HHS Public Access

Author manuscript

Dev Psychol. Author manuscript; available in PMC 2016 January 01.

Published in final edited form as:

Dev Psychol. 2015 January ; 51(1): 26–35. doi:10.1037/a0038212.

Integrating Mindfulness with Parent Training: Effects of the Mindfulness-Enhanced Strengthening Families Program

J. Douglas Coatsworth,
Department of Human Development and Family Studies, Colorado State University

Larissa G. Duncan,
Osher Center for Integrative Medicine, University of California, San Francisco

Robert L. Nix,
The Bennett Pierce Prevention Research Center, The Pennsylvania State University

Mark T. Greenberg,
The Bennett Pierce Prevention Research Center, The Pennsylvania State University

Jochebed G. Gayles,
The Bennett Pierce Prevention Research Center, The Pennsylvania State University

Katharine T. Bamberger,
The Bennett Pierce Prevention Research Center, The Pennsylvania State University

Elaine Berrena, and
The Bennett Pierce Prevention Research Center, The Pennsylvania State University

Mary Ann Demi
The Bennett Pierce Prevention Research Center, The Pennsylvania State University

Abstract

There is growing support for the efficacy of mindfulness training with parents as an intervention technique to improve parenting skills and reduce risk for youth problem behaviors. The evidence, however, has been limited to small scale studies, many with methodological shortcomings. This study sought to integrate mindfulness training with parents into the Strengthening Families Program: For Parents and Youth 10-14 (SFP 10-14), an empirically-validated family-based preventive intervention. It used a randomized-controlled comparative effectiveness study design (N = 432 families, 31% racial/ethnic minority) to test the efficacy of the Mindfulness-Enhanced Strengthening Families Program (MSFP), compared to standard SFP 10-14 and a minimal-treatment home study control condition. Results indicated that, in general, MSFP was as effective as SFP 10-14 in improving multiple dimensions of parenting, including interpersonal mindfulness in parenting, parent-youth relationship quality, youth behavior management, and parent well-being, according to both parent and youth reports at both post-intervention and one-year follow-up. This study also found that in some areas MSFP boosted and better sustained the effects of SFP

Correspondence concerning this article should be addressed to J. Douglas Coatsworth, Department of Human Development and Family Studies, 439 Behavioral Sciences Building, Colorado State University, Fort Collins, Colorado, 80523. Electronic mail may be sent to doug.coatsworth@colostate.edu..

10-14, especially for fathers. Although the pattern of effects was not as uniform as hypothesized, this study provides intriguing evidence for the unique contribution of mindfulness activities to standard parent training.

Teaching mindfulness skills has become a popular and efficacious intervention strategy for reducing stress, improving psychological well-being, preventing relapse of depression and substance abuse, and enhancing relationship functioning (Bowen, Witkiewitz, Dillworth, & Marlatt, 2007; Brantley, 2005; Carlson, Speca, Patel, & Goodey, 2003; Kabat-Zinn, 2003; Segal, Williams, & Teasdale, 2002). Drawn from ancient Eastern traditions, mindfulness is defined as the awareness that arises from paying attention to what one is experiencing in the present moment in an open and accepting way (Kabat-Zinn, 1990). Although most scientific research has focused on the intrapersonal aspects of mindfulness, behaving mindfully toward others in everyday life is also a critical aspect of mindfulness (Kabat-Zinn, 2011).

Teaching interpersonal mindfulness practices to parents has been proposed as one strategy to enhance parenting skills. These practices may allow parents to use parenting skills more effectively and to improve parent-youth interactions, thereby reducing risk for youth problems (Dumas, 2005; Duncan, Coatsworth, & Greenberg, 2009a). Mindfulness training for parents has been tested with parents of children with developmental delays (Singh et al., 2007), parents of children with behavior disorders (Bögels, Hoogstad, van Dun, de Schutter, & Restifo, 2008) and ADHD (van der Oord, Bogels, & Peijnenburg, 2012), parents in methadone treatment (Dawe & Harnett, 2007), parents of special education students (Benn, Akiva, Arel, & Roeser, 2012), and a community sample of parents of early adolescents (Coatsworth, Duncan, Greenberg, & Nix, 2010; Duncan, Coatsworth, & Greenberg, 2009b).

