ORIGINAL ARTICLE

Effectiveness of A Mindful Parenting Group Intervention on the Parent-Child Relationship in Parents of Children with Attention-Deficit/Hyperactivity Disorder (ADHD): A Pilot Randomized Controlled Trial

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Objective: To assess the effectiveness of a mindful parenting intervention on the parent-child relationship and parental mindfulness.

Materials and Methods: This unblinded, randomized controlled trial with a parallel-group design was conducted with parents of children with ADHD treated at Siriraj Hospital. The intervention group (13 participants) participated in six weekly mindful parenting group sessions, while the control group (10 participants) received psychoeducation about mindful parenting. The Parent-Child Relationship Questionnaire (PCRQ) and Srithanya Sati Scale (SSS) were administered at baseline, post-intervention, and at an 8-week follow-up. Data were analyzed using a linear mixed model.

Results: Although no significant group-by-time interaction was found, conditional marginal effect analysis revealed distinct longitudinal patterns. For parental mindfulness (SSS), the intervention group showed a significant immediate improvement post-intervention (B=4.54, p=0.012), followed by a "fade-out" effect at the 8-week follow-up (p=0.203), due to skill decay after the withdrawal of structured support. In contrast, for the parent-child relationship (PCRQ), the experimental group demonstrated persistence by maintaining stable scores, whereas the control group experienced a significant decline during the follow-up period (B=–4.10, p=0.009).

Conclusion: The intervention showed promise as a protective buffer for parent-child relationships and an immediate mindfulness boost. However, the 8-week mindfulness fade-out highlights the need for ongoing reinforcement. Despite the small sample and short follow-up, the findings suggest that sustaining environment is essential for long-term impact. Further rigorous longitudinal studies are recommended.

Keywords: Attention deficit disorder with hyperactivity; Children; Mindfulness; Parenting; Parent-child relations

Received 22 September 2025 | Revised 22 January 2026 | Accepted 27 January 2026

J Med Assoc Thai 2026;109(3):218-26

Website: http://www.jmatonline.com

Attention-deficit/hyperactivity disorder (ADHD) is a prevalent neurodevelopmental disorder in children and adolescents, with significant negative consequences for both affected individuals and their families[1-3]. The global prevalence of ADHD in children and adolescents is estimated to range from 5.6% to 7.6%[1], while in Thailand, it is estimated to range from 3.8% to 8.1%[4-6]. Children with ADHD face a range of adverse long-term outcomes, including academic underachievement, risky sexual behaviors, substance use, impaired job performance, relationship difficulties, and increased risk of car accidents[2]. The quality of parent-child relationships is associated with both internalizing and externalizing problems in children and adolescents with ADHD[7-10]. Specifically, this relationship is linked to behavioral problems in both the short and long term[7,8]. Moreover, it can serve as a moderating factor for the development of antisocial behaviors and depressive symptoms[9,10].

Mindfulness is defined as the awareness that arises from paying attention intentionally, in the present moment, and without judgment[11]. Mindful parenting is an intervention that helps parents develop present-moment awareness, enabling them to cultivate mindfulness, emotional literacy, and non-judgmental acceptance of their children[12]. Research has shown that mindful parenting is

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How to cite this article:

Duangchoo T, Apinantavet S, Singhakant S, Atsariyasing W. Effectiveness of A Mindful Parenting Group Intervention on the Parent-Child Relationship in Parents of Children with Attention-Deficit/Hyperactivity Disorder (ADHD): A Pilot Randomized Controlled Trial. J Med Assoc Thai 2026;109:218-26.

