion (deviations from pre-test)

	Waitlist		Post-test		Follow-up	
Child psychopathology						
Internalizing	-.00 (.14)	-.01	-.45 (.10)	-4.5***	-.47 (.09)	-5.3***
Externalizing	.00 (.10)	.00	-.31 (.09)	-3.5**	-.37 (.08)	-4.5***
Parent psychopathology						
Internalizing	.14 (.16)	.89	-.48 (.09)	-5.3***	-.46 (.10)	-4.5***
Externalizing	.59 (.12)	4.7***	-.43 (.08)	-4.1***	-.50 (.09)	-5.6***
Parental stress	.01 (.12)	.10	-.44 (.08)	-5.7***	-.47 (.09)	-5.3***
Parental rearing						
Autonomy encouragement	.04 (.15)	.24	.28 (.08)	3.3***	.50 (.11)	4.6***
Overprotection	-.09 (.15)	.60	-.27 (.09)	-2.9**	-.38 (.09)	-4.0***
Acceptance	-.01 (.14)	.06	.01 (.08)	.25	.18 (.13)	1.8†
Rejection	.16 (.13)	1.3	-.33 (.11)	-3.3**	-.35 (.10)	-2.6*
Coparenting						
Family integrity	.20 (.09)	2.2*	.13 (.06)	2.1*	.27 (.09)	3.0**
Disparagement	.07 (.24)	-.29	-.28 (.08)	-3.3**	-.14 (.09)	-1.4
Conflict in front of child	.11 (.21)	-.52	-.47 (.11)	-4.3***	-.40 (.15)	-2.6*
Marital functioning						
Marital conflict	-.09 (.06)	1.5	-.08 (.08)	.98	-.09 (.10)	-.86
Marital satisfaction	-.07 (.12)	-.55	.06 (.07)	.81	.00 (.09)	.02
Negative communication	.02 (.10)	.15	.10 (.09)	1.1	.03 (.10)	.28
Open communication	-.02 (.08)	-.22	-.04 (.09)	-.42	.12 (.11)	1.1

Negative estimates indicate less problems compared to pre-test, in case of positive variables (autonomy encouragement, acceptance, family integrity, and open communication), positive estimates indicate improvement compared to pre-test. Measures are Z-transformed. Estimates can be interpreted as effect sizes

† $p < .10$ ; \* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$

occurred; and (5) improvements generally were maintained at 8-week follow-up, or further improvement occurred. Further, (6) parents evaluated the program as valuable and effective in many areas of their own and their family's functioning, and reported transformational changes.

Although improvements on child psychopathology were only of small to medium effect size, it should be noted that this is an important effect taking into account the following two reasons. First, as children suffered from a wide range of problems, measures of more specific target complaints, that are more sensitive to measure change, could not be applied. Therefore, the smaller changes on the broadband measures that were applied can well be clinically significant. This was indicated by the finding that 20 % less children were in the (sub)clinical range at follow-up compared to before the Mindful Parenting training. Second, the course was short (only eight sessions) and children were not treated themselves. It is interesting that changes were as pronounced on parental psychopathology as on target child psychopathology, particularly because the vast majority of parents were referred for a mental disorder of the child rather than of their own. This improvement in parental psychopathology is however consistent with

the focus of the Mindful Parenting intervention, that is, becoming aware, in a nonjudgmental way, of (parenting) stress and anxiety, (parenting) sadness, (parenting) anger rather than acting upon these emotions, practicing focused and nonbiased attention, cultivating non-reactivity, and taking care of oneself. Such practice can be expected to affect internalizing and externalizing problems of parents.

The improvements in (self-reported) parenting are also remarkable, given that the focus of the course was not about changing certain parenting styles or behaviors, as in Parent Management training, such as giving praise or time-out. However, becoming aware of parenting stress and parental automaticity, practicing here-and-now nonjudgmental attention for the child, practicing parental non-reactivity, and taking better care of oneself as a parent, may all contribute to more functional parenting styles such as less rejecting, less overprotective, and more autonomy encouraging parenting. As heightened parental stress causes dysfunctional parenting (e.g., Crnic et al. 2005), the improvement in parenting stress may underlie the reported changes in parenting styles.