These interventions, which vary in their approach to mindfulness training, produce changes in parents' mindfulness (Benn et al., 2012; Coatsworth et al., 2010; van der Oord et al., 2012). They also alter intrapersonal parenting experiences and states of wellbeing such as parenting stress, anger management, negative mood states, and self-compassion (Benn et al., 2012; Coatsworth et al., 2010; Dawe & Harnett, 2007; Singh et al., 2007; van der Oord et al., 2012). Additionally, some evidence indicates that mindful parenting programs can affect interpersonal aspects of parenting, including empathic concern (Benn et al., 2012), parent-youth interactions (Coatsworth et al., 2010), discipline strategies (van der Oord et al., 2012), and family functioning (Dawe & Harnett, 2007).

The Present Study

Mindfulness may be most useful for parenting when conceived as one possible mechanism in programs that address multiple domains of family functioning (Harnett & Dawe, 2012). Accordingly, we created the Mindfulness-Enhanced Strengthening Families Program (MSFP) by adapting the Strengthening Families Program: For Parents and Youth 10-14 (Molgaard, Kumpfer, & Fleming, 2001), an existing evidence-based intervention with sound techniques of parent management training. MSFP incorporates all structural and core intervention features of SFP 10-14, but also includes focused training based on our conceptual model of mindful parenting (Duncan et al., 2009a). This strategy allowed us to

examine whether teaching mindfulness in parenting enhanced the efficacy of an evidence-based family intervention.

To create MSFP, we integrated activities to train interpersonal mindfulness in parenting into the SFP 10-14 parenting curriculum. We chose to incorporate mindfulness activities because of: 1) theoretical work proposing that a mindful approach to parenting may help alter engrained patterns of negative interactions between parents and youth (Dumas, 2005), and can help parents more effectively use the skills they learn in an intervention (Duncan et al., 2009a), and 2) recent empirical work illustrating that mindfulness based interventions with parents show promise for changing parents' thoughts and feelings about parenting and their interactions with their youth (Bögels et al., 2008; Coatsworth et al., 2010; Harnett & Dawe, 2012). The format (e.g., session number, length, and timing) of MSFP remained identical to SFP 10-14 but some of the original activities were shortened or moved to a different session. We worked with Virginia Molgaard, PhD., the lead author of SFP 10-14, to help ensure that we retained the core content of SFP 10-14 while also infusing new mindful parenting activities.

The new mindful parenting activities were based on our conceptual model (Duncan et al., 2009a) and highlighted five dimensions of interpersonal mindfulness in parenting: 1) *Listening with full attention*, in which activities were designed to enhance parents' ability to pay close attention and listen carefully to their children during moment-to-moment parenting interactions; 2) *Nonjudgmental acceptance of self and child*, in which activities focused parents' awareness on their attributions and expectations of their children and the cultivation of openness and acceptance toward their own and their child's traits, attributes, and behaviors; 3) *Emotional awareness of self and child*, in which activities emphasized parents' capacity for awareness of their child's emotions and their own emotions while parenting; 4) *Self-regulation in parenting*, in which activities helped parents enhance their ability to slow down their reactions to their child's behavior and to be aware of their intentions to calmly select and implement appropriate parenting behaviors; and 5) *Compassion for self and child*, in which activities were designed to build and reflect on parents' genuine sense of concern for their child, themselves as parents, and the struggles they all face. We also changed some of the language of SFP 10-14 to emphasize messages of mindful parenting, such as being attentive, reducing emotional reactivity, and being less judgmental.

New mindful parenting activities were facilitated in didactic presentations about principles of mindful parenting, modeling of mindfulness practices, and group interactive discussions. We adapted many activities that are common to mindfulness interventions. For example we taught deep breathing and breath awareness for parents to use as a mechanism for self-calming and emotion-regulation and as a way to focus their attention on what was happening at the present moment. Facilitators delivered short 1-5 minute guided reflections at the beginning and end of each parenting session, in which parents practiced breath awareness and also set intentions for the session or the coming week. Intention-setting is a conscious, motivational element of mindfulness practice that provides purpose to the direction of one's attention. We taught parents strategies for noting and labeling emotions, and to recognize emotions as both transient states and signals to focus their attention and self-regulate. A number of activities were designed to help parents develop stronger senses of non-

judgmental acceptance as a way of reducing avoidance of uncomfortable thoughts or feelings and as a form of perspective-taking related to empathy and compassionate actions for self and others. Loving kindness reflections were also used to help promote compassion and caring for their youths and for themselves as parents. Parents were encouraged to practice these activities at home and were provided with materials that would facilitate practice, including a refrigerator magnet with the phrase "Stop, Be Calm, Be Present." A more complete description of the intervention is available elsewhere (Coatsworth et al., 2014).

