Child maltreatment and adult depressive symptoms: Roles of self-compassion and gratitude

Qinglu Wu, Peilian Chi, Xiuyun Lin, Hongfei Du

ABSTRACT
Child maltreatment, including abuse (physical, emotional, and sexual) and neglect (physical and emotional), is positively associated with depressive symptoms in adulthood. However, most studies have been conducted within a psychopathological framework and focused on underlying dysfunctional processes (e.g., insecure attachment styles, maladaptive schemas, and negative attribution styles). Protective factors that affect the relationship between child maltreatment and adult depressive symptoms are underexplored. Guided by emotion regulation theory and the perspective of positive psychology, we examined the roles of self-compassion and gratitude as protective factors in the relationship between child maltreatment and adult depressive symptoms in a sample of 358 college students. Results showed that psychological maltreatment (emotional abuse and emotional neglect) was associated with adult depressive symptoms through decreased self-compassion. Neglect (emotional neglect and physical neglect) and sexual abuse were associated with adult depressive symptoms through decreased gratitude. There was no association between physical abuse and depressive symptoms through either self-compassion or gratitude. Our findings suggest that clinical practices focusing on self-compassion and gratitude might help prevent the development of adult depressive symptoms among clients with a history of maltreatment in childhood.

1. Introduction
Child maltreatment is an adverse experience that includes abuse (physical abuse, emotional abuse, and sexual abuse) and neglect (physical neglect and emotional neglect) suffered in childhood (Bernstein et al., 2003). Child maltreatment has been regarded as a risk factor that can lead to negative developmental outcomes in childhood and adverse effects on mental health (e.g., depression), psychological well-being (e.g., quality of life), substance abuse (e.g., drug use), and suicide attempts in adulthood (for systematic reviews and meta-analyses, see Mandelli, Petrelli, & Serretti, 2015; Norman et al., 2012; Weber, Jud, & Landolt, 2016). Among these negative long-standing consequences of child maltreatment, adult depression – an important indicator of mental health – has received much attention in previous studies (for meta-analysis, see Nelson, Klumparendt, Doebler, & Ehring, 2017). Prior studies have consistently shown that child abuse and neglect are strong predictors of adult depression in both general populations and psychiatric patients (Cohen, Menon, Shorey, Le, & Temple, 2017; Gibb, Chelminski, & Zimmerman, 2007; O’Mahen, Karl, Moberly, & Fedock, 2015; Powers, Ressler, & Bradley, 2009; Spertus, Yehuda, Wong, Halligan, & Seremetis, 2003).

Keywords:
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Gratitude
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Theories and empirical research have provided insights into the robust association between child maltreatment and adult depression. Based on attachment theory (Bowlby, 2005), empirical studies have consistently shown that individuals with experiences of child emotional abuse and neglect are more likely to develop insecure attachment styles and maladaptive schemas (Coates & Messman-Moore, 2014; Hankin, 2005), which further predicted adult depression (Hankin, 2005; Wright, Crawford, & Del Castillo, 2009). The role of cognitive processes has also been identified in the relationship between child maltreatment and adult depression. Victims of psychological maltreatment, physical abuse, and sexual abuse in childhood are prone to developing negative cognitive processes (e.g., negative attribution styles, automatic thoughts, or maladaptive cognitions about others), resulting in negative interpretations of the suffering they encountered. This in turn increases their vulnerability to adult depression (Gibb, Benas, Crossett, & Uhrlass, 2007; Hankin, 2005; Kaysen, Scher, Mastnak, & Resick, 2005).

Emotion regulation theory (Gratz & Roemer, 2004) provides additional explanations in terms of emotional processes for the association between child maltreatment and adult depression. Individuals with adverse childhood experiences were more likely to have difficulties regulating their emotions, which might further increase their risk of depression (Coates & Messman-Moore, 2014; Huh, Kim, Lee, & Chae, 2017; O’Mahen et al., 2015). However, most of the processes previously studied have been negative (e.g., emotion dysregulation, maladaptive emotion regulation strategies). Few studies have applied the framework of positive psychology to explore the potential effects of positive processes on adult depression (Coates & Messman-Moore, 2014; O’Mahen et al., 2015).

