Maternal depression and adolescent suicidal ideation: the mediating roles of childhood trauma and ineffectiveness

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Research Article

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Abstract

**Background** Maternal depression is an important risk factor for adolescent depression and suicidal ideation through the poor family environment and negative self-cognition. This study aimed to investigate the mediating role of childhood trauma between maternal depression and adolescent depression and the chain mediating role of childhood trauma and ineffectiveness between maternal depression and adolescent suicidal ideation.

**Methods** A cross-sectional study was conducted on 6216 mothers and 7375 adolescents from middle schools (Grades 6 to 12) in Shanghai and Henan Province, China, through an online platform by the school psychologists, resulting in 4,157 pairs of matching samples. Center for Epidemiological Studies Depression Scale (CES-D) and Childhood Trauma Questionnaire (CTQ) were used to assess maternal depression and childhood trauma of adolescents. The Children's Depression Inventory (CDI) was administered to assess adolescent depression, ineffectiveness, and suicidal ideation.

**Results.** The prevalence of clinical depression in mothers is 17.68%, and in adolescents is 15.49% (n = 4157). 28.20% of adolescents have suicidal ideation. Maternal depression (r = 0.17, p < 0.01), childhood trauma (r = 0.18, p < 0.01), and ineffectiveness (r = 0.14, p < 0.01) were significantly and positively correlated with adolescent depression. Gender (β = 0.13, p < 0.01), maternal depression (β = 0.03, p = 0.01), childhood trauma (β = 0.22, p < 0.01) and ineffectiveness (β = 0.32, p < 0.01) were positive predictors of adolescent suicidal ideation. The mediating effects of childhood trauma between maternal depression and adolescent depression (95%CI = [0.047, 0.007]) is significant. The chain mediating effect of childhood trauma and ineffectiveness between maternal depression and adolescent suicidal ideation is also significant (95%CI = [0.000, 0.001]).

**Conclusion** Depression from mother to adolescent can be mediated by the childhood trauma of adolescents. Higher maternal depression increases the possibility of child abuse, which can cause adolescents to feel ineffectual and increase their risk of developing suicidal ideation. These findings are important for sociological intervention in adolescent depression.

**Background**

Evidence suggests that the prevalence of depression and suicide among adolescents continues to rise according to research in China and other countries[1, 2]. A recent survey of adolescents in China showed that depressive symptoms are present in more than 20% of people in both cities and rural areas[3], a higher percentage than in any other age group[4]. Depression is a leading cause of mental health problems and is correlated with increased rates of suicide and suicidal ideation[3, 5].

Several risk factors for depression and suicidal ideation have been found in adolescents. These include personality and emotional traits, coping strategies, social support, and negative life events[6]. An important and basic risk factor for depression and suicidal ideation in adolescents is the mental health of their mothers. Previous studies have shown that maternal depression has an impact on the family
environment and increases the risk of child abuse[7, 8]. A poor family environment in turn harms children's education[9] and increases their likelihood of constructing suicidal ideation[10]. Moreover, parents with severe depressive symptoms are more likely to criticize their children for problem behavior[11].

If adolescents are brought up by overly critical parents, they will be prone to childhood trauma, which increases their risk of suicidal ideation and even suicide attempts[12, 13]. Furthermore, childhood trauma promotes and perpetuates negative self-cognition of adolescents[14]. For example, it causes the reduction of self-efficacy, which prevents adolescents from constructing positive beliefs about themselves[15]. The sense of ineffectiveness is significantly correlated with mental health problems in adolescents, especially increasing the risk of depression[16, 17]. By contrast, high self-efficacy could be a protective factor for adolescent suicidal ideation[18, 19]. Childhood trauma and sense of ineffectiveness are important social factors and individual factors respectively. It remains to be systematically explored that their roles in the influence of maternal emotion on adolescent depressive symptoms such as suicidal ideation.