This study utilized a randomized-controlled comparative effectiveness trial design. Our design is most similar to practical clinical trial designs (Tunis, Stryer, & Clancy, 2003) which test innovative interventions against a previously-established "best practice" or standard of care in a naturalistic community setting (Shegog et al., 2013). In this design, we chose SFP 10-14 as a "standard of care" because of its demonstrated efficacy in modifying parenting practices, enhancing parent-youth relationships, and reducing youth behavior problems and substance use (Spoth, Shin, Guyll, Redmond, & Azevedo, 2006; Spoth & Redmond, 2002). We also included an information-only, home study control condition, similar to the comparison group used in the foundational studies of SFP 10-14. We hypothesized that mothers and fathers in MSFP would show greater improvements in interpersonal mindfulness, parent-youth relationship quality, youth behavior management, and parent well-being than parents in SFP 10-14 or an information-only home study control condition.

Method

Participants

During four consecutive academic years, families of 6th and 7th grade students in four school districts in rural and urban areas of central Pennsylvania were invited to participate in this study (See Supplemental Online Materials [SOM] for recruitment procedures). Four hundred and thirty-two families (69% European American, 15% African American, 8% Latino, 4% Asian, 1% American Indian, 3% biracial) participated. Sixty six percent of families (N = 286) included two parents and 90% of fathers participated in this study. Twenty-five percent of mothers and 30% of fathers had a high school diploma or less; median annual family income was $49,000. Fifty-four percent of target youths were female; average age was 12.14 (SD = .67).

Study Procedures

Procedures for this study were approved by the Pennsylvania State University Institutional Review Board. Individual assessments were conducted with mothers, fathers, and youths at baseline, post-intervention, and one-year follow-up. Families completing pre-intervention assessments were randomly assigned to MSFP (n = 154), SFP 10-14 (n = 160), or home study (n = 118). A participant CONSORT flow diagram is provided in the SOM.

Intervention Procedures

SFP 10-14 is an evidence-based, universal, family-focused intervention designed to prevent the onset and escalation of adolescent substance use and problem behavior. The intervention consists of seven two-hour sessions, delivered to groups of parents and youth. Sessions are typically delivered one session per week and are structured such that parents and youth meet in separate groups for the first hour and conjointly in a family session during the second hour. See Molgaard, Spoth, and Redmond (2000) for a full description of the intervention. MSFP, described above, is an adapted version of SFP 10-14 and the focus of this intervention trial.

The SFP 10-14 and MSFP intervention conditions were delivered on the same evening but at different locations, once per week for seven weeks. This helped reduce any potential confounding with family availability due to differential participation in conflicting youth or family activities (e.g., sports, church groups, etc.).

The information-only home study condition featured two short booklets that were mailed to families. Both booklets contained information that was compiled and organized from readily available on-line resources. The first booklet, mailed during the second or third week of the intervention, contained information about social emotional changes that occur during adolescence. The second booklet, mailed during the fifth or sixth week, contained information about family life with adolescents. Families in this condition did not receive any additional services from this research project.

Intervention Training and Fidelity

All facilitators were required to have a minimum of a bachelor's degree and experience working with youth or parents. MSFP facilitators were required to have training and personal experience with a contemplative practice. Prior to conducting sessions, facilitators of both interventions completed a three-day certified training program. Part of MSFP training was dedicated to review and practice of the added mindfulness activities. Implementation fidelity was monitored through weekly supervision and directly observed during intervention sessions. One or more observers were scheduled to visit on three to four of the seven sessions, observing either parent or youth and family components at each visit. Adherence to protocol, facilitator effectiveness, and parent and youth participation were excellent and did not differ across conditions.

Measures

Mothers and fathers reported on their own functioning, and/or youths reported on their parents' functioning in the following domains: (1) interpersonal mindfulness in parenting, including listening with full attention, self-regulation in parenting, emotional awareness of youth, compassion/acceptance for youth, and compassion/acceptance for self (Duncan, 2007); (2) the parent-youth relationship, including affective/interaction quality, approach to emotions, support/understanding, and family involvement (Gottman & DeClair, 1997; Spoth, Redmond, & Shin, 1998; Tilton-Weaver et al., 2010); (3) youth behavior management, including inductive reasoning, monitoring, and alcohol rule communication (Spoth et al., 1998); and (4) parent well-being, including parenting satisfaction and efficacy,

parent daily hassles, and anger management (Crnic & Greenberg, 1990; Gibaud-Wallston & Wandersman, 2001; Spoth et al., 1998) See SOM for details on all study methods.