1.1. Potential roles of self-compassion and gratitude

Positive psychology emphasizes the positive influences of protective factors and character strengths (Peterson & Seligman, 2004) on well-being, mental health, and life satisfaction (Kwok, Gu, & Kit, 2016; Tweed et al., 2011). This study investigated self-compassion and gratitude as potential protective factors in the association between child maltreatment and adult depressive symptoms. Both self-compassion and gratitude are highly related to emotion regulation of the self and attitude toward others (Neff, 2003; Peterson & Seligman, 2004). Prior interventions that integrated self-compassion and gratitude have proven effective in preventing depression (Kwok et al., 2016; Neff & Germer, 2013). However, few studies have examined the roles of self-compassion and gratitude in the association between child maltreatment and depressive symptoms in adulthood.

Self-compassion is an important self-regulating strategy to cope with suffering through acknowledging uncomfortable feelings with self-kindness, establishing connections between personal experiences and human experiences, and accompanying pain with clear mindfulness instead of criticizing self, isolating self, or over-identifying with pain (Neff, 2003). Studies have shown that self-compassion is positively associated with individual mental health, well-being, and life satisfaction (Gilbert & Procter, 2006; Neff & McGehee, 2010; Neff, 2003). Individuals who are compassionate toward self are less likely to be depressed (Krieger, Berger, & Grosse Holtforth, 2016; Neff & McGehee, 2010; Raes, 2011). Additionally, longitudinal studies have shown that self-compassion negatively predicted subsequent depressive symptoms in student participants and depressed outpatients (Krieger et al., 2016; Raes, 2011). However, self-compassion is negatively affected by early adverse experiences. For example, people who have been emotionally abused and neglected during childhood displayed lower levels of self-compassion (Tanaka, Wekerle, Schmuck, Paglia-Boak & MAP Research Team, 2011), which led to negative consequences such as emotion dysregulation (Vettese, Dyer, Li, & Wekerle, 2011) and alcohol problems (Miron, Orcutt, Hannan, & Thompson, 2014).

Similarly, gratitude, one of the character strengths highly stressed in positive psychology (Peterson & Seligman, 2004), has been regarded as an affective trait that is associated with psychological well-being, mental health, and life satisfaction (McCullough, Emmons, & Tsang, 2002; Toussaint & Friedman, 2009). Gratitude is an emotional tendency to appreciate other people and events. Grateful people appreciate what they gain (e.g., resources, capacity, and relationships with others); this leads them to focus on the positive aspects of life and demonstrate prosocial behaviors (e.g., forgiveness). Gratitude also can reduce the possibility of immersing oneself in depressive emotions (Neto, 2007; Petrocchi & Couyoumdjian, 2016). Gratitude was found to be negatively associated with depressive symptoms in diverse groups such as university students (Wood, Maltby, Gillett, Linley, & Joseph, 2008), late adolescents (Lin, 2015), marital partners (Chang, Li, Teng, Berki, & Chen, 2013), and individuals suffering from chronic illnesses (Sirois & Wood, 2017). Moreover, research with longitudinal designs and cross-legged panel designs have shown that gratitude leads to lower levels of depression over time (Sirois & Wood, 2017; Wood et al., 2008). Convincingly, interventions with gratitude as a focus (e.g., writing a gratitude letter) have revealed that gratitude contributes to a decrease in depressive symptoms and an increase in life satisfaction (Kwok et al., 2016; Toepfer, Cichy, & Peters, 2012). Gratitude has been shown to be impaired, however, by early adverse experiences (Coleman, Zawadzki, Heron, Vartanian, & Smyth, 2016; Vartanian, Smyth, Zawadzki, Heron, & Coleman, 2014). Individuals who have been seriously neglected and abused in early childhood experience greater difficulty in developing the ability to appreciate others in adulthood.

Cultural factors should be considered as researchers investigate child maltreatment (Korbin, 1991; Wong et al., 2009). Culture influences individuals’ understanding of child-rearing, parenting, and discipline practices (Korbin, 1991). Whether parental discipline practices are viewed as normal or abusive and standards of abuse are affected by the culture in which individuals live (Wong et al., 2009). For instance, strict physical discipline is regarded as a necessity to develop a child’s ability to confront hardship in Chinese culture (Wong et al., 2009). Normalization of physical discipline may mitigate the negative effects of harsh parenting practices on children to some extent. This study provides valuable evidence on the specific paths of child maltreatment on adult depressive symptoms within a Chinese community.
1.2. Present study

The aforementioned review demonstrates that most research considers negative psychological processes (e.g., insecure attachment, negative attribution, and maladaptive emotion regulation strategies) when explaining the relationship between child maltreatment and adult depressive symptoms. Few studies have explored the roles of positive psychological processes. Guided by emotion regulation theory and positive psychology, this study examined the potential roles of self-compassion and gratitude, two positive emotional processes, in explaining the relationship between child maltreatment and adult depressive symptoms. We hypothesized that child maltreatment is associated with depressive symptoms in adulthood through a decrease in self-compassion and gratitude.