DOI: 10.35755/jmedassocthai.2026.3.03437

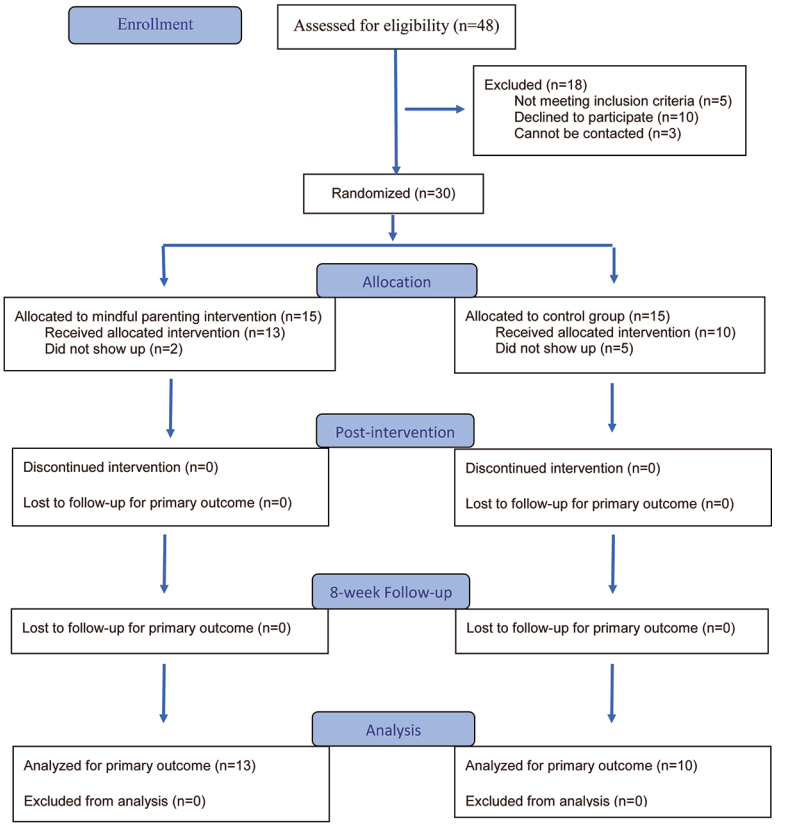

Figure 1. Flow diagram.

associated with improvements in parent-child relationships in both children and adolescents[13,14]. It has been linked to improved communication, increased parental sensitivity, and greater emotional awareness, all of which may lead to improved parent-child relationships[13]. Previous studies have demonstrated that mindful parenting interventions can improve the parent-child relationship[15,16], although one study reported no significant improvement[17].

Although mindful parenting interventions show promise in improving the parent-child relationship, a factor known to moderate both internalizing and externalizing behaviors in children with ADHD, existing evidence remains limited and inconclusive. Moreover, most previous studies did not exclusively focus on children with ADHD and were mostly conducted in the United States. Therefore, the present study aimed to develop a culturally adapted mindful parenting intervention and evaluate its effects on the parent-child relationship in families of children with ADHD.

Materials and Methods

Study design

The present study was a pilot study that employed an unblinded, randomized controlled trial with a parallel-group design. Data collection was conducted between March and November 2018.

Participants

The participants were parents and their children diagnosed with ADHD receiving treatment at Siriraj Hospital at the time of recruitment. Eligibility criteria included fluency in Thai and no participation in any mindfulness or parenting training program within the past year. Recruitment was conducted via promotional posters displayed at the Child and Adolescent Psychiatry Clinic. Thirty participants were recruited, consistent with sample size recommendations for a two-arm pilot trial, as suggested by Browne[18] (Figure 1). Research leaflets were used to advertise the study at the outpatient unit. Randomization was performed using a simple random sampling method. Each participant was assigned a number based on their application order, and an independent research team

Table 1. Outline of the mindful parenting intervention

Session	Objectives	Activities
1) Automatic vs. mindful parenting	- To build rapport and motivation for group participation. - To create awareness of the differences between automatic parenting and mindful parenting. - To practice attention control.	- Raisin exercise
2) Beginner's mind	- To practice seeing things as they are, perceiving them as they are, without judgment, resulting in a realization of the present reality. - To cultivate a beginner's mind, practicing seeing without expectations based on past experiences, accepting new possibilities that may arise, resulting in a more open mind.	- Breathing exercise - Perspective on inkblot drawings - Looking at children with a beginner's mind
3) Listening with full attention	- To enable parents to practice listening and paying quality attention to their children, so they can accurately understand the children's thoughts and feelings.	- Breathing exercise - Mindful speaking/listening
4) Self-care of parent	- To enable parents to take care of their own bodies and learn to listen to their body's signals. - To enable parents to learn to manage their emotions appropriately.	- Breathing exercise - Body scan/yoga exercise
5) Responding vs. reacting	- To cultivate awareness and understanding of the internal states of both children and themselves, including emotions, feelings, and thoughts. - To enable parents to practice self-restraint and control their own emotions appropriately, avoiding impulsive reactions to children's behavior.	- Observe thoughts and emotions while playing games. - "Pause" game.
6) Compassion for self and child	- To cultivate gentleness and increase compassion towards oneself and children. - To enable parents to learn to forgive children and forgive themselves. - To foster positive relationships between children and parents.	- Breathing exercise - Empty chairs - Compassion/gratitude practice

member, blinded to participant identities, randomly drew the numbers to create equal intervention and control groups.

