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The Impact of Maternal Childhood Trauma on Children's Problem Behaviors: The Mediating Role of Maternal Depression and the Moderating Role of Mindful Parenting

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Objective: This study investigates the impact of maternal childhood trauma on children's problem behaviors, focusing on the mediating role of maternal depression and the moderating role of mindful parenting.

Methods: The study used a convenience sampling method to survey 385 mother-child pairs from kindergartens in Jinan, China. Data were collected in two waves, and various validated questionnaires were used to assess maternal childhood trauma, depression, mindful parenting, and children's problem behaviors.

Results: Maternal childhood trauma positively predicted children's problem behaviors. Maternal depression was found to mediate this relationship. Mindful parenting moderated the effects of maternal childhood trauma and depression on children's problem behaviors, with high levels of mindful parenting mitigating these adverse effects.

Conclusion: Maternal childhood trauma impacts children's problem behaviors both directly and indirectly through maternal depression. Mindful parenting serves as a protective factor, reducing the negative impact of maternal childhood trauma and depression on children's problem behaviors. These findings highlight the importance of interventions aimed at enhancing mindful parenting practices to improve child outcomes.

Keywords: maternal childhood trauma, children's problem behaviors, maternal depression, mindful parenting

Introduction

Children's problem behaviors refers to deviations from normal behavioral standards that hinder the physical and mental health development. They are typically regarded as crucial indicators of children's social adaptability, including internalization and externalization problems.[1] Internalization problems encompass negative emotional issues such as depression, loneliness, anxiety, and withdrawal. Externalization problems include behaviors like attacks and disciplinary.[2] Research indicates that problem behaviors occurs during the preschool stage and are highly prevalent.[3] These behavioral problems have a negative impact on children's personality development, academic adaptation, and peer interaction, and pose a serious threat to their physical and mental health.[4] Moreover, early childhood problem behaviors exhibit persistence and can have a negative impact on their future development.[5]

From an ecological or environmental perspective, children are nested within an interconnected and complex network,[6] wherein various factors may contribute to the development of children's problem behaviors. Research suggests that parental parenting styles can have an impact on children's problem behaviors, with authoritarian and permissive parenting styles exacerbating children's problem behaviors, while authoritative parenting styles reduce children's problem behaviors.[7,8] Higher parenting stress increases the risk of internalization problems in children.[9,10] Moreover, family socioeconomic status and family disorder can also have an impact on children's problem behaviors.[11]

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The Ecological Systems Theory holds that the family is the primary and most critical social environment for children.[12] As the primary caregiver of children in the family, mother's attitude and mental health directly impact on the development of the child. Research has shown that mothers who experience traumatic events during childhood have a negative impact on parenting attitudes, which may affect their emotional engagement, psychological state, and parenting style towards their children,[13] and even transfer their negative childhood experiences to their children.[14,15] Therefore, this study aims to explore the impact of maternal childhood trauma on children's problem behaviors, and further investigating the mediating role of maternal depression and the moderating role of mindfulness parenting. This will provide important clues for a deeper understanding of the mechanisms through which maternal childhood trauma affects children's development, offering a scientific basis for the formulation of relevant intervention and support strategies.

Literature Review and Theoretical Hypotheses

Maternal Childhood Trauma and Children's Problem Behaviors

Childhood Trauma (CT) is commonly defined as "psychological, emotional, or physical harm caused by negative behavior or inaction by parents or other caregivers during childhood",[16] including emotional neglect, physical neglect, emotional abuse, sexual abuse, and physical abuse. Many studies have found that childhood trauma can lead to serious consequences for individual development, such as impaired brain structure and function, sleep problems, emotional problems, drug abuse, suicidal behavior, criminal behavior, and overall health decline, posing a serious threat to a person's physical and mental health and social function development.[17,18] It is worth emphasizing that childhood trauma not only affects the individual itself, but may also affect the health, adaptability, and well-being of future generations through intergenerational transmission.[19,20]

The Intergenerational Trauma Transmission (ITT) theory emphasizes the impact of parent-child interaction on the spread of trauma. This impact can be manifested through caregivers' behavior towards children and children's social learning.[21] Research indicates that mothers who have experienced childhood trauma may exhibit impaired parenting skills, such as child neglect, lower parenting efficacy, negative self-evaluation, and more frequent use of abusive, punitive, and psychologically aggressive parenting methods.[22–24] These negative parenting behaviors by parents may lead to problem behavior in the next generation.[25] In addition, parents with childhood trauma problems often exhibit strong emotional responses, such as fear, anger, sadness, and avoidance behaviors. These negative emotions and behaviors are easily observed and learned by young children, ultimately affecting their behavior and emotional development.[21]