This study assumes that mother's depression is an important predisposing cause for depression and through a cross-sectional design, investigates the relationship between maternal depression, the childhood trauma of adolescents, the sense of ineffectiveness, and suicidal ideation related to depression. We hypothesize that (1) The transmission of depression from mother to adolescent is mediated by childhood trauma; (2) Maternal depression and adolescent suicidal ideation are mediated by childhood trauma; (3) Childhood trauma and the ineffectiveness of adolescents act as chain mediators in the effect of maternal depression on adolescent suicidal ideation.

**Methods**

**Participants**

Recruitment took place from April 23 2021 to December 11, 2022. Mothers and adolescents were from seven middle schools (Grade 6 to Grade 9) in Shanghai, China, and one middle school (Grade 10 to Grade 12) in Henan, China. A survey was administered via an online platform by the school psychologists from each school. At the beginning of the survey, an informed consent form was presented. Participants who selected “Agree” proceeded to the survey, and those who selected “Disagree” exited the survey automatically. 4,663 mothers and 4,888 adolescents from Shanghai and 1,553 mothers and 2,487 adolescents from Henan completed the survey. Repeated submissions (n = 295) were identified through IP addresses and eliminated. Submissions with a completion time of more than 3 standard deviations (n = 261) and less than 2 seconds per item (n = 254)[20] were deemed invalid and eliminated. Submissions with missing values (n = 235) were deemed invalid and eliminated. Submissions of mothers with ages less than 25 years old and more than 100 years old (n = 6) were deemed invalid and eliminated. Submissions of adolescents with age less than 10 years old and more than 18 years old (n = 69) were deemed invalid and eliminated.
Hence, a final sample of 5,681 mothers (valid response rate: 91.4%) and 6,790 adolescents (valid response rate: 92.1%) was included. The matching of student names and mother contact details resulted in 4,157 pairs of valid questionnaires out of all 13,591 questionnaires issued.

The study was approved by the Ethics Committee of Shanghai Mental Health Center, China (Ethics Approval Number: 2021-11).

**Measures**

**Maternal depression**

Depression was measured by the 20-item Center for Epidemiological Studies Depression Scale (CES-D). Each item was rated on a 4-point Likert scale ranging from 0 (rarely or none of the time, less than 1 day) to 3 (Most or all the time, 5-7 days)[21]. The Chinese version of the CES-D was validated for different age groups among the Chinese urban population[22]. A higher score indicates more severe depressive symptoms and a score of 16 is classified as clinical depression. Cronbach’s alpha in the current sample was 0.96.

**Childhood trauma**

The Childhood Trauma Questionnaire-Short Form (CTQ-SF) is a 28-item self-report questionnaire to measure adolescents’ trauma experiences in childhood[23, 24]. Items are rated on a 5-point Likert scale, ranging from 1 (never true) to 5 (very often). Higher scores represent more perceived traumatic events in childhood. Cronbach’s alpha in the current sample was 0.59.

**Adolescent depression, ineffectiveness, and suicidal ideation**

The Children's Depression Inventory (CDI) was administered to assess adolescent depression[25]. The scale uses 27 items to measure depressive symptoms in minors aged 7-17. Adolescents were asked to rate each item based on a 3-point scale (0-2). An example item is “I am sad once in a while” (0), “I am sad many times” (1), and “I am sad all the time” (2). A higher score indicates more severe depressive symptoms and a score of 19 is classified as clinical depression. Cronbach’s α was 0.90 in the current study. The subscale of ineffectiveness was made up of items 3, 15, 23, and 24. Cronbach’s α of the ineffectiveness subscale was 0.62. Suicidal ideation was indicated by Item 9, and a score of 1 or 2 is classified as having suicidal ideation.

**Statistical analyses**

All data were analyzed using SPSS 25.0 and Amos 23.0. Harman's one-factor test was used to test the common method bias. Descriptive statistics were reported as mean ($M$) ± standard ($SD$) or frequency (percentage). For the primary analysis, Spearman correlation analyses were performed to examine the associations among maternal depression, childhood trauma, and adolescent depression. Multiple linear regression using the “enter” method was conducted with significant variables of correlation analysis as
independent variables and adolescent depression as a dependent variable. The values of the variance inflation factor (VIF) were less than 10, ranging from 1.03 to 1.18. For the mediating effect, childhood trauma was taken as the mediator, and then adolescent depression and suicidal ideation were taken as the dependent variable separately. The chain mediating effect of childhood trauma and ineffectiveness on suicidal ideation was further explored. The significance value was set at $p < 0.05$ (two-tailed) in this study.