Intervention

The experimental group attended 90-minute mindful parenting sessions for six consecutive weeks, while the control group received a leaflet about mindfulness. The intervention was developed by the research team based on Duncan's five core principles of mindful parenting: 1) listening with full attention, 2) non-judgmental acceptance of self and child, 3) emotional awareness of self and child, 4) self-regulation in the parenting relationship, and 5) compassion for self and child[12]. The intervention content was reviewed by two experts in mindfulness and parenting and tested with a focus group of parents of children with ADHD (Table 1). The sessions were co-facilitated by a leader and a co-leader, both of whom were psychologists experienced in mindfulness practice and conducting parenting groups. Furthermore, they were trained to deliver mindfulness-based interventions by an experienced psychiatrist. Fidelity monitoring was conducted by a co-leader to ensure adherence to the protocol. The control group received a leaflet providing information that included a definition and the benefits of mindful parenting, as well as basic mindfulness practices.

Adherence to the intervention protocol in the intervention group was analyzed based on session attendance. Specifically, eight participants (61.54%) completed the full complement of six sessions. Partial adherence was observed among the remaining participants, with four individuals (30.77%) attending five sessions and one individual (7.69%) attending three sessions. Analysis of specific session attendance revealed that Sessions 1 and 5 achieved 100% participant attendance. Conversely, Session 2 demonstrated the lowest rate of participation, at 76.9%, across the intervention period.

Measurements

The data collecting tools utilized in this study included the Parent-Child Relationship Questionnaire (PCRQ) and the Srithanya Sati Scale (SSS).

PCRQ was developed by the researchers based on Bowlby's attachment theory and the parenting frameworks of Baumrind[19] and Maccoby & Martin[20]. It consists of 14 items divided into three aspects: communication, closeness and warmth, and satisfaction in parenting. A higher total score indicates a stronger parent-child relationship. The PCRQ demonstrated good validity and reliability, with a content validity index of 1.0 and a Cronbach's alpha coefficient of 0.859.

SSS was developed by Silpakit & Silpakit to

assess mindfulness levels in the Thai context. It consists of 14 items divided into three subscales: awareness, acceptance, and self-recollection. Higher scores in self-recollection and awareness, and lower scores in acceptance, indicated good mindfulness. However, for the present study, the items within the 'acceptance' subscale were reverse-scored. This adjustment was made to ensure that higher scores across all three subscales consistently represent higher levels of mindfulness. SSS demonstrated good validity and reliability, with Cronbach's alpha coefficients for awareness, acceptance, and self-recollection subscales being 0.77, 0.73, and 0.63, respectively. The scale also demonstrated good validity, with a Pearson's correlation coefficient of 0.71 when compared with the Philadelphia Mindfulness Scale[21].

Data analysis

An intention-to-treat analysis was employed, using the last observation carried forward method for handling missing data, to assess the effectiveness of the mindful parenting program. Data were analyzed using PASW Statistics, version 18.0 (SPSS Inc., Chicago, IL, USA) and Stata Statistical Software, version 16 (StataCorp LLC, College Station, TX, USA). Descriptive statistics were used to analyze demographic data. Linear mixed model assessed the effect of time, during post-intervention at six and eight weeks, and at follow-up at 14 weeks, and intervention on parent-child relationship changing from baseline (PCRQ total score) and mindfulness changing from baseline (SSS total score) with Bonferroni adjustment.

Results

Demographic data

Twenty-three parents of children with ADHD participated in the study, with 13 assigned to the intervention group and 10 to the control group (Figure 1). There were no statistically significant differences between the groups in terms of gender, age, education level, and monthly income. Most participants in both groups were mothers, with a mean age ranging between 40 and 50 years (Table 2).