The Mediating Role of Maternal Depression

Traumatic exposure is an early adversity associated with long-term negative physical and mental health outcomes.[26] Research indicates that maternal trauma exposure can increase the risk of depression.[27] Furthermore, Nanni, Uher, Danese[28] pointed out that individuals who have experienced childhood trauma are twice as likely to suffer from persistent and recurrent depression compared to others. Early experiences of abuse are not only related to the victim's own emotional or behavioral disorders, but may also affect the mental health of future generations.[29] The social science literature extensively demonstrates the intergenerational transmission of domestic violence.[30]

Mothers with higher levels of depression often exhibit mental states such as low energy, slow reactions, and psychological distress. These emotional challenges may reduce the quality of the parenting environment, leading to intrusive parenting, inconsistent discipline, and diminished parental monitoring.[31] In addition, depressive emotions are often accompanied by negative self-evaluation, which weakens a mother's parenting confidence,[32] and shows less emotional support and attention to young children.[33] These negative parenting styles and emotional responses increase the risk of children developing internalized and externalized behaviors.[34]

The Moderating Role of Mindfulness Parenting

Mindful parenting is a parenting approach based on the concept of mindfulness, which refers to parents maintaining present-moment awareness and acceptance in their daily interactions with their children.[35] This parenting approach stems

from the development of five parenting qualities: attentive listening, non-judgmental acceptance of oneself and the child, emotional awareness of oneself and the child, compassion towards oneself and the child, and self-regulation in the parenting relationship.[36]

Mindfulness teaches individuals to accept their current experiences, observe their feelings, emotions, and thoughts without judgment, and face challenges and difficulties with a calmer, more composed attitude. By integrating mindfulness practices with parenting techniques, mindful parenting can alleviate maternal childhood trauma, reduce parenting stress,[37,38] and enhance psychological resilience.[39] Research indicates that parents who experience less stress are able to provide higher-quality parenting, which promotes children's psychological well-being.[40] Moreover, high resilience can significantly buffer the negative effects of childhood trauma, helping individuals better adapt to challenges.[25] Furthermore, mindful parenting can effectively reduce maternal depressive symptoms. For instance, Coatsworth, Duncan, Nix, Greenberg, Gayles, Bamberger, Berrena, Demi[41] found that mothers who underwent mindful parenting training showed significant improvements in reducing depressive symptoms. Alexander[42] also highlighted that mindful parenting helps mothers better manage their emotions, thereby reducing the impact of depressive symptoms. This practice enhances mothers' emotional regulation and stress-coping abilities, enabling them to interact with their children in a more positive and effective manner.[43] This not only improves mothers' psychological health but also reduces children's problem behaviors.

Current Study

Based on the Intergenerational Trauma Transmission theory, this study explores the impact of maternal childhood trauma on children's problem behaviors, and examines the mediating role of maternal depression and the moderating role of mindfulness parenting. It aims to deeply reveal the formation and development mechanism of problem behaviors in preschool children. This study mainly raises three research questions:

1. Can maternal childhood trauma directly predict children's problem behavior?
2. Does maternal depression mediate the relationship between maternal childhood trauma and child problem behaviors?
3. Does mindfulness parenting moderate the relationship between maternal childhood trauma and child problem behaviors?
4. Does mindful parenting moderate the relationship between maternal depression and children's problem behaviors?

The study constructs a research model based on these research questions, as illustrated in Figure 1.