**Results**

**Descriptive analysis**

Out of 4,157 pairs of valid questionnaires, the prevalence of clinical depression in mothers (CES-D $\geq 16$) is 17.68%, and the prevalence of clinical depression in adolescents (CDI $\geq 19$) is 15.49%. 28.20% of adolescents have suicidal ideation (the score of suicidal ideation $\geq 1$) in this study. Most mothers were younger than 45 (83.5%, $M$ (age) = 41.49, $SD$ = 4.31). The sample of adolescents was aged from 9 to 17 years ($M$ (age) = 13.42, $SD$ = 1.21). Table 1 showed the descriptive statistics and scores of the maternal depression, childhood trauma, and adolescent depression.

**Correlational and regression analysis**

Correlations among maternal depression, childhood trauma, and adolescent depression were conducted (see Table 2). As we hypothesized, higher maternal depression ($r = 0.18$, $p < 0.01$) and childhood trauma ($r = 0.51$, $p < 0.01$) were positively associated with higher adolescent depression. Moreover, maternal depression ($r = 0.12$, $p < 0.01$), childhood trauma ($r = 0.35$, $p < 0.01$), and ineffectiveness ($r = 0.41$, $p < 0.01$) were positively associated with suicidal ideation.

As depicted in Table 3, we examined the effects of maternal depression and childhood trauma on adolescent depression controlling for adolescents’ gender and age. Results indicated that gender ($\beta = 0.07$, $p < 0.01$), age ($\beta = 0.15$, $p < 0.01$), maternal depression ($\beta = 0.10$, $p < 0.01$) and childhood trauma ($\beta = 0.49$, $p < 0.01$) were all significantly positive predictors of adolescent depression. As depicted in Table 4, we further examined the effects of maternal depression, childhood trauma, and ineffectiveness on suicidal ideation controlling for adolescents’ gender and age. Results indicated that gender ($\beta = 0.13$, $p < 0.01$), maternal depression ($\beta = 0.03$, $p = 0.01$), childhood trauma ($\beta = 0.22$, $p < 0.01$) and ineffectiveness ($\beta = 0.32$, $p < 0.01$) were positive predictors of suicidal ideation.

**The mediating effect of childhood trauma**

We took maternal depression as the predictor, childhood trauma as the mediator, adolescent depression as the dependent variable, and adolescents’ gender and age as covariates. The results showed a significant mediating effect of childhood trauma (95%CI = [0.047, 0.007], see Figure 1) because zero is not part of the confidence interval in this analysis (Hypothesis 1 is proved). The results showed a
significant mediating effect of childhood trauma mediating the link between maternal depression and adolescent suicidal ideation (95%CI = [0.047, 0.007], see Figure 2), supporting our second hypothesis.

**Figure 1** Standard regression coefficients of the mediation model for maternal depression, childhood trauma, and adolescent depression. **p < 0.01, ***p < 0.001

**Figure 2** Standard regression coefficients of the mediation model for maternal depression, childhood trauma, and Suicidal ideation. **p < 0.01, ***p < 0.001

The chain mediating effect of childhood trauma and ineffectiveness

We found a significant mediating effect of childhood trauma and ineffectiveness. The 95% confidence interval of the total effect, direct effect, and indirect effects from maternal depression to suicidal ideation does not contain 0, indicating that the mediating effect of both childhood trauma (95%CI = [0.001, 0.003]) and ineffectiveness (95%CI = [0.001, 0.002]) are significant. Together, childhood trauma and ineffectiveness play a chain mediating role between maternal depression and adolescent suicidal ideation (95%CI = [0.000, 0.001]), with a mediating effect value of 0.001 and an effect size of 16.67%, supporting our third hypothesis. Our results support the presence of partial mediation, accounting for 66.67% of the total effect. See Table 4 and Figure 3 for details.