Regarding child characteristics, there were no statistically significant differences between the groups in terms of gender, comorbid conditions, or medication treatment. In both groups, most children were males receiving treatment with methylphenidate. However, statistically significant differences ($p<0.05$) were observed in child age and duration of ADHD diagnosis, from time of diagnosis to present, between the experimental group and the control group. The mean age of children in the experimental group was 8.9 years, with most having been diagnosed with ADHD for less than one year. In contrast, the mean age of children in the control group was 11.3 years, and the majority had been diagnosed for more than three years (Table 2).

Table 2. Demographic data

	Intervention group (n=13)	Control group (n=10)	p-value
Demographic data of parents			
Sex; n (%)			1.000
• Male	1 (7.7)	1 (10.0)	
• Female	12 (92.3)	9 (90.0)	
Age (years); mean±SD	44.5±9.4	46.7±9.8	0.584
Education level; n (%)			0.377
• Below bachelor's degree	6 (46.1)	2 (20.0)	
• Bachelor's degree	4 (30.8)	6 (60.0)	
• Higher bachelor's degree	3 (23.1)	1 (10.0)	
• Missing data	0 (0.0)	1 (10.0)	
Family monthly income (THB); n (%)			0.219
• <5,000	4 (30.8)	2 (20.0)	
• 5,000 to 20,000	2 (15.4)	6 (60.0)	
• 20,000 to 50,000	3 (23.0)	1 (10.0)	
• Greater than 50,000	4 (30.8)	1 (10.0)	
Demographic data of children			
Sex; n (%)			0.618
• Male	11 (84.6)	7 (70.0)	
• Female	2 (15.4)	3 (30.0)	
Age (years); mean±SD	8.9±1.8	11.3±2.6	0.018
Duration from ADHD diagnosis to present; n (%)			0.014
• Less than 3 months	4 (30.7)	0 (0.0)	
• 3 to 12 months	4 (30.7)	0 (0.0)	
• 1 to 2 years	2 (15.4)	2 (20.0)	
• 3 to 5 years	2 (15.4)	1 (10.0)	
• More than 5 years	1 (7.8)	4 (40.0)	
• Missing data	0 (0.0)	3 (30.0)	
Psychiatric comorbidities; n (%)			0.486
• None	8 (61.5)	5 (50.0)	
• SLD	3 (23.1)	5 (50.0)	
• ODD	1 (7.7)	0 (50.0)	
• GDD	1 (7.7)	0 (50.0)	
Pharmacological treatment; n (%)			0.771
• None	3 (23.1)	1 (10.0)	
• Methylphenidate-short acting	9 (69.2)	9 (90.0)	
• Methylphenidate-long acting	1 (7.7)	0 (0.0)	

ADHD=attention-deficit/hyperactivity disorder; SD=standard deviation; THB=Thai Baht; PCRQ=Parent-Child Relationship Questionnaire; SSS=Srithanya Sati Scale; SLD=specific learning disorder; ODD=oppositional defiant disorder; GDD=global developmental delay

Table 3. Linear mixed-effects regression analysis of PCRQ scores between experimental and control groups

Variable	Coefficient	95% CI	z	p-value
Fixed effects				
Constant	2.77	0.58 to 6.12	1.62	0.105
Group (experiment vs. control)	–1.07	–6.23 to 4.09	–0.41	0.684
Time (post-intervention vs. follow-up)	–1.32	–3.99 to 1.34	–0.97	0.330
Interaction (group × time)	–2.77	–6.84 to 1.29	–1.34	0.181
Random effects	Estimate (variance)			
Between-subject (intercept)	26.76	12.70 to 56.37		
Within-subject (residual)	11.22	5.98 to 21.04		

CI=confidence interval; PCRQ=Parent-Child Relationship Questionnaire

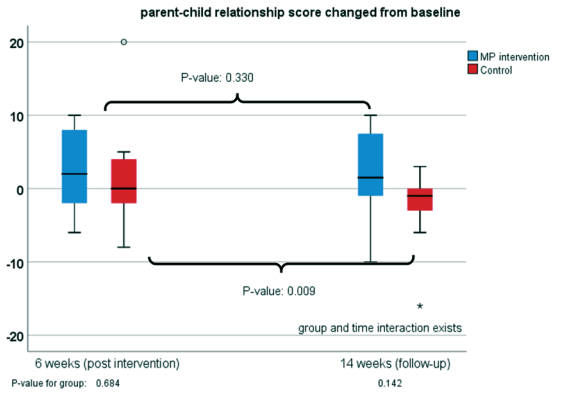

Figure 2. Interaction effect between group and time on parent-child relationship score.