2. Method

2.1. Participants and procedure

The participants in the study were Chinese college students at the University of Macau who were 18-years-old or older. Students from different departments who enrolled in the course Introduction to Psychology were invited to participate in the online survey by the course instructor. Course credits were given to participants who completed the questionnaire. Completing the questionnaire was optional; students could obtain credits in many ways (e.g., participating in other studies or writing short summary papers). Students registered for the study online if they were interested. Before answering the electronic questionnaire, participants were introduced to the study (purpose, procedures, confidentiality issues). Students were permitted to participate in the study only after they provided informed consent. The research protocol received approval from the research ethics committee in the Department of Psychology at the University of Macau.

In total, 449 students enrolled in the study and 413 students (92%) completed the questionnaire. Results from 358 undergraduate students were used in the analysis after unqualified responses (i.e., duplicated responses, questionnaires with missing data, questionnaires completed within 5 minutes) were removed. The ages of participants ranged from 18 to 34 years ($M = 19.18, SD = 1.46$). Of the students, 95% were between 18 and 21 years of age. First-year and second-year undergraduates comprised 78.8% of the participants. More females (63.1%) participated in the study than males.

2.2. Measures

2.2.1. Child maltreatment

The Childhood Trauma Questionnaire - Short Form (CTQ-SF) is widely used to evaluate child maltreatment, including physical abuse (e.g., “People in my family hit me so hard that it left me with bruises or marks”), emotional abuse (e.g., “I thought that my parents wished I had never been born”), sexual abuse (e.g., “Someone tried to touch me in a sexual way, or tried to make me touch them”), physical neglect (e.g., “My parents were too drunk or high to take care of the family”), and emotional neglect (e.g., “People in my family felt close to each other”) (Bernstein et al., 2003). In the present study, the Chinese version of the CTQ-SF (Fu et al., 2005) was used to measure abuse and neglect. Each subscale has five items with a 5-point Likert scale ranging from 1 (never true) to 5 (very often true). A higher score indicates that the respondent suffered more serious maltreatment in childhood. The internal consistency coefficient for the total score of the Chinese CTQ-SF was 0.90. There was a relatively low coefficient of physical neglect in the current study, 0.57, which is consistent with previous studies of similar populations (Cohen et al., 2017; Dias et al., 2014; Fu et al., 2005). Cronbach’s $\alpha$ for other subscales were acceptable (physical abuse: 0.92; emotional abuse: 0.78; sexual abuse: 0.95; emotional neglect: 0.86). To examine the prevalence of each type of child maltreatment, CTQ-SF scores were used to identify participants with a history of child maltreatment (emotional abuse $\geq 9$, emotional neglect $\geq 10$, physical abuse $\geq 8$, physical neglect $\geq 8$, and sexual abuse $\geq 6$). These cut-off scores have good sensitivity (89%) and specificity (97%) in Western countries (Tietjen et al., 2010); they also have been applied in studies of child maltreatment of Chinese in both clinical samples and the general population (Li et al., 2014, 2015, 2017).

2.2.2. Self-compassion

The Self-Compassion Scale (SCS) is a self-reporting instrument that consists of 26 items with a 5-point Likert scale ranging from 1 (almost never) to 5 (almost always) (Neff, 2003). The scale used in the present study was the Chinese version of this tool (Chen, Yan, & Zhou, 2011). It has six subscales: self-kindness (e.g., “When I’m going through a very hard time, I give myself the caring and tenderness I need”), common humanity (e.g., “When I’m down and out, I remind myself that there are lots of other people in the world feeling like I am”), mindfulness (e.g., “When something painful happens, I try to take a balanced view of the situation”), self-judgment (e.g., “I’m disapproving and judgmental about my own flaws and inadequacies”), isolation (e.g., “When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world”), and over-identification (e.g., “When something upsets me I get carried away with my feelings”). The self-kindness, common humanity, and mindfulness subscales test the positive response toward self when participants encounter suffering in daily life. In contrast, the self-judgment, isolation, and over-identification subscales measure negative responses; these scores were reversed before calculating the total score of self-compassion. Higher scores indicate a higher level of self-compassion. The reliability of self-compassion (total score) in the current study was good ($\alpha = 0.80$). The Cronbach’s $\alpha$ for subscales was acceptable (self-kindness: 0.74; common humanity: 0.74; mindfulness: 0.74; self-judgment: 0.65; isolation: 0.70; over-identification: 0.69).
2.2.3. Gratitude