**Figure 3** Standard regression coefficients of the chain mediation model for maternal depression, childhood trauma, ineffectiveness, and Suicidal ideation. **p < 0.01, ***p < 0.001

Discussion

The main finding of this study was that maternal depression and childhood trauma were positive predictors of adolescent depression and suicidal ideation. Childhood trauma played a mediating role in the effect of maternal depression on adolescent depression. Particularly, childhood trauma and ineffectiveness in adolescents play a chain mediating role in the influence of maternal depression on adolescent suicidal ideation.

Our results reveal that higher maternal depression predicted higher adolescent depression, in line with previous studies[26-28]. We found that childhood trauma of adolescents played a mediating role in the impact of maternal depression on adolescent suicidal ideation, as others have previously reported [29, 30]. Our results extend our knowledge of the relationship by reporting the chain mediating effect of childhood trauma and ineffectiveness between maternal depression and adolescent suicidal ideation.
This may be because the mother's depressive symptoms can have an impact on the child's self-perception through the family environment[31-33]. Maternal depression reflects the likelihood of childhood abuse in adolescents. The more depressive symptoms mothers had, the more abuse adolescents are likely to experience because such mothers have difficulty in dealing with communication to express their concern about children. These childhood traumas further affect the self-perception of adolescents. For example, childhood emotional abuse was believed to cause depressive symptoms in adolescents through developing early maladaptive schemas and negative self-perception[34, 35]; Childhood emotional neglect could affect the quality of adolescent peer relationships, which increased the risk of adolescent depression[36, 37]. The feeling of ineffectiveness caused by maternal emotion and childhood trauma reflects the low self-efficacy of adolescents, which puts the impact of family environment on teenagers into their cognition. In the case of low self-efficacy, adolescents’ social and learning functions further declines[38], which creates a vicious cycle. Furthermore, ineffectiveness and low self-efficacy may trigger suicidal ideation [39]. Both environmental factors represented by childhood trauma and personal factors represented by ineffectiveness are affected by maternal depression gradually, which has a significant effect on adolescent suicidal ideation.

The key strength of this study is the comprehensive and systematic exploration of the progression from maternal depression to adolescent depression and suicidal ideation. The influence of the mother on children is not only simple direct communication or emotional transmission but also the influence on the whole family environment. A negative family atmosphere harms the individual development of adolescents. It is adolescents' negative self-perceptions that contribute to their desire to end their lives. The results help us understand the interplay of family members through the family system.

There are several limitations to this study. First, this study was a cross-sectional rather than a longitudinal-up study, which means that the childhood trauma of adolescents could only be inferred from maternal depression. Second, our data were obtained only in Shanghai and Henan, so that the findings may not extrapolate to other parts of China. Thirdly, the influence of genetic factors was not excluded in this study.

Our study indicates the important role that parental emotion and behavior play in determining the mental health of their children. Adolescents' social functioning and self-efficacy are easily influenced by their family environment and childhood experiences, which are closely related to the formation of suicidal ideation. In the future, research can focus on the effects of specific types of childhood trauma on different aspects of self-perception, and provide more insight into the prevention of adolescent suicide and the communication between adolescents and their parents.

**Conclusion**

The results of our study show that depression from mother to adolescent can be mediated by the childhood trauma of adolescents. Higher maternal depression revealed a greater likelihood of child abuse, which can cause adolescents to feel ineffectual and increase their risk of developing suicidal
ideation. These findings call on parents to attach importance to their impact on the operation of their family system, as well as to the formation of personality and suicidal ideation in adolescents.

**Declarations**

**Acknowledgements**

We express gratitude to the mothers and adolescents who have participated in our investigation, as well as the teachers of middle and high schools who have made this research possible.

**Authors’ contributions**

EC and YX designed the study. EC, Yuting Li, Yan Li, XH, Yue Li, JC, RC and HY participated in the data collection. YZ and Yuting Li analyzed the data. YZ wrote the manuscript. EC, and YX assisted in manuscript revision. All authors have read and agreed to the published version of the manuscript.

**Funding**

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**Availability of data and materials**

All data generated or analyzed during this study are not publicly available due to the privacy of the participants’ identities. The dataset supporting the conclusions is available upon request to the corresponding author.