Results

To examine intervention effects, this study relied on hierarchical linear models, in which families were nested within cohort/site – the blocking unit within which individual families were recruited into the study and randomized to condition. Each outcome was mean centered and standardized within cohort/site so that parameter estimates of the dichotomous indicators of study condition are comparable to an effect size (Cohen, 1977). A set of covariates, such as demographic characteristics, family income, parent depression, and child behavior problems, were included in all hierarchical linear models to increase the precision of the estimates of intervention effects. To reduce any possible bias due to missing data, all results reflect the combined estimates from 50 multiple imputation datasets (Widaman, 2006).

Table 1 presents intervention effects for mothers' self-report and youth report of mothers; Table 2 presents intervention effects for fathers (self-report and youth report). (See SOM for tables of means and standard deviations.) Our hypotheses compare MSFP to SFP 10-14 and the control condition; however, we include comparisons of SFP 10-14 to control to demonstrate that SFP 10-14 was implemented well-enough to produce comparable intervention effects to those published previously (Redmond, Spoth, Shin, & Lepper, 1999; Spoth et al., 1998) and therefore constitutes a legitimate "best practice" in this comparative effectiveness study.

Intervention-Related Improvements in Mothers' Functioning

Interpersonal mindfulness in parenting—At post-intervention, mothers in SFP 10-14 reported better self-regulation in parenting (d = .18, p < .10, indicating a difference of one-sixth to one-fifth of a standard deviation) and better emotional awareness of youth (d = .19, p < .10) than mothers in the control group. Counter to study hypotheses, however, mothers in MSFP reported comparable levels of interpersonal mindfulness to mothers in the control group, but worse self-regulation in parenting (d = -.20, p < .05) than mothers in SFP 10-14. At post-intervention, according to youth report, there were no differences in mothers' interpersonal mindfulness across the three study conditions. At one-year follow-up, mothers in SFP 10-14 reported better self-regulation in parenting (d = .20, p < .10) and better emotional awareness of youth (d = .24, p < .05) than mothers in the control group, and mothers in MSFP reported better emotional awareness of youth (d = .26, p < .05) than mothers in the control group. At follow-up, youths reported their mothers in SFP 10-14 exhibited better listening with full attention (d = .29, p < .01), better self-regulation in parenting (d = .24, p < .10), and greater compassion/acceptance toward their youths (d = .27, p < .01) than mothers in the control group. Similarly, at follow-up, youths reported their mothers in MSFP exhibited better listening with full attention (d = .25, p < .05) and compassion/acceptance for their youths (d = .23, p < .05) than mothers in the control group. At follow-up, according to youth report, there were no significant differences between mothers in MSFP and SFP 10-14.

Parent-youth relationship quality—At post-intervention, mothers in both SFP 10-14 and MSFP reported more positive affective/interaction quality with their youths (d = .17, p < .10, and d = .18, p < .10, respectively) than mothers in the control group. According to youth report, however, there was comparable parent-youth relationship quality across all study conditions, except that mothers in MSFP exhibited greater support/understanding (d = .17, p < .10) than mothers in SFP 10-14. At follow-up, mothers in SFP 10-14 reported higher support/understanding (d = .20, p < .10) than mothers in the control group. Mothers in both SFP 10-14 and MSFP reported higher levels of family involvement (d = .35, p < .01, and d = .26, p < .05, respectively) than mothers in the control group. However, mothers in MSFP reported lower levels of approach to emotions (d = -.19, p < .10) and lower support/understanding (d = -.18, p < .10) than mothers in SFP 10-14. At follow-up, according to youth report, mothers in both SFP 10-14 and MSFP displayed better approach to emotions (d = .31, p < .01, and d = .28, p < .01, respectively) than mothers in the control group.

Youth behavior management—At post-intervention, mothers in SFP 10-14 reported better monitoring (d = .24, p < .05) and alcohol rule communication (d = .26, p < .05) than mothers in the control group. Likewise, mothers in MSFP reported better inductive reasoning (d = .20, p < .10), monitoring (d = .35, p < .001), and alcohol rule communication (d = .33, p < .001) than mothers in the control group. According to youth report, mothers in SFP 10-14 were clearer in alcohol rule communication (d = .29, p < .01) than mothers in the control group, and mothers in MSFP engaged in more inductive reasoning (d = .22, p < .05) and more effective monitoring (d = .26, p < .01) than mothers in SFP 10-14. At follow-up, mothers in MSFP reported more effective monitoring (d = .21, p < .10) than mothers in the control group. Similarly, youth reported that mothers in MSFP engaged in more effective monitoring (d = .35, p < .01, and d = .31, p < .01, respectively) than mothers in both the control group and SFP 10-14. Unexpectedly, youth also reported that mothers in SFP 10-14 were less clear in alcohol rule communication (d = -.22, p < .10) than mothers in the control group.