Materials and Methods

Participants

This study employed a convenience sampling method to survey children and their mothers from two kindergartens in Jinan. The survey was conducted in two waves. The first wave took place in December 2023, during which mothers

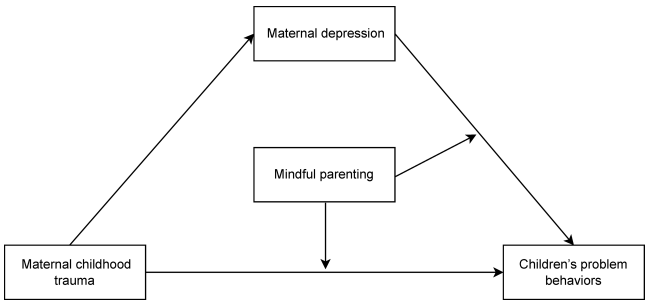

Figure 1 Research hypothesis model of this study.

reported on childhood trauma, depression, and mindful parenting. The second wave occurred in June 2024, during which teachers reported on children's problem behaviors. Data that were completed too quickly or showed obvious patterns of identical responses were excluded. This resulted in 423 valid questionnaires for the first wave and 399 valid questionnaires for the second wave. After pairing the two sets of data, 385 valid pairings were achieved. Fourteen children and their mothers could not be paired and were considered lost to follow-up. Little's MCAR test indicated that the missing data were completely random ($\chi^2 = 35.853$, $df = 49$, $p = 0.919$).[44] Consequently, the final sample consisted of data from 385 children and their mothers (216 girls and 169 boys). The demographic information of the participants is presented in Table 1. The study received ethical approval from the corresponding author's institution in accordance with the guidelines of the Helsinki Declaration. Informed consent was obtained from each child's mother.

Measures

Childhood Trauma

The Childhood Trauma Questionnaire-Short Form (CTQ-SF) was used to assess parents' childhood trauma.[45] Fu, Yao[46] revised the Chinese version, and it has been widely used in the Chinese population.[47] The questionnaire consists of 28 items, divided into five subscales: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. An example item is: "I was hit hard enough to leave bruises." The responses are rated on a 5-point scale (1 = never, 5 = always), with a total score range of 25 to 125. Higher scores indicate more severe early trauma experiences. In this study, the Cronbach's alpha coefficient for this scale was 0.964.

Depression

The Beck Depression Inventory (BDI) is widely used to assess the severity of depressive symptoms[48]. This inventory has also been extensively used in Chinese populations.[49] It comprises 21 items, each rated on a 0–3 scale. The total score is the sum of the scores of the 21 items. An example item is: "I felt that I could not shake off the blues even with help from my family or friends." Higher scores indicate more severe depression. In this study, the Cronbach's alpha coefficient for this scale was 0.911.

Mindful Parenting

This study utilized the Mindfulness in Parenting Questionnaire (MIPQ) developed by McCaffrey, Reitman, Black[50] and translated and revised by Chinese scholars Wu, Buchanan, Zhao, Wang, Zhan, Zhao, Fan.[51] The questionnaire is widely used in Chinese populations.[52] It consists of 28 items covering two dimensions: present-centered attention and mindful discipline. An example item is: "Did you carefully listen and tune into your child when you two were talking?"

Table 1 Social Demographic Features of Participants (N = 385)

Variables		Frequency	Percentages
Gender of child	Boy	216	56.10%
	Girl	169	43.90%
Age of child	25–35 months	5	1.30%
	36–46 months	36	9.35%
	47–57 months	166	43.12%
	58–68 months	175	45.45%
	> 69 months	3	0.78%
Mother's age	26–36 years old	242	62.86%
	37–47 years old	143	37.14%
Mother's education	High school (technical secondary school) and below	12	3.12%
	College degree	57	14.81%
	Bachelor's degree	231	60.00%
	Master's degree or above	85	22.08%
Family situation	Non-divorced families	374	97.14%
	Divorced families	11	2.86%

Responses are rated on a 4-point Likert scale (1 = rarely, 4 = always), with higher scores indicating higher levels of mindful parenting. In this study, the Cronbach's alpha coefficient for the mothers' mindful parenting scale was 0.889.

Children's Problem Behaviors

The Strengths and Difficulties Questionnaire (SDQ) for preschool children was used to measure children's problem behaviors.[53] In this study, teachers reported on the children's problem behaviors. The Chinese version of the questionnaire, revised by Du, Kou, Coghill,[54] has been widely used in Chinese populations.[55] The questionnaire comprises 25 items. An example item is: "Other kids like him/her." Responses are rated on a 3-point scale (1 = not true, 3 = certainly true), with higher scores indicating more severe problem behaviors. In this study, the Cronbach's alpha coefficient for the children's problem behavior scale was 0.749.