**Ethics approval and consent to participate**

The ethical approval for this study was obtained from the Ethics Committee of Shanghai Mental Health Center. Informed consent was received from all participants, and for participants under the age of 18, informed consent was obtained from a parent and legal guardian. All methods were carried out under relevant guidelines and regulations.

**Consent for publication**

Not applicable.

**Competing interests**

The authors declare that there are no competing interests in the submission of this manuscript.

**References**

1. Shorey S, Ng ED, Wong CH: Global prevalence of depression and elevated depressive symptoms among adolescents: A systematic review and meta-analysis. *British Journal of Clinical Psychology* 2022,


**Tables**

**Table 1** Descriptive statistics and scores of maternal depression, childhood trauma, and adolescent depression
<table>
<thead>
<tr>
<th>Variables</th>
<th>$M \pm SD / n$ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother’s age (years)</td>
<td>41.49±4.31</td>
</tr>
<tr>
<td>Adolescent’s age (years)</td>
<td>14.20±1.78</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>2079(50.00)</td>
</tr>
<tr>
<td>Girls</td>
<td>2078(50.00)</td>
</tr>
<tr>
<td><strong>Grade</strong></td>
<td></td>
</tr>
<tr>
<td>Grade 6</td>
<td>994(23.91)</td>
</tr>
<tr>
<td>Grade 7</td>
<td>902(21.70)</td>
</tr>
<tr>
<td>Grade 8</td>
<td>744(17.90)</td>
</tr>
<tr>
<td>Grade 9</td>
<td>478(11.50)</td>
</tr>
<tr>
<td>Grade 10</td>
<td>157(3.78)</td>
</tr>
<tr>
<td>Grade 11</td>
<td>360(8.66)</td>
</tr>
<tr>
<td>Grade 12</td>
<td>522(12.56)</td>
</tr>
<tr>
<td><strong>Maternal depression (CES-D)</strong></td>
<td>7.45±9.90</td>
</tr>
<tr>
<td><strong>Childhood trauma (CTQ-SF)</strong></td>
<td>43.79±6.77</td>
</tr>
<tr>
<td><strong>Adolescent depression (CDI)</strong></td>
<td>11.15±7.47</td>
</tr>
<tr>
<td>Ineffectiveness</td>
<td>2.59±1.41</td>
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<tr>
<td>Suicidal ideation</td>
<td>0.30±0.50</td>
</tr>
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</table>

**Table 2** Correlations between maternal depression, childhood trauma, and adolescent depression

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Maternal depression</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Childhood trauma</td>
<td>0.17**</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Adolescent depression</td>
<td>0.18**</td>
<td>0.51**</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>4. Ineffectiveness</td>
<td>0.14**</td>
<td>0.37**</td>
<td>0.76**</td>
<td>–</td>
</tr>
<tr>
<td>5. Suicidal ideation</td>
<td>0.12**</td>
<td>0.35**</td>
<td>0.60**</td>
<td>0.41**</td>
</tr>
</tbody>
</table>

Note: *$p < 0.05$, **$p < 0.01$
Table 3 Multiple linear regression analysis of maternal depression and childhood trauma on adolescent depression

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE</th>
<th>β</th>
<th>p</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
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<tr>
<td>Gender</td>
<td>1.06</td>
<td>0.20</td>
<td>0.07</td>
<td>&lt; 0.001</td>
<td>0.296</td>
<td>437.205**</td>
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<tr>
<td>Adolescent’s age</td>
<td>0.62</td>
<td>0.06</td>
<td>0.15</td>
<td>&lt; 0.001</td>
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<tr>
<td>Maternal depression</td>
<td>0.08</td>
<td>0.01</td>
<td>0.10</td>
<td>&lt; 0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood trauma</td>
<td>0.54</td>
<td>0.02</td>
<td>0.49</td>
<td>&lt; 0.001</td>
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<td></td>
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</table>

Note: **p < 0.01

Table 4 Multiple linear regression analysis of maternal depression, childhood trauma, and ineffectiveness on suicidal ideation