The Gratitude Questionnaire-Six was used to test grateful disposition (e.g., “If I had to list everything that I felt grateful for, it would be a very long list” and “I am grateful to a wide variety of people”) (McCullough et al., 2002). The Chinese version of the questionnaire consists of six items with a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) (Wei, Wu, Kong, & Wang, 2011). The internal consistency coefficient in the current study was good (Cronbach’s α = 0.88).

2.2.4. Depressive symptoms

Depressive symptoms were measured by the trait depression subscale (TDS) of the State–Trait Depression Questionnaire (Spielberger, Carretero-Dios, De los Santos-Roig, & Buela-Casal, 2002). The Chinese version of the TDS has good validity. It is highly associated with the Center for Epidemiologic Studies Depression Scale (r = 0.80) (Lei, Xu, Deng, & Luo, 2011). The Chinese version of the TDS contains a total of 16 items across two dimensions (Lei et al., 2011). Dysthymia tests negative affectivity (e.g., “I am unmotivated”, “I feel down”), and Euthymia measures positive affectivity (e.g., “I do things that make me feel good”, “I am full of energy”). It uses a 4-point Likert scale with a range from 1 (almost never) to 4 (almost always). After reversing the score of items in Euthymia, the total scores show the severity of depressive symptoms. A higher score indicates a higher degree of depressive symptoms. Cronbach’s α of trait depression was 0.87.

2.3. Data analysis

Initial analysis was conducted using SPSS version 21 to perform descriptive statistics (mean, standard deviation, the range of scores, Cronbach’s α of each variable, and their bivariate correlations) and check the prevalence of each type of child maltreatment. To examine the indirect effects (through self-compassion and gratitude) of child maltreatment on depressive symptoms in adulthood, SPSS macro PROCESS (Model 4) was used (Hayes, 2013). This procedure bootstrapped 5000 times to estimate the indirect effects with 95% confidence intervals (CIs). Direct effect and indirect effects of child maltreatment on depressive symptoms were shown with estimates and bias-corrected CIs (95%). If the CI does not include zero, the corresponding effect is significant. Indirect effects (paths through self-compassion and gratitude) of each type of child maltreatment on depressive symptoms were examined while controlling for age, gender, and four other types of child maltreatment. For instance, the model of emotional neglect examined the indirect effects of emotional neglect on depressive symptoms through self-compassion and gratitude while controlling the other variables.

3. Results

3.1. Descriptive statistics

Results of the initial analysis are shown in Table 1, which consists of the means, standard deviations, range of scores, Cronbach’s α of each variable, and their bivariate correlations between child maltreatment types (emotional abuse, emotional neglect, physical abuse, physical neglect, and sexual abuse), self-compassion, gratitude, and depressive symptoms.

Different types of maltreatment were positively and significantly correlated; they were also positively associated with depressive symptoms. Self-compassion was positively related to gratitude, and both of them were negatively correlated with depressive symptoms. Self-compassion was negatively correlated with emotional abuse and emotional neglect. Gratitude was negatively associated with the Center for Epidemiologic Studies Depression Scale ($r = 0.80$) (Lei, Xu, Deng, & Luo, 2011). The Chinese version of the TDS contains a total of 16 items across two dimensions (Lei et al., 2011). Dysthymic tests negative affectivity (e.g., “I am unmotivated”, “I feel down”), and Euthymia measures positive affectivity (e.g., “I do things that make me feel good”, “I am full of energy”). It uses a 4-point Likert scale with a range from 1 (almost never) to 4 (almost always). After reversing the score of items in Euthymia, the total scores show the severity of depressive symptoms. A higher score indicates a higher degree of depressive symptoms. Cronbach’s α of trait depression was 0.87.