Statistical Methods and Analytical Approach

SPSS 22.0 and SPSS PROCESS V.4.0 were used for data analysis. Descriptive statistics and correlation analyses between variables were conducted using SPSS 22.0. SPSS PROCESS V.4.0 was used to test mediation and moderated mediation effects. Given the potential impact of children's gender and age on problem behaviors, these variables were included as control variables in the analyses.

Results

In this study, Harman's single-factor analysis was employed to test for common method bias. The results indicated 17 factors with eigenvalues greater than 1, with the first factor accounting for 28.314% of the variance (less than the 40% threshold). Therefore, it can be concluded that there is no severe common method bias in this study.[56]

Pearson correlation analysis results among the variables in this study are presented in Table 2. Significant correlations were found between maternal childhood trauma, maternal depression, and children's problem behaviors. The results showed a significant positive correlation between maternal childhood trauma and maternal depression, as well as between maternal childhood trauma and children's problem behaviors. Additionally, maternal depression was significantly positively correlated with children's problem behaviors.

Moderated mediation analysis was conducted using the SPSS PROCESS macro, with parameter estimation performed via bootstrapping with 5000 samples. A 95% confidence interval that does not include zero indicates significant parameters.

First, SPSS PROCESS Model 4 was used to test for mediation effects, controlling for the child's gender and age. Maternal childhood trauma was found to significantly positively predict maternal depression ($\beta = 0.298$, $p < 0.001$), maternal childhood trauma significantly positively predicted children's problem behaviors ($\beta = 0.331$, $p < 0.001$), and maternal depression significantly positively predicted children's problem behaviors ($\beta = 0.408$, $p < 0.001$). The 95% CI [0.071, 0.117] did not include zero, indicating that maternal depression mediates the relationship between maternal childhood trauma and children's problem behaviors. The results are shown in Table 3.

To examine the moderating role of mindful parenting in the model where maternal childhood trauma affects children's problem behaviors through maternal depression, mindful parenting was incorporated into the model using SPSS PROCESS Model 15 for further moderation analysis. The moderating effect of mindful parenting is presented in Table 4. The interaction term between maternal childhood trauma and mindful parenting significantly negatively

Table 2 Means, Standard Deviations, and Correlations of the Major Study Variables (N=385)

Variables	M	SD	1	2	3	4	5	6
1. Age of child	56.580	8.152	1					
2. Gender of child	0.560	0.497	−0.054	1				
3. Mother's childhood trauma	1.935	0.712	−0.059	−0.084	1			
4. Mother's depression	0.432	0.382	−0.091	−0.191**	0.318**	1		
5. Mother's mindful parenting	3.224	0.672	0.124*	0.125*	−0.208**	−0.468**	1	
6. Children's Behavioral Problems	1.251	0.202	−0.138**	−0.219**	0.476**	0.543**	−0.517**	1

Notes: *p < 0.05, **p < 0.01.

Table 3 Direct Effect Analysis in the Mediation Model (N = 385)

Variables	Dependent Variable: Mother's Depression		Dependent Variable: Children's Behavioral Problems	
	β	t	*β*	t
Mother's childhood trauma	0.298	6.228***	0.331	8.007***
Mother's depression			0.408	9.682***
Child's age	−0.082	−1.718	−0.088	−2.224*
Child's gender	−0.17	−3.556***	−0.118	−2.937**
R^2	0.135		0.417	
F	19.791 ***		67.916***	

Notes: *p < 0.05, **p < 0.01, ***p < 0.001.

Table 4 Moderated Mediation Analysis (N = 385)

Variables	Dependent Variable: Mother's Depression		Dependent Variable: Children's Behavioral Problems	
	β	t	*β*	t
Mother's childhood trauma	0.16	6.228***	0.071	6.798***
Mother's depression			0.084	3.264**
Mother's mindful parenting			−0.129	−9.193***
Mother's childhood trauma * Mother's mindful parenting			−0.118	−6.894***
Mother's depression * Mother's mindful parenting			−0.128	−2.776**
Child's age	−0.004	−1.718	−0.001	−1.17
Child's gender	−0.131	−3.556***	−0.027	−1.909
R^2	0.135		0.562	
F	19.791***		69.145 ***	

Notes: **p < 0.01, ***p < 0.001.

predicted children's problem behaviors (β = −0.118, p < 0.001). Similarly, the interaction term between maternal depression and mindful parenting significantly negatively predicted children's problem behaviors (β = −0.128, p < 0.01). Therefore, moderated mediation was established.