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE</th>
<th>β</th>
<th>p</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.13</td>
<td>0.01</td>
<td>0.13</td>
<td>&lt; 0.001</td>
<td>0.230</td>
<td>247.784**</td>
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<tr>
<td>Adolescent’s age</td>
<td>0.01</td>
<td>0.00</td>
<td>0.02</td>
<td>0.063</td>
<td></td>
<td></td>
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<tr>
<td>Maternal depression</td>
<td>0.00</td>
<td>0.00</td>
<td>0.03</td>
<td>&lt; 0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Childhood trauma</td>
<td>0.02</td>
<td>0.00</td>
<td>0.22</td>
<td>&lt; 0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ineffectiveness</td>
<td>0.11</td>
<td>0.01</td>
<td>0.32</td>
<td>&lt; 0.001</td>
<td></td>
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Note: **p < 0.01

Table 5 Bootstrap analysis for the significance test of the mediating effect
<table>
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<th>Path</th>
<th>Effect</th>
<th>Effect size (%)</th>
<th>SE</th>
<th>Bias-corrected 95% CI</th>
<th>Lower</th>
<th>Upper</th>
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</thead>
<tbody>
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<td>Model 1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Total effect</td>
<td>0.136</td>
<td></td>
<td>0.011</td>
<td>0.114</td>
<td>0.159</td>
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<tr>
<td>Direct effect</td>
<td>0.075</td>
<td>55.15</td>
<td>0.010</td>
<td>0.056</td>
<td>0.095</td>
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<tr>
<td>Maternal depression→Childhood trauma→Adolescent depression</td>
<td>0.061</td>
<td>44.85</td>
<td>0.008</td>
<td>0.047</td>
<td>0.077</td>
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</tr>
<tr>
<td>Model 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total effect</td>
<td>0.006</td>
<td></td>
<td>0.001</td>
<td>0.005</td>
<td>0.008</td>
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<tr>
<td>Direct effect</td>
<td>0.003</td>
<td>50.00</td>
<td>0.001</td>
<td>0.002</td>
<td>0.005</td>
<td></td>
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<tr>
<td>Maternal depression→Childhood trauma→Suicidal ideation</td>
<td>0.003</td>
<td>50.00</td>
<td>0.000</td>
<td>0.002</td>
<td>0.004</td>
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<tr>
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<tr>
<td>Total effect</td>
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<td>0.001</td>
<td>0.005</td>
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<tr>
<td>Direct effect</td>
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<td>0.001</td>
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<tr>
<td>Ind1: Maternal depression→Childhood trauma→Suicidal ideation</td>
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<td>33.33</td>
<td>0.000</td>
<td>0.001</td>
<td>0.003</td>
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<tr>
<td>Ind2: Maternal depression→Ineffectiveness→Suicidal ideation</td>
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<td>16.67</td>
<td>0.000</td>
<td>0.001</td>
<td>0.002</td>
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</tr>
<tr>
<td>Ind3: Maternal depression→Childhood trauma→Ineffectiveness→Suicidal ideation</td>
<td>0.001</td>
<td>16.67</td>
<td>0.000</td>
<td>0.000</td>
<td>0.001</td>
<td></td>
</tr>
</tbody>
</table>

Note: CI: confidence interval; Effect size, %: the ratio of the effect to total effect; SE: standard error.

### Figures

[Diagram of the Pathway Model]

- Maternal depression → Childhood trauma → Adolescent depression
- Maternal depression → Childhood trauma → Suicidal ideation
- Maternal depression → Ineffectiveness → Suicidal ideation

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Figure 1

Standard regression coefficients of the mediation model for maternal depression, childhood trauma, and adolescent depression. **$p < 0.01$, ***$p < 0.001$}

Figure 2

Standard regression coefficients of the mediation model for maternal depression, childhood trauma, and Suicidal ideation. **$p < 0.01$, ***$p < 0.001$}

Figure 3

Standard regression coefficients of the chain mediation model for maternal depression, childhood trauma, ineffectiveness, and Suicidal ideation. **$p < 0.01$, ***$p < 0.001$}