Parent-child relationship

Linear mixed-effects model analysis showed no significant interaction between group and time (p=0.181). However, analysis of conditional marginal effects revealed that the control group experienced a significant decline in PCRQ scores at the eighth week follow-up compared to baseline (B=–4.10, 95% CI –7.17 to –1.03, p=0.009). In contrast, the experimental group demonstrated relative stability, with no significant reduction in scores from baseline to the follow-up period (B=–3.85, 95% CI –8.97 to 1.28, p=0.142), suggesting a potential protective effect of the intervention against the deterioration observed in the control group. The detailed fixed and random effects are presented in Table 3, and the marginal effects by group are summarized in Figure 2.

Mindfulness levels

Linear mixed-effects model analysis was conducted to evaluate the impact of the intervention and time on mindfulness scores. The model revealed no significant group-by-time interaction effect (B=0.73, 95% CI –5.40 to 6.87, p=0.815), indicating that the overall trajectory of mindfulness scores did not differ significantly between the experimental and the control groups. However, analysis of conditional marginal effects showed a significant immediate improvement within the experimental group. Specifically, mindfulness scores in the experimental group increased significantly from baseline to post-test (B=4.54, 95% CI 0.99 to 8.09, p=0.012). This improvement was not maintained at the eighth week follow-up, where the change from baseline was no longer statistically significant (B=2.31, 95% CI –1.24 to 5.86, p=0.203). In the control group, no significant changes in mindfulness scores were observed from baseline to either the post-test (B=3.60, p=0.081) or the eighth week follow-up (B=2.10, p=0.309). The detailed fixed and random effects are presented in Table 4, and the marginal effects by group are summarized in Figure 3.

Discussion

The present study employed linear mixed-effects modeling to investigate the impact of the intervention on both parent-child relationships (PCRQ) and parental mindfulness (SSS). While the interaction effects for both outcomes did not reach statistical significance, a detailed analysis of conditional marginal effects revealed distinct and noteworthy patterns of change over time. Regarding mindful parenting, the intervention demonstrated a significant immediate impact. Participants in the experimental group showed a substantial increase in mindfulness scores immediately following the program's conclusion (B=4.54, p=0.012). This finding aligns with the nature of mindfulness as a skill-based construct that can be enhanced through targeted training. However, this effect was not sustained at the eighth week follow-up (p=0.203). This "fade-out" effect suggests that mindfulness

Table 4. Linear mixed-effects regression analysis of SSS scores between experimental and control groups

Variable	Coefficient	95% CI	z	p-value
Fixed effects				
Constant	4.54	0.99 to 8.09	2.51	0.012
Group (experiment vs. control)	–0.94	–6.32 to 4.45	–0.34	0.733
Time (post-intervention vs. follow-up)	–2.23	–6.28 to 1.81	–1.08	0.280
Interaction (group × time)	0.73	–5.40 to 6.87	0.23	0.815
Random effects	Estimate (variance)			
Between-subject (intercept)	14.96	12.70 to 56.37		
Within-subject (residual)	27.69	15.12 to 50.69		

CI=confidence interval; SSS=Srithanya Sati Scale

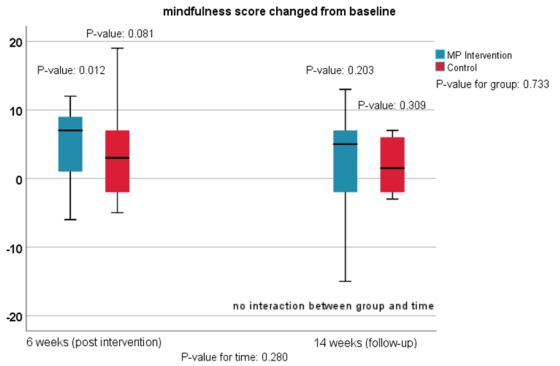

Figure 3. Interaction effect between group and time on mindfulness score.

may be a transient state that requires continuous practice and reinforcement to maintain long-term benefits once the structured support of a program is withdrawn. Mindfulness, as a malleable skill, requires a 'sustaining environment' including continuous practice and reinforcement to persist. In the absence of such ongoing environmental support after the program's conclusion, the newly acquired mindfulness skills underwent a process of 'skill decay,' where the initial gains gradually regressed toward the baseline[22].