A simple slopes analysis was conducted, with the moderator variable mindful parenting being adjusted by one standard deviation above and below the mean to represent high and low mindful parenting groups, respectively. The moderating effect of mindful parenting on the relationship between maternal childhood trauma and children's problem behaviors is illustrated in Figure 2. In the high mindful parenting group, maternal childhood trauma did not significantly predict children's problem behaviors (simple slope = −0.008, p > 0.05). In the low mindful parenting group, maternal childhood trauma significantly positively predicted maternal depression (simple slope = 0.151, p < 0.001). Additionally, to more precisely estimate the range of the moderating effect of mindful parenting, the Johnson-Neyman method was employed to determine the significant regions of simple slopes at different levels of mindful parenting. Figure 3 shows that when the value of mindful parenting is less than 0.383 or greater than 0.948, the prediction is significant. When the value of mindful parenting is between 0.383 and 0.948, the prediction is not significant.

The moderating effect of mindful parenting on the relationship between maternal depression and children's problem behaviors is illustrated in Figure 4. In the high mindful parenting group, maternal depression did not significantly predict children's problem behaviors (simple slope = −0.002, p > 0.05). In the low mindful parenting group, maternal depression significantly positively predicted children's problem behaviors (simple slope = 0.170, p < 0.001). The significant regions of simple slopes for the effect of maternal depression on children's problem behaviors are shown in Figure 5. When the value of mindful parenting is less than 0.179, the prediction is significant. When the value of mindful parenting is greater than 0.179, the prediction is not significant.

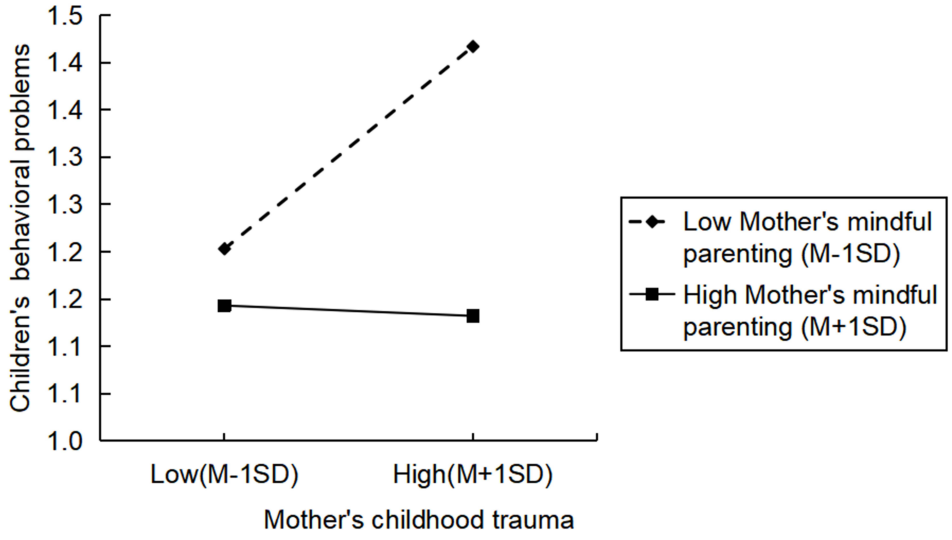

Figure 2 Moderating effect of mindful parenting on the relationship between maternal childhood trauma and children's behavioral problems.