Parent well-being—At both post-intervention and follow-up, mothers reported comparable levels of well-being across all three study conditions.

Intervention-Related Improvements in Fathers' Functioning

Interpersonal mindfulness in parenting—At post-intervention, fathers in MSFP reported greater emotional awareness of youth (d = .28, p < .05, and d = .23, p < .05, respectively) than fathers in the control group or SFP 10-14. Similarly, youth reported that fathers in MSFP exhibited better emotional awareness of youth (d = .28, p < .05) than fathers in SFP 10-14. They also reported that fathers in SFP 10-14 exhibited worse listening with full attention (d = -.27, p < .05) and worse emotional awareness of youth (d = -.35, p < .05) than fathers in the control group and that fathers in MSFP exhibited less compassion/acceptance of youth (d = -.19, p < .10) than fathers in the control group. At follow-up, consistent with study hypotheses, fathers in MSFP reported better emotional awareness of youth (d = .51, p < .001), more compassion/acceptance for their youths (d = .25, p < .05), and more compassion/acceptance for themselves as parents (d = .37, p < .01) than fathers in the control group; they also reported better listening with full attention (d = .35, p < .01),

emotional awareness of youth (d = .46, p < .001), and compassion/acceptance for their youths (d = .24, p < .05) than fathers in SFP 10-14. At follow-up, youth corroborated that fathers in MSFP exhibited greater emotional awareness of youth (d = .34, p < .05, and d = .25, p < .10, respectively) than fathers in the control group or SFP 10-14.

Parent-youth relationship quality—At post-intervention, fathers in SFP 10-14 reported more positive affective/interaction quality with their youths (d = .20, p < .10) than fathers in the control group. Fathers in MSFP reported more positive affective/interaction quality (d = .19, p < .10) and higher levels of family involvement (d = .32, p < .05) than fathers in the control group. Youth reported that their fathers in SFP 10-14 displayed less support/understanding (d = -.29, p < .05) than fathers in the control group. Consistent with study hypotheses, youth also reported that fathers in MSFP displayed a better approach to emotions (d = .27, p < .05) and support/understanding (d = .36, p < .01) than fathers in SFP 10-14. At follow-up, fathers in MSFP reported more positive affective/interaction quality (d = .22, p < .10) than fathers in the control group and better support/understanding than fathers in the control group and SFP 10-14 (d = .27, p < .05, and d = .22, p < .10, respectively). Youth corroborated that fathers in MSFP displayed more positive affective/interaction quality (d = .25, p < .10) than fathers in the control group. They also reported that fathers in both SFP 10-14 and MSFP displayed more support/understanding (d = .24, p < .10, in both cases) than fathers in the control group.

Youth behavior management—At post-intervention, fathers in SFP 10-14 reported comparable skills in youth behavior management to fathers in the control group. In contrast, fathers in MSFP reported engaging in more inductive reasoning (d = .25, p < .10) and clearer alcohol rule communication (d = .25, p < .10) than fathers in the control group. Fathers in MSFP reported more effective monitoring (d = .39, p < .01, and d = .35, p < .01, respectively) than fathers in both the control group and SFP 10-14. Although youth reported that fathers in SFP 10-14 demonstrated less effective monitoring (d = -.21, p < .10) than fathers in the control group, youth also reported that fathers in MSFP engaged in more inductive reasoning (d = .26, p < .05) than fathers in SFP 10-14. At follow-up, fathers in SFP 10-14 reported less inductive reasoning (d = -.26, p < .10) than fathers in the control group. Fathers in MSFP continued to report clearer alcohol rule communication (d = .26, p < .10) than fathers in the control group. Youth reported that fathers in MSFP engaged in more effective monitoring (d = .24, p < .10) than fathers in the control group.

Parent well-being—At post-intervention, fathers in MSFP reported greater satisfaction and efficacy in the parenting role (d = .19, p < .10) than fathers in the control group. At follow-up, additional gains had consolidated, whereby fathers in both SFP 10-14 and MSFP reported greater satisfaction/efficacy (d = .26, p < .05, and d = .29, p < .05, respectively) than fathers in the control group. In addition, fathers in MSFP reported better anger management (d = .33, p < .05) than fathers in the control group and fewer parent daily hassles (d = -.33, p < .05) than fathers in SFP 10-14.