Table 1

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<td>7. Gratitude</td>
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<td>8. Depressive</td>
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* p < .05.
** p < .01.
*** p < .001.
emotional discipline strategies in parenting (Stoltenborgh, Bakermans-Kranenburg, Alink, & van IJzendoorn, 2012). Chinese culture shares collectivist characteristics that emphasize social and familial harmony, which may promote the frequent use of positive psychology to examine the associations between specific processes; few examine positive processes. To address this gap, this study applied emotion regulation theory and the perspective of Nelson et al., 2017). However, further exploration is needed to understand how negative emotions are managed in Chinese cultures with the same measures of child maltreatment and cutoff scores (comparison of indirect effects of child maltreatment and adult depressive symptoms were examined while controlling for the other four types of child maltreatment. The specific parameter estimates and paths of all five models are presented in Table 2. Emotional abuse was associated with depressive symptoms in both direct and indirect pathways. The indirect effect of emotional abuse through self-compassion was significant ($\beta = 0.267, p = .003, 95\% \text{ CI } [0.100, 0.466]$). Child emotional abuse was not associated with adult depressive symptoms indirectly through gratitude. Emotional neglect was associated with adult depressive symptoms indirectly through self-compassion and gratitude ($\beta = 0.088, p = .029, 95\% \text{ CI } [0.029, 0.173]$; gratitude: $\beta = 0.133, p < .001, 95\% \text{ CI } [0.076, 0.211]$). There was no difference between these two indirect effects (comparison of indirect effects: $\beta = -0.045, 95\% \text{ CI } [-0.143, 0.056]$). Physical neglect was indirectly associated with depressive symptoms in adulthood through gratitude ($\beta = 0.054, p = .057, 95\% \text{ CI } [0.005, 0.129]$). Sexual abuse was associated with adult depressive symptoms both directly and indirectly through gratitude ($\beta = 0.109, p = .017, 95\% \text{ CI } [0.038, 0.218]$). Physical abuse was associated directly with depressive symptoms, but not indirectly through self-compassion or gratitude.

4. Discussion

In the past two decades, research on the relationship between child maltreatment and mental health problems (e.g., depression) has burgeoned (Cohen et al., 2017; Gibb, Benas et al., 2007; Gibb, Chelminski et al., 2007; Powers et al., 2009; Spertus et al., 2003). Recent meta-analyses suggest positive associations between child maltreatment and depression in adulthood (Mandelli et al., 2015; Nelson et al., 2017). However, further exploration is needed to understand how negative effects of adverse experiences in childhood influence adult mental health outcomes (Crow, Cross, Powers, & Bradley, 2014). Most research investigate negative psychological processes; few examine positive processes. To address this gap, this study applied emotion regulation theory and the perspective of positive psychology to examine the associations between specific types of child maltreatment and adult depressive symptoms and the roles of self-compassion and gratitude in explaining that relationship.

The high prevalence of participants with a history of emotional neglect, physical neglect, and emotional abuse indicates that psychological maltreatment and neglect are common in the Chinese context. The prevalence of child maltreatment is similar to those of other studies in Chinese cultures with the same measures of child maltreatment and cut-off scores (Li et al., 2014, 2015, 2017). Chinese culture shares collectivist characteristics that emphasize social and familial harmony, which may promote the frequent use of emotional discipline strategies in parenting (Stoltenborgh, Bakermans-Kranenburg, Alink, & van IJzendoorn, 2012).

Our findings on the associations among child maltreatment, self-compassion, gratitude, and adult depressive symptoms were consistent with previous studies. Individuals reporting a history of child maltreatment were more likely to report depressive symptoms and less inclined to be compassionate toward themselves or grateful toward people or events (Cohen et al., 2017; Coleman...
et al., 2016; Miron et al., 2014; Tanaka et al., 2011). In the present study, gratitude was negatively associated with all five types of child maltreatment. Self-compassion was negatively correlated with only emotional abuse and emotional neglect. Self-compassion is related to the emotional aspects of self (e.g., self-kindness, viewing suffering from a common humanity perspective) that responds to suffering. Therefore, self-compassion is more vulnerable to emotional abuse and emotional neglect. Differently, gratitude relates to positive and prosocial emotions toward others and the outside world. Any type of maltreatment is hurtful and violates an individual's appreciation of the outside world.

Generally, people with tendencies toward self-compassion and appreciation were less likely to have depressive symptoms in adulthood (Neff & McGehee, 2010; Wood et al., 2008). In our findings, all types of child maltreatment were associated with adult depressive symptoms directly or indirectly. However, their indirect effects on adult depressive symptoms were different. Psychological maltreatment (emotional abuse and emotional neglect) were indirectly associated with depressive symptoms through self-compassion in adulthood. Child sexual abuse, emotional neglect, and physical neglect were associated with adult depressive symptoms through gratitude. The results were robust, even after controlling for other types of child maltreatment.