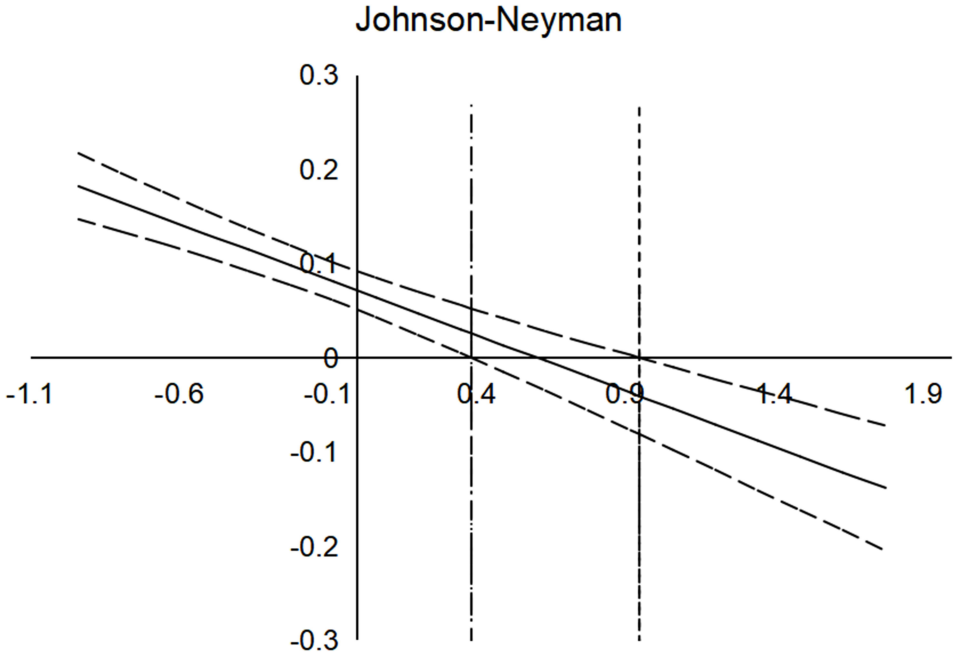

Figure 3 Johnson-Neyman plot of moderating effect of mindful parenting on the relationship between maternal childhood trauma and children's behavioral problems.

Discussion

The present study delves into the complex dynamics between maternal childhood trauma, depression, and children's problem behaviors. The findings indicate that maternal childhood trauma directly impacts children's problem behaviors and can also indirectly influence children's problem behaviors through maternal depression. Moreover, the study reveals that mindful parenting significantly moderates the effects of maternal childhood trauma and depression on children's problem behaviors. In the following sections, we will discuss the implications of these findings.

This study found that maternal childhood trauma has a positive predictive effect on children's problem behaviors, which is consistent with previous research findings,[19,57] and supports the Intergenerational Trauma Transmission (ITT) theory. This theory suggests that psychological trauma experienced by individuals not only affects their own mental

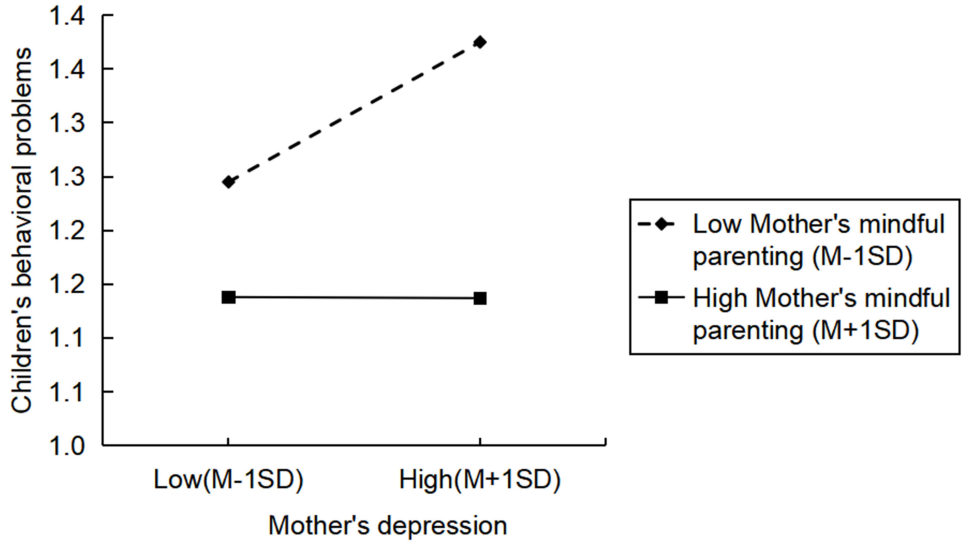

Figure 4 Moderating effect of mindful parenting on the relationship between mother's depression and children's behavioral problems.