Discussion

This study used a comparative effectiveness research strategy to test the efficacy of MSFP against SFP 10-14 and a home study control group. Results revealed positive but not universal support for our hypotheses that mothers and fathers in MSFP would show greater improvements in interpersonal mindfulness in parenting, parent-youth relationship quality, youth behavior management, and parent well-being than parents in SFP 10-14 or the home study condition. Some effects emerged immediately at post-intervention and were sustained, whereas other effects took time to consolidate. In addition, some effects were perceived and reported by parents themselves, whereas other effects were only evident to their youths.

At post-intervention, mothers in MSFP reported similar levels of interpersonal mindfulness in parenting as mothers in the control group, but less self-regulation in parenting than mothers in SFP 10-14. It is possible that exposure to mindfulness practices in which parents learn to attend to uncomfortable emotions (Kabat-Zinn, 1990), such as those experienced during stressful interactions with youth, may have a destabilizing effect (Hayes & Feldman, 2004) and temporarily increase perceived distress (Chodron, 2001). Perceptual changes, such as reperceiving, a shift in how one makes sense of thoughts, feelings, or interactions, which has been hypothesized as a central mechanism of mindfulness practices (Shapiro, Carlson, Astin, & Freedman, 2006), may alter how parents evaluate their own parenting after participating in a mindfulness intervention. Similarly, it has been suggested that an increased openness and awareness of experiences following an intervention might yield more candid and accurate reports of behavior such as alcohol use (Nirenberg, Longabaugh, Baird, & Mello, 2013).

Independently and without solicitation, several mothers in MSFP reported to study staff that their scores on our questionnaires were likely to look worse at post-intervention because the mothers now viewed their parenting differently and were more aware of missed opportunities for engaging in mindful parenting behaviors. A fundamental principle of mindfulness involves the practice of noticing when one is not being mindful, which then affords the opportunity to reorient one's attention to the present moment and/or choose a behavioral response more consistent with one's intentions. The mothers in MSFP may have become more aware of this process in their parenting and therefore better able to report on its inherent challenges.

The data from this study cannot answer this process-oriented question, but future studies of the change process during a mindful parenting intervention could address this by incorporating more frequent data collection strategies such as daily diaries. Observational methods in which parent-youth interactions are coded on relevant dimensions by independent observers (Duncan, Coatsworth, Gayles, Geier, & Greenberg, 2013) could also provide independent verification of change in mindfulness in parenting.

It was curious that mothers in SFP 10-14 reported better self-regulation in parenting and emotional awareness of youth at both post-intervention and follow-up than mothers in the control group. Youth also reported differences in interpersonal mindfulness in parenting among mothers in both SFP 10-14 and MSFP at follow-up. It may be that effective family-

focused preventive interventions inevitably foster some aspects of mothers' mindfulness in how they perceive and parent their children.

The inclusion of fathers is a strength of this study, as fathers are underrepresented in research on parenting in general (Phares, Lopez, Fields, Kamboukos, & Duhig, 2005) and intervention studies in particular (Phares, Fields, & Binitie, 2006). For the most part, findings from this study indicate stronger effects of MSFP for fathers, including at follow-up, which may bode well for longer-term preventive effects of the intervention. Fathers are less likely to be involved in family life than mothers, but they make independent contributions to the health and well-being of their children (Pleck, 2010). Moreover, fathers who show greater mindfulness tend to be more involved and nurturing with their children (MacDonald & Hastings, 2010). Improving fathers' involvement and mindful parenting could alter the health and well-being of their children. The stronger effects of MSFP on fathers on dimensions of interpersonal mindfulness in parenting and relationship quality may be especially important to improving long-term family functioning and youth adaptation.

Although youths noticed long-term effects of both MSFP and SFP 10-14 on mothers' interpersonal mindfulness in parenting, it was fathers in MSFP who tended to notice long-term effects in themselves. As is evident in the tables of means and standard deviations (Tables 3-6 in the SOM), this differential effect does not appear to be due to baseline differences between mothers and fathers, or to a ceiling effect for mothers. Although uncertain, it may be that fathers experience their new insights as more novel and influential and are therefore more responsive to these mindfulness techniques. The fact that intervention effects grew stronger over time suggests that the new approach and practices presented in the parent groups may have taken time for fathers to consolidate and integrate into their lives.