Improvement on coparenting, reflected in reduced conflict in front of the child, reduced disparagement, and increased

family integrity, was another result of the course. Few couples participated in the course, but enhanced awareness of stress and reduced reactivity of the parent that followed the course, appeared to have influenced the co-parental relationship. This is an important finding, as the negative effects of conflict in the presence of the child, and unsupportive coparenting on child psychopathology, are well documented (e.g., Cummings 1994; Majdandzic et al. 2012).

The finding that Mindful Parenting did not affect marital functioning suggests that it may be worthwhile developing, within or after a Mindful Parenting course, mindfulness practices that can be particularly applied for improving couple relationships (Gambrel and Keeling 2010), given its importance for parenting. Note however that most parents in our sample followed the Mindful Parenting course on their own, either because they preferred that, because their partner had no time or did not want to follow the course, or because there was no partner due to divorce or death. A Mindful Parenting course that would be organized exclusively for couples could have a different outcome on marital relationship variables. A disadvantage of such an approach is that parents without a partner or without a partner willing to come would be excluded from the course.

The remarkably low dropout during the course may be indicative of the strong cohesion we observed in the groups during the course, as well as of the fact that participants found the course to be of value for their problems. It also is consistent with our clinical sense of the high degree of motivation in the parents. The heterogeneity of the groups in terms of the age range of the target children (2–21), the type of mental disorders of the target children, the variation in presence and type of mental disorders in the parents, the fact that fathers or mothers, and sometimes couples participated, apparently did not negatively affect cohesion or dropout. In contrast, the clinical impression of the teachers was that the heterogeneity contributed to a constructive group process in terms of openness to and sharing of experiences and support. Holding the group process, including the large variety in problems and suffering, was felt to be an important attitude for teachers guiding the groups. It should be noted that the teachers had long experience in working with groups and with child and adult psychopathology (about 30 years).

### Proposed Change Mechanisms

This study provides preliminary evidence for some of the six proposed mechanisms of change through Mindful Parenting (Bögels et al. 2010), that were described in the introduction. The reduction in parenting stress immediately after the course are consistent with mechanism (1): *reducing parental stress and resulting parental reactivity*. Improvements in aspects of the coparenting relationship are consistent with mechanism (6): *improving marital functioning and coparenting*, but the lack of

effect of the Mindful Parenting course on marital functioning measures does not support the idea that the Mindful Parenting course affects the marital relationship outside of the area of parenting a child together, and that this is one of the ways in which the Mindful Parenting course improves parenting. Finally, parents' report (see Appendix 1d) of increased ability to care for themselves are consistent with mechanism (5): *increasing self-nourishing attention*. Whether changes in these variables precede improvements in parental functioning, or cause improvements in parenting remains to be investigated. Also, research is needed to shed light on the possible other proposed mechanisms involved in the effectiveness of Mindful Parenting. That is, mechanism (2): *parental preoccupation resulting from the child's or parent's psychopathology*, could be measured by having parents rate their convictions before and after the course of negative beliefs about their child (e.g., "My child will never have a normal life") and about themselves as parents (e.g., "I'm a bad parent"). Mechanism (3): *improving executive functioning in impulsive parents*, could be measured with objective attention tests and questionnaires such as the BRIEF (Barkley and Murphy 2010). To shed more light on mechanism (4): *breaking the cycle of intergenerational transmission of dysfunctional parenting schemas and habits*, Young's Schema questionnaire (Young 1994), which assesses intergenerationally acquired dysfunctional schemes that can operate in intimate relationships, including the parent–child relationship, could be applied. Mechanism 6 should be studied by using a self-compassion scale (Raes et al. 2011) or observational rating (e.g., Sbarra et al. 2012).