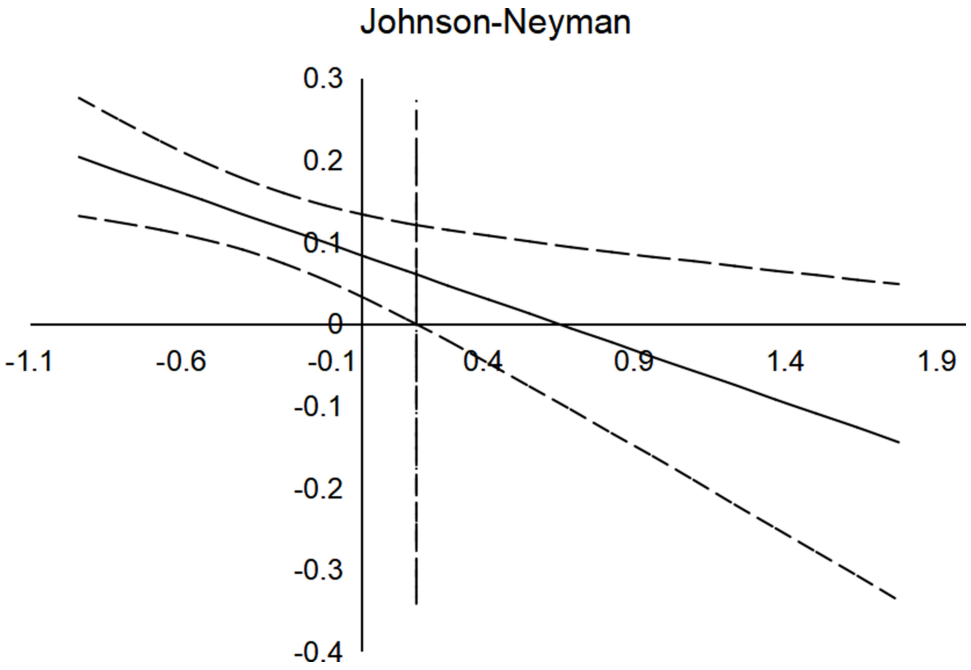

Figure 5 Johnson-Neyman plot of moderating effect of mindful parenting on the relationship between mother's depression and children's behavioral problems.

health but can also be transmitted to the next generation, impacting their psychological health and behavioral patterns.[21] Consequently, mothers who experienced trauma during childhood may struggle to regulate their emotional states due to the psychological and physiological impacts of their trauma, leading to increased hostility, helplessness, and feelings of loneliness. This phenomenon may place their children at higher risk for abusive environments, continuing the vicious cycle of intergenerational trauma.[58] This cycle becomes a significant factor increasing the risk of behavioral problems in children.[58]

This study found that depression partially mediates the relationship between maternal childhood trauma and children's problem behaviors. That is, childhood trauma can directly influence children's problem behaviors and indirectly affect these problems through depression. Recent studies also indicate that childhood trauma is a significant

predictor of depression in adulthood.[59] For instance, studies have shown that over 50% of severely depressed patients have experienced at least one traumatic event during childhood.[60] Maternal depression affects parenting behaviors, often resulting in emotional abuse, neglect, and authoritarian parenting.[61] This negative parenting environment increase the risk of psychological health issues in children, ultimately leading to various behavioral problems. Moreover, children may learn negative emotional responses (eg, fear, anger, sadness) from their mothers, adopting similar emotional and behavioral patterns, which contributes to the development of behavioral issues.[21]

This study found that mindful parenting not only significantly moderates the impact of maternal childhood trauma on children's problem behaviors but also plays a crucial role in moderating the impact of maternal depression on children's problem behaviors. Specifically, when the level of mindful parenting is low, maternal childhood trauma significantly predicts an increase in children's problem behaviors. However, when the level of mindful parenting is high, the predictive effect of maternal childhood trauma on children's problem behaviors is not significant. Similarly, under low mindful parenting, maternal depression significantly predicts children's problem behaviors. Conversely, under high mindful parenting, the predictive effect of maternal depression on children's problem behaviors is not significant.

Maternal childhood trauma often leads to excessive emotional reactions or negative emotional transmission when dealing with children's problem behaviors.[62] However, mindful parenting emphasizes attentive listening and non-judgmental acceptance of both self and child, helping mothers remain calm and rational during parenting.[36] Mindful parenting also enhances mothers' self-regulation and emotional health,[63] reducing the transmission of negative emotions caused by childhood trauma and increasing positive responses and effective management of children, thereby lowering the incidence of children's problem behaviors.[64]

Mindful parenting also plays a key role in mitigating the impact of maternal depression on children's problem behaviors. Mothers with higher levels of depression often experience psychological distress, which can reduce their patience and responsiveness in parenting, thereby increasing the risk of behavioral issues in children.[65] Mindful parenting cultivates emotional awareness and self-compassion in mothers, enabling them to better understand and manage their emotional states, thereby reducing depression,[42] and ultimately decreasing the occurrence of children's problem behaviors.