Results of this study provide empirical support for the efficacy of both SFP 10-14 and MSFP to improve parenting practices and family functioning factors that serve as important mediators of youth risk behaviors (Sandler, Schoenfelder, Wolchik, & MacKinnon, 2011). However, the pattern of results from post-intervention to one-year follow-up suggests that MSFP may enhance the sustainability of intervention effects on mothers' ability to effectively monitor their youth. MSFP also may result in the sustainability of intervention effects on father-youth relationship quality, youth behavior management, and fathers' well-being.

Intervention Design and Evaluation

The most commonly studied forms of secular mindfulness interventions involve instruction in and daily practice of formal mindfulness meditation (e.g., Mindfulness-Based Stress Reduction; Kabat-Zinn, 1990). Efforts have been made to disentangle the impact of different forms of mindfulness practice on outcomes (e.g, Carmody & Baer, 2008), but the true shape of the dose-response relation is unknown. This study demonstrated that modest benefits can be achieved with relatively little instruction and practice of formal mindfulness techniques, but instead a focus on extending mindfulness to the interpersonal interactions of daily life as a parent. It is unclear whether intervention effects would have been more numerous or larger in magnitude with additional mindfulness instruction and formal meditation practice.

Testing MSFP against a standard of care in a comparative effectiveness trial is a stringent test of efficacy, assuming that the standard of care is administered with fidelity. In this study, according to mother self-report or youth report at post-intervention or follow-up, mothers in SFP 10-14 displayed better listening with full attention, self-regulation in parenting, emotional awareness of youth, compassion for youth, affective/interaction quality, approach to emotions, support/understanding, family involvement, monitoring, and alcohol rule communication than mothers in the control group. These intervention effects compare favorably to those for a combined sample of all parents (both mothers and fathers) from the original validation study of SFP 10-14 (Spoth et al., 1998). In this study, fathers in SFP 10-14 displayed somewhat better affective/interaction quality, support/understanding, and satisfaction/efficacy but worse inductive reasoning than fathers in the control group. Interestingly, however, youth also reported that at post-intervention, fathers in SFP 10-14 exhibited worse listening with full attention, emotional awareness of youth, support/understanding, and monitoring than fathers in the control condition. It is unclear how these intervention effects for fathers compare to those from the original validation study, given that youth reports of fathers were not included in that study and separate intervention effects for mothers and fathers were not reported (Spoth et al., 1998).

Conclusions

MSFP was designed to enhance parents' capacity to interact with their youths in a more accepting, emotionally attuned, and compassionate way. Positive findings for this intervention were consistent with results of previously-published studies suggesting the benefits of mindfulness training for interpersonal relationships generally (Carson, Carson, Gil, & Baucom, 2004) and parent-youth relationships specifically (Coatsworth et al., 2010). These changes may have important implications for prevention because programs that teach parents emotional communication skills and promote positive interactions with their youths tend to have better overall effects and can disrupt cycles of negative interactions related to the development of problem behaviors (Kaminski, Valle, Filene, & Boyle, 2008; Patterson, Reid, & Dishion, 1992).

This study contributes to the small literature supporting mindfulness training with parents. Results suggest that even very brief mindfulness training, delivered in the context of a family-focused preventive intervention, may be a promising approach to improving the quality of parent-youth relationships and behavioral management strategies that create a protective family environment against the development of youth problem behaviors (Masten & Coatsworth, 1998; Sandler et al., 2011).

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

The research reported in this article was supported by Grant RO1DA026217 from the National Institute on Drug Abuse and through grants from The Pennsylvania State University Children Youth and Families Consortium. Larissa Duncan was supported by a career development award (K01AT005270) from the National Institutes of Health and The National Center for Complementary and Alternative Medicine. Katharine Bamberger was supported

by the Prevention and Methodology Training Program Grant T32 DA017629 from the National Institute on Drug Abuse to the Pennsylvania State University and F31DA03849.

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Table 1

Comparisons of study conditions intervention effects for mothers at post intervention and 1 year follow-up