### Limitations

This study had several limitations. First, parents were not randomly assigned to Mindful Parenting or Wait List control, and there was no active control intervention. Second, all assessments were made by participating parents, which may have artificially raised some correlations due to the same informant. It is possible that improvement in parental psychopathology (e.g., mood) may have accounted in part for the changes in parents' perceptions of child psychopathology. Third, there is no way of knowing whether the improvements in parenting and child psychopathology were the result of the specific mindful parenting aspects of the course, or that a MBCT or MBSR course would have had the same results. Note however that it would not have been possible to offer this heterogeneous group of parents an MBCT course in its present form, as many parents did not suffer from depression.

### Further Research

The most important next step is to randomly assign referred parents to Mindful Parenting versus a proven effective parenting training, such as Parent Management training, in order to

compare the type and size of effects of both approaches. Moreover, to the extent that some parents might benefit better from Mindful Parenting whereas others might benefit better from Parent Management training, moderation effects can be taken into account. Another, perhaps more creative way to look at this question, would be to investigate which parents self-select or are selected for Mindful Parenting, and which for Parent Management training. In addition, a combined approach of a Mindful Parenting program plus a Parent Management program could be tested (e.g. Dumas 2005), in which order effects are interesting, that is, is it better to first follow a course of Mindful Parenting and second Parent Management, or the other way around? Multiple informants (e.g., child, teacher, and nonparticipating parent) and objective assessments (e.g., observed parenting behavior) are recommended in order to evaluate whether the subjectively reported effects also translate into objective changes. Longer-term follow-ups are needed to examine the idea that Mindful Parenting leads to transformational life changes—that may be better visible over time. The six proposed mechanisms of change by Mindful Parenting (Bögels et al. 2010) need to be specifically tested, using measures that assess the particular mechanism and using mediation analyses. Moreover, it would be interesting to compare the effects of solely Mindful Parenting with a combined approach of Mindful Parenting plus Child Mindfulness, as has been tested with children and with adolescents with ADHD (Van der Oord et al. 2012; Weijer-Bergsma et al., 2012). Harnatt and Dawe (2012) suggested that such combined approaches would be more promising than Mindful Parenting on its own. This is clearly an empirical question that needs research. Finally, comparing the effects of Mindful Parenting with MBSR or MBCT could shed more light on whether a specific Mindful Parenting program as the one tested in this study, is more beneficial for parents', and their children's needs. When we teach mindfulness through the prism of parenting and family relations, we have observed several important advantages. First, parents are usually extremely motivated to do whatever they can to help their children when they are suffering. Therefore, parents who may not otherwise be willing to participate in mindfulness training or therapy may be more open to a mindfulness training which has the goal of improving parenting and the parent–child relationship. Second, there seems to be a deep emotional engagement that occurs when mindfulness is applied to parenting. Few things touch a parent's heart so closely or deeply as their relationship with their child. We have observed an emotional intensity as well as vulnerability that is elicited in the context of the mindful parenting groups. This intensity, if handled sensitively, can increase motivation to stay in the group and to practice, and also to change.

## Strengths

This study builds on the research into mindfulness-based interventions for children and parents in mental health. The study took place in a clinical setting, families being referred to secondary mental health care. As such, the sample was not self-selected and results can be generalized to a large group of parents in need for treatment for themselves and/or their child. Sample size was large, drop-out rate extremely low, and a wide range of psychopathology as well as parenting and family outcomes were assessed with well-validated measures. A detailed protocol for trainers and workbook for parents was used, making the study replicable. This is one of the first studies to examine the effects of Mindful Parenting alone (not in combination with mindfulness for children). It is therefore impressive that decreases in internalizing and externalizing behaviors were found in parents, who were the direct recipients of the intervention, as well as in children, who received no direct intervention. The results are consistent with the hypothesis that improving parental psychopathology and stress can have direct effect on child outcomes. Improvements in parenting suggest that mindfulness training, when focused on the parenting situation, can directly affect parenting, despite the fact that no specific training in parent management was given. The fact that coparenting improved is also impressive, given that it was not addressed directly. Note that as Mindful Parenting was relatively short (nine sessions) and can be delivered in larger groups (of 14 parents) it appears a cost-effective intervention. Finally, the low drop-out rate, and positive program evaluation suggests that, as hypothesized, parents feel motivated and engaged by the mindful parenting program.