This study validates the theory of intergenerational transmission of trauma by revealing how maternal childhood trauma influences children's problem behaviors through the mediating variable of maternal depression. This finding further supports the core viewpoint of the intergenerational transmission of trauma theory, that parents' traumatic experiences can indirectly affect the behavioral and emotional development of the next generation through their mental health status. This not only enriches our understanding of the mechanisms behind intergenerational trauma effects but also underscores the importance of focusing on parental mental health in the prevention of children's problem behaviors. Furthermore, this study introduces mindful parenting as a moderating variable, exploring its role in alleviating the impact of maternal childhood trauma and depression on children's behavioral issues. The results show that mindful parenting significantly weakens the pathway through which maternal childhood trauma influences children's problem behaviors through depression. This finding not only confirms the moderating role of mindful parenting in the intergenerational transmission of trauma but also provides a new reference for intervention practices.

This study proposes corresponding strategies and recommendations to reduce the risk of children's problem behaviors. Alleviating maternal childhood trauma and depression symptoms. Firstly, mothers should seek psychological therapy to help them process and overcome the psychological distress caused by childhood trauma. Cognitive-behavioral therapy, emotion regulation techniques, and other psychological treatments have been proven effective in reducing depressive symptoms and improving emotional stability.[66]

Secondly, mothers should prioritize their physical and mental health by learning effective self-care methods, such as regular exercise, maintaining good sleep habits, and finding ways to relax and reduce stress.[67,68] Lastly, helping mothers understand the long-term impact of childhood trauma on both themselves and their children's development is crucial. Providing relevant books, online resources, or professional lectures can enhance mothers' self-reflection and awareness, encouraging them to positively influence and shape their children's growth and development.

To enhance maternal mindful parenting levels. Firstly, cultivating acceptance and understanding, including accepting both themselves and their children's imperfections, and treating their own and their children's mistakes with gentleness

and compassion. Secondly, focusing on the present moment during interactions with their children. This involves getting rid of past worries and future concerns to fully engage and connect with their children. Lastly, practicing mindfulness meditation to enhance self-awareness and concentration.[69] This helps parents become more aware of their current emotions and thoughts, enabling them to better manage stress and emotional responses, thus fostering calmer and more focused interactions with their children. These strategies and recommendations aim to help mothers improve their psychological well-being and mindful parenting abilities, thereby creating a healthier, more positive family environment that promotes optimal development for their children.

Limitations and Future Prospects

This study explores the impact of maternal childhood trauma on children's problem behaviors, mediated by depression, and moderated by mindful parenting. It identifies the critical role of mothers as primary caregivers in early childhood development. However, the study also has some limitations. It relied on self-reported data, which may be influenced by social expectations of the respondents, questioning the accuracy of the data and potentially exaggerating the correlations between variables. Future research should employ diverse methodologies such as observational methods, teacher reports, and interviews to obtain more comprehensive and objective data. Additionally, the study only examines the impact of maternal childhood trauma on children's problem behaviors, neglecting the role of fathers in childcare. Therefore, future research could explore the effects of paternal childhood trauma on children to gain a more comprehensive understanding of the dynamics and mechanisms of intergenerational transmission.

Conclusion

This study explores the complex relationships among maternal childhood trauma, depression, and children's problem behaviors. The results indicate that depression mediates the relationship between maternal childhood trauma and children's problem behaviors, while mindful parenting moderates both the impact of maternal childhood trauma on children's problem behaviors and the effect of depression on children's problem behaviors. This finding highlights the critical role of mothers as primary caregivers in the parenting process. Furthermore, the results support the theory of Intergenerational Transmission of Trauma, demonstrating that maternal childhood trauma can be transmitted to the next generation through depressive emotions, thereby influencing children's behavior. Therefore, maternal mental health should be a key focus for intervention. Clinical interventions could incorporate mindful parenting training and family mindfulness therapy to help mothers process their own traumatic experiences. This approach may help break the cycle of intergenerational trauma transmission and promote children's mental health and development.

Ethics Approval

The studies involving human participants were reviewed and approved by the Research Ethics Committee of the Shandong Women's University. Written informed consent to participate in this study was provided by the participants.

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Disclosure

The authors report no conflicts of interest in this work.

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