In contrast, the findings for the parent-child relationship (PCRQ) highlighted a different mechanism of action. Although the experimental group did not show a significant increase from baseline, they demonstrated remarkable stability in their relationship quality. Conversely, the control group experienced a significant and sharp decline in PCRQ scores during the follow-up period (B= –4.10, p=0.009). This divergence suggests that the intervention may serve a 'protective function'. By equipping parents with specific tools, the program appears to buffer against the natural deterioration of relationship quality that occurred in the control group over time. However, it is a recognized limitation that the 8-week follow-up is a short timeframe. Therefore, these results should be viewed as short-term trajectories. Further longitudinal study is required to determine if this protective effect constitutes true long-term persistence as defined in larger developmental frameworks.

The finding that the mindful parenting intervention did not result in statistically significant improvement in the parent-child relationship aligns with the results reported by Coatsworth et al.'s study[17]. However, in Coatsworth's study, participants were parents from a non-clinical population of adolescents, not parents of children with ADHD, and the control group received a family-focused intervention, rather than a psychoeducation leaflet[17]. Therefore, it is difficult to directly compare the results of these two studies.

The findings from the present study differ from another study by Coatsworth et al., which used a similar protocol but included a larger sample size and a longer follow-up period[15]. That study found that mindfulness-enhanced family-focused intervention improved the parent-adolescent relationship compared to family-focused intervention alone in parents of a non-clinical population of adolescents at both the post-intervention and 1-year follow-up period[15]. Several factors may account for the discrepancy between the present study findings and those of Coatsworth's later study, including intervention protocols, the study population, and the measurement of the parent-child relationship. The intervention in Coatsworth's study consisted of 120-minute weekly sessions over seven weeks and involved both parents and adolescents[15], while the present study provided 90-minute weekly sessions over six weeks to parents only. The more intensive intervention in Coatsworth's study may have led to more effective outcomes. Moreover, the study

population in Coatsworth's included parents of a non-clinical population of adolescents, while the present study focused on parents of children with ADHD, which may also explain the different results.

The findings of the present study also differ from Chaplin et al.'s study, which reported that a mindful parenting intervention improved the parent-child relationship. This difference may be attributable to variations in the intervention details, participants' characteristics, and outcome measurements of the parent-child relationship. The intervention in Chaplin's study was 120 minutes per session for a total of eight sessions[16], while it was 90 minutes for six sessions in the present study. The greater frequency and duration of sessions in Chaplin's study might have resulted in higher effectiveness. Additionally, participants in Chaplin's study were parents of a non-clinical population of adolescents with high stress levels[16], whereas the present study included parents of children with ADHD without reported baseline stress levels.

Differences in the baseline age of children and the duration of illness between the experimental group and the control group may have also affected the study results. Children in the experimental group had a mean age of 8.9 years, while those in the control group had a mean age of 11.3 years. Younger children may exhibit less control over their behavior, potentially leading to increased parental stress and worse parent-child relationships[22,23]. Furthermore, most children in the experimental group had an illness duration of less than one year, whereas most children in the control group had an illness duration of more than three years. Children and parents with longer exposure to treatment are more likely to have received comprehensive ADHD management, including medication, psychoeducation, behavioral modification, and parent training. Such support may help reduce disruptive behaviors and parental stress, leading to improvement in the parent-child relationship[24].

The present study has limitations. First, the small sample size might have resulted in insufficient statistical power to detect significant differences between the experimental and the control groups. Second, randomization of a small number of participants made it challenging to balance all potential confounding factors between the experimental and the control groups. Consequently, some confounding factors, such as the age of the children and the duration of illness, might have influenced the study results. Third, the unblinded study design may increase the likelihood of performance and detection bias. Fourth, a reliance on self-report measures for both the parent-child relationship and mindfulness levels introduced the potential of bias, including underreporting of problematic behaviors and inaccurate self-assessments. Moreover, the lack of data on daily mindfulness practice in both the experimental and control groups could confuse the study's findings. Finally, most participants were mothers aged 40 to 50 years from a middle socioeconomic status, and all children were diagnosed with ADHD, which might limit the generalizability of the study results to other populations.