	Post-Intervention						One-Year Follow-Up					
	Mother self-report			Youth report of mother			Mother self-report			Youth report of mother		
	SFP v. C	MSFP v. C	MSFP v. SFP	SFP v. C	MSFP v. C	MSFP v. SFP	SFP v. C	MSFP v. C	MSFP v. SFP	SFP v. C	MSFP v. C	MSFP v. SFP
Interpersonal Mindfulness												
Listening with full attention	−.04	−.05	−.01	−.06	−.11	−.06	.11	.14	.03	.29**	.25*	−.04
Self-regulation in parenting	.18+	−.02	−.20*	.17	.12	−.05	.20+	.15	−.06	.24+	.20	−.04
Emotional awareness of youth	.19+	.17	−.01	−.02	.08	.10	.24*	.26*	.01	.12	.03	−.09
Compassion/Acceptance for youth	.12	−.01	−.13	.03	−.04	−.07	.16	.01	−.15	.27**	.23*	−.04
Compassion/Acceptance for self	.07	.00	−.07	NA	NA	NA	.09	.12	.03	NA	NA	NA
Parent-Youth Relationship Quality												
Affective/interaction quality	.17+	.18+	.01	.04	.04	.00	.06	.03	−.03	.09	.22	.13
Approach to emotions	.04	−.06	−.10	.06	.09	.03	.03	−.17	−.19+	.31**	.28**	−.03
Support/understanding	.10	.07	−.04	−.07	.11	.17+	.20+	.02	−.18+	.04	.11	.07
Family Involvement	.13	.12	−.01	−.01	−.01	.00	.35**	.26*	−.09	.07	.02	−.04
Youth Behavior Management												
Inductive reasoning	.15	.20+	.05	−.10	.12	.22*	.10	.05	−.06	.09	.07	−.03
Monitoring	.24*	.35***	.10	−.11	.14	.26**	.05	.21+	.16	.04	.35**	.31**
Alcohol rule communication	.26*	.33***	.07	.29**	.19	−.10	.04	−.08	−.13	−.22+	−.13	.09
Parent Well-Being												
Satisfaction/efficacy	.16	.13	−.03	NA	NA	NA	.13	.11	−.02	NA	NA	NA
Daily hassles	.06	−.04	−.10	NA	NA	NA	.00	−.16	−.16	NA	NA	NA
Anger management	.13	.00	−.13	NA	NA	NA	.15	−.04	−.19+	NA	NA	NA

Note:

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$^{+}p < .10$

$^{*}p < .05$

$^{**}p < .01$

$^{***}p < .001$

Table 2

Comparisons of study conditions intervention effects for fathers at post intervention and 1 year follow-up

	Post-Intervention						One-Year Follow-Up					
	Father self-report			Youth report of father			Father self-report			Youth report of father		
	SFP v. C	MSFP v. C	MSFP v. SFP	SFP v. C	MSFP v. C	MSFP v. SFP	SFP v. C	MSFP v. C	MSFP v. SFP	SFP v. C	MSFP v. C	MSFP v. SFP
Interpersonal Mindfulness												
Listening with full attention	−.06	−.10	−.04	−.27*	−.13	.13	−.20	.15	.35**	−.16	.07	.23
Self-regulation in parenting	.07	−.08	−.15	.11	.17	.05	.10	.15	.05	−.02	−.03	−.01
Emotional awareness of youth	.04	.28*	.23*	−.35*	−.07	.28*	.05	.51***	.46***	.09	.34*	.25+
Compassion/Acceptance for youth	.17	.08	−.09	−.10	−.19+	−.09	.01	.25*	.24*	.05	−.01	−.05
Compassion/Acceptance for self	−.05	.07	.13	NA	NA	NA	.19	.37**	.17	NA	NA	NA
Parent-Youth Relationship Quality												
Affective/interaction quality	.20+	.19+	−.01	.08	.07	−.01	.03	.22+	.19	.15	.25+	.10
Approach to emotions	.11	.02	−.09	−.11	.15	.27*	.22	.00	−.22	.15	.27	.12
Support/understanding	.03	.03	.00	−.29*	.07	.36**	.05	.27*	.22+	.24+	.24+	.00
Family involvement	.18	.32*	.14	.00	.12	.12	.04	.21	.17	−.14	−.10	.04
Youth Behavior Management												
Inductive reasoning	.18	.25+	.08	−.19	.08	.26*	−.26+	−.07	.19	−.03	.11	.15
Monitoring	.04	.39**	.35**	−.21+	−.04	.17	.02	.04	.01	.06	.24+	.18
Alcohol rule communication	.17	.25+	.08	.13	.14	.02	.12	.26+	.13	−.20	.02	−.22
Parent Well-Being												
Satisfaction/efficacy	.15	.19+	.05	NA	NA	NA	.26*	.29*	.03	NA	NA	NA
Daily hassles	−.17	−.17	.01	NA	NA	NA	.10	−.23	−.33*	NA	NA	NA
Anger management	.07	.16	.09	NA	NA	NA	.11	.33*	.22	NA	NA	NA

Note:

+ $p < .10$
* $p < .05$
** $p < .01$
*** $p < .00$