## Clinical Implications

Mindful Parenting is a promising new intervention for parents in mental health. The low drop-out rate as well as overall positive evaluation of parents suggest that Mindful Parenting is an acceptable and feasible intervention in mental health care. Improvements in parental and child psychopathology, parental stress, parenting, and coparenting were observed, indicating that Mindful Parenting is effective on a broad range of family factors. For clinical purposes, it would be important to learn whether Mindful Parenting should be given before, after, or combined with, or instead of Parent Management training.

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**Appendix 1: Evaluation of the Mindful Parenting Training**

A.

	Yes	No
1. Do you feel you got something of lasting value or importance as a result of taking the training?	95 %	5 %
2. Have you made any changes in your lifestyle, in dealing with your child or family, or in your child-rearing practices as a result of the training?	88 %	12 %
3. Did you become more “conscious” as a result of the training? Did this change something in relation to your thoughts, your feelings, and your reaction on your thoughts and feelings?	92 %	9 %
4. Is it your intention to keep on practicing the formal exercises, i.e. the body scan, sitting meditation, walking meditation, and laying and standing yoga?	86 %	14 %
5. Is it your intention to keep on practicing to be conscious in daily life?	95 %	5 %
6. Has the training been sufficient to move on with your life?	66 %	34 %

B.

	Never	1 or 2 times a week	3 to 4 times a week	5 to 7 times a week
1. How many times a week, on average, did you practice the meditation exercises?	2 %	36 %	37 %	24 %

C.

	Less than before the training	The same as before the training	More often than before the training	Much more often than before the training
1. How many times do you pay attention to your child in moments you are together	0 %	14 %	66 %	21 %

D.

Did, as a result of the training, something changed on the following issues?

	Negative change	No change	Some positive change	Great positive change
1. Knowing to take better care of myself	0 %	19 %	44 %	37 %
2. Actually taking better care of myself	0 %	27 %	53 %	20 %
3. Periods of bother, stress, frustration	2 %	9 %	71 %	19 %
4. Intensity of bother, stress, frustration	0 %	17 %	53 %	31 %
5. Believing that I can improve the relationship with my child and family	0 %	17 %	40 %	43 %
6. Feeling self-confident	2 %	28 %	40 %	31 %
7. Feeling hopeful	2 %	22 %	37 %	39 %
8. Dealing with emotions (anger, sadness, fear)	0 %	14 %	64 %	22 %
9. Awareness of what is stressful in my life	0 %	7 %	53 %	41 %
10. Awareness of stressful rearing situations at the time they are happening	2 %	9 %	53 %	36 %
11. Ability to handle stressful rearing situations appropriately	0 %	17 %	62 %	21 %

E.

Judgments about (parts of the) training (from 1=not important at all to 10=very important)

	Mean
1. How important has the training been for you?	8.0
2. Sitting meditation in the group	8.2
3. Sitting meditation at home	7.5

4. Walking meditation in the group	5.4
5. Walking meditation at home	5.0
6. Body scan in the group	7.8
7. Body scan at home	6.7
8. Lying/sitting yoga in the group	6.8
9. Lying/sitting yoga at home	6.3
10. Standing yoga in the group	6.6
11. Standing yoga at home	6.0
12. Awareness in daily life	8.2
13. Group discussions and education	8.5
14. The diaries	7.1
15. The texts in the workbook	7.8

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