Conclusion

The present pilot study demonstrates that a short-term mindful parenting intervention serves as a promising protective buffer for parent-child relationships, even when overall group differences did not reach statistical significance due to the small sample size. While the intervention provided an immediate mindfulness boost, the observed 'fadeout' at 8-week follow-up suggests that mindfulness gains are susceptible to skill decay without a sustaining environment. Conversely, the persistence of parent-child relationship stability in the experimental group was compared to the significant decline in the control group. Future studies should utilize larger, diverse cohorts and double-blind longitudinal designs, such as a 12-month follow-up. Integrating booster sessions and controlling for confounding variables will be crucial to minimizing bias and attrition, confirming the intervention's long-term sustainability across various populations.

What is already known about this topic?

- Mindful parenting has been linked to better parent-child relationships in both children and adolescents, though the evidence is limited and inconclusive.
- Most studies did not exclusively focus on children with ADHD and were primarily conducted in the Western region.

What does this study add?

While the mindful parenting intervention did not significantly improve the parent-child relationship for Thai parents of children with ADHD, the results suggest a positive trend toward effectiveness.

Acknowledgement

The authors would like to thank Ms. Neungrutai

Tinwongyen for her assistance in conducting the mindful parenting group and Dr. Orawan Supapueng, from the Department of Research, Faculty of Medicine Siriraj Hospital, Mahidol University, for her assistance with the statistical analyses. Lastly, the authors would like to thank Mr. Aditya Rana from the Faculty of Medicine Siriraj Hospital, for his assistance with language editing of this manuscript.

Authors' contributions

Conceptualization and methodology, TD, SA, SS, and WA; Investigation, TD and WA; Formal analysis, TD, SA, SS, and WA; Visualization and writing-original draft, TD and WA; Writing-review and editing, SA, SS, and WA; Funding acquisition, TD and WA; Supervision, WA. All authors have read and agreed to the final version of the manuscript.

Data availability statement

The data supporting the findings of this study are not publicly available due to ethical and confidentiality restrictions. However, de-identified data may be made available upon reasonable request to the corresponding author, subject to approval by the institutional ethics committee. Secondary data sources, where applicable, are cited in the references section.

Ethics approval and consent to participate

The present study was approved by the Institutional Review Board of the Faculty of Medicine, Siriraj Hospital (certificate of approval number Si 590/2017).

Clinical trial registration

The present study was registered with the Thai Clinical Trials Registry under the identification number TCTR20190131001.

Use of artificial intelligence

The authors used Gemini 2.5 Pro to assist with grammar correction and sentence refinement. All AI-assisted content was thoroughly validated and approved by the authors to ensure accuracy and compliance with academic and ethical standards.

Funding disclosure

This study was supported by the Siriraj Research Development Fund, Grant Number (IO) R016132022.

Conflicts of interest

The authors have no conflicts of interest to disclose regarding this study.