Similar to previous findings (Coates & Messman-Moore, 2014; Huh et al., 2017; O'Mahen et al., 2015), child psychological maltreatment, including emotional abuse and emotional neglect, damaged individuals' ability for self-compassion. This resulted in more depressive symptoms in adulthood. Victims of psychological maltreatment are less likely to be self-compassionate, leading to depression in adulthood (Barnett, Miller-Perrin, & Perrin, 2005; Loos & Alexander, 1997; Soffer, Gilboa-Schechtman, & Shahar, 2008; Spertus et al., 2003; Wright, 2007). Psychological maltreatment may leave emotional scars on victims, damage their senses of self (e.g., self-concept, self-worth, self-schemas), and lead to negative constructions or maladaptive models of self (e.g., shame, self-worthlessness) (Rose & Abramson, 1992; van Harmelen et al., 2010). Self-compassion reflects a profile of the self that copes with suffering through emotion self-regulation (e.g., self-kindness). Physical neglect, sexual abuse, and physical abuse were not indirectly associated with depressive symptoms through self-compassion. This finding suggests that self-compassion may be more sensitive to psychological maltreatment (i.e., emotional neglect and emotional abuse) than to other childhood adverse experiences. Constant criticism, contempt, rejection, and neglect may cultivate helplessness and self-denial instead of self-kindness and humanity.

Emotional neglect, physical neglect, and sexual abuse were indirectly associated with adult depressive symptoms through gratitude. This can be attributed to the adverse effects of child maltreatment on one's view of the social world. Grateful people hold an appreciation toward others and the world. Victims of child maltreatment may have negative internal representations of others (for a review, see Hildyard & Wolfe, 2002). They hold more negative expectations and are less likely to accept and empathize with others in interpersonal relationships (McCrone, Egeland, Kalkoske, & Carlson, 1994). Thus, individuals who have experience of neglect and sexual abuse are less likely to appreciate others; they hold negative beliefs, expectations, and interpretations of the world that increase their vulnerability to depressive symptoms.

Physical abuse was associated with adult depressive symptoms directly, but neither self-compassion nor gratitude explained the relationship between physical abuse and depressive symptoms. Cultural understandings of physical abuse in Chinese society may explain the findings. In Chinese society, physical discipline on children is not regarded as abuse; it is normalized as a strict but effective parenting approach (Lansford et al., 2010). Individuals may adopt the cultural context and understand such physical and emotional abuse as resulting from frustrating their parents' expectations. This can offset the deleterious effects of abuse on the relationship. More studies in Chinese and Asian cultures with these normalized attitudes toward harsh discipline are needed to confirm the findings and explore underlying causal factors.

Some limitations of this study should be noted. First, this study shares the shortcomings of cross-sectional designs. The study could not examine the mediation effects over time, because all variables were measured concurrently. Future research should test the relationships among child maltreatment, self-compassion, gratitude, and adult depression with a longitudinal design. Second, this study measured variables through self-reporting and retrospective reports of participants. Because subjectivity, social desirability, and recall bias threaten the validity of research (Norman et al., 2012), an other-report approach could be used to reduce the bias in the future. Third, findings suggest a specific path of child maltreatment on the mental health of adults in Chinese culture. There may be limited generalizability to other cultures. Researchers should be cautious when interpreting the findings in a different cultural context.

Despite these limitations, our study enriches the understanding of emotion regulation theory. It also sheds some light on the theoretical perspective of positive psychology as an explanatory factor in the link between child maltreatment and adult mental health. Previous studies focused on the role of negative processes when considering the connection between childhood adverse experiences and depression (Cohen et al., 2017; Crow et al., 2014). In contrast, this study examined the positive emotion-related processes in this link. Further, it revealed that specific maltreatment in childhood was associated with depressive symptoms in adulthood through decreased self-compassion and gratitude. These findings provide a new perspective on the associations between child maltreatment and mental health. Our research suggests that gratitude and self-compassion are potentially effective elements that could be incorporated into interventions to prevent depression, especially for adults with adverse childhood experiences. Promisingly, recent intervention studies focused on self-compassion and gratitude have shown positive effects on the decrease of mental health problems (Mindful Self-Compassion program, Neff & Germer, 2013; “Making Friends with Yourself” program, Bluth & Eisenlohr-Moul, 2017).

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