References

1. Salari N, Ghasemi H, Abdoli N, Rahmani A, Shiri MH, Hashemian AH, et al. The global prevalence of ADHD in children and adolescents: a systematic review and meta-analysis. Ital J Pediatr 2023;49:48. doi: 10.1186/s13052-023-01456-1.
2. Usami M. Functional consequences of attention-deficit hyperactivity disorder on children and their families. Psychiatry Clin Neurosci 2016;70:303-17.
3. Wanni Arachchige Dona S, Badloe N, Sciberras E, Gold L, Coghill D, Le HND. The impact of childhood attention-deficit/hyperactivity disorder (ADHD) on children's health-related quality of life: A systematic review and meta-analysis. J Atten Disord 2023;27:598-611.
4. Visanuyothin T, Pavasuthipaisit C, Wachiradilok P, Arunruang P, Buranasuksakul T. The prevalence of attention deficit/hyperactivity disorder in Thailand. J Ment Health Thai 2013;21:66-75.
5. Ekasawin S, Phothisut C, Chomcheun R. The prevalence of psychiatric disorders in Thai students aged 13-17 years. J Ment Health Thai 2016;24:141-53.
6. Pandee P, Wangtrakul K, Luangbumroong K, Jarungsaksakul P, Puttaprasert N, Kwunrod C, et al. Prevalence and associated factors of attention deficit hyperactivity disorder among male adolescents in juvenile observation and protection centers. J Ment Health Thai 2024;32:36-48.
7. Taghizade S, Mahmoodi Z, Zandifar A, Qorbani M, Mohamadi F, Mehrafzoun N. The relationship model among parent-child relationship, coping responses and behavioral problems in children with attention deficit hyperactivity disorder. BMC Psychiatry 2022;22:596. doi: 10.1186/s12888-022-04224-3.
8. Brook JS, Lee JY, Finch SJ, Brown EN. The association of externalizing behavior and parent-child relationships: An intergenerational study. J Child Fam Stud 2012;21:418-27.
9. Giannotta F, Rydell AM. The prospective links between hyperactive/impulsive, inattentive, and oppositional-defiant behaviors in childhood and antisocial behavior in adolescence: The moderating influence of gender and the parent-child relationship quality. Child Psychiatry Hum Dev 2016;47:857-70.
10. Powell V, Riglin L, Ng-Knight T, Frederickson N, Woolf K, McManus C, et al. Investigating friendship difficulties in the pathway from ADHD to depressive symptoms. Can parent-child relationships compensate? Res Child Adolesc Psychopathol 2021;49:1031-41.
11. Kabat-Zinn J. Wherever you go, there you are: mindfulness meditation in everyday life. 10th ed. New York: Macmillan Audio; 2005.
12. Duncan LG, Coatsworth JD, Greenberg MT. A model of mindful parenting: implications for parent-child

relationships and prevention research. Clin Child Fam Psychol Rev 2009;12:255-70.
13. Potharst ES, Leyland A, Colonnesi C, Veringa IK, Salvadori EA, Jakschik M, et al. Does mothers' self-reported mindful parenting relate to the observed quality of parenting behavior and mother-child interaction? Mindfulness (N Y) 2021;12:344-56.
14. Duncan LG, Coatsworth JD, Gayles JG, Geier MH, Greenberg MT. Can mindful parenting be observed? Relations between observational ratings of mother-youth interactions and mothers' self-report of mindful parenting. J Fam Psychol 2015;29:276-82.
15. Coatsworth JD, Duncan LG, Nix RL, Greenberg MT, Gayles JG, Bamberger KT, et al. Integrating mindfulness with parent training: effects of the Mindfulness-Enhanced Strengthening Families Program. Dev Psychol 2015;51:26-35.
16. Tara MC, Turpyn CC, Fischer S, Martelli AM, Ross CE, Leichtweis RN, et al. Parenting-focused mindfulness intervention reduces stress and improves parenting in highly-stressed mothers of adolescents. Mindfulness (N Y) 2021;12:450-62.
17. Coatsworth JD, Duncan LG, Greenberg MT, Nix RL. Changing parent's mindfulness, child management skills and relationship quality with their youth: Results from a randomized pilot intervention trial. J Child Fam Stud 2010;19:203-17.
18. Browne RH. On the use of a pilot sample for sample size determination. Stat Med 1995;14:1933-40.
19. Baumrind D. Child care practices anteceding three patterns of preschool behavior. Genet Psychol Monogr 1967;75:43-88.
20. Maccoby EE, Martin JA. Socialization in the context of the family: Parent-child interaction. In: Mussen PH, Hetherington EM, editors. Handbook of child psychology. Vol. 4: Socialization, personality and social development. 4th ed. New York: Wiley; 1983. p. 1-101.
21. Silpakit O, Silpakit C. A thai version of mindfulness questionnaire: Srithanya Sati scale. East Asian Arch Psychiatry 2014;24:23-9.
22. Bailey D, Duncan GJ, Odgers CL, Yu W. Persistence and fadeout in the impacts of child and adolescent interventions. J Res Educ Eff 2017;10:7-39.
23. Planalp EM, Nowak AL, Tran D, Lefever JB, Braungart-Rieker JM. Positive parenting, parenting stress, and child self-regulation patterns differ across maternal demographic risk. J Fam Psychol 2022;36:713-24.
24. Chung G, Lanier P, Wong PYJ. Mediating effects of parental stress on harsh parenting and parent-child relationship during Coronavirus (COVID-19) pandemic in Singapore. J Fam Violence 2022;37:801-12.