



BRAIN. Broad Research in Artificial Intelligence and Neuroscience

e-ISSN: 2067-3957 | p-ISSN: 2068-0473

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Submitted: May 24th, 2026 | Accepted for publication: June 25th, 2026

Effect of Childhood Emotional Abuse on Depressive Symptoms in Adulthood: Rumination as a Mediator and Resilience as a Moderator

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Abstract: This study examined the relationship between retrospective childhood emotional abuse (CEA) and adult depressive symptoms by investigating the mediating role of cognitive rumination and the moderating role of psychological resilience within a Transylvanian-Hungarian sample. A cross-sectional sample of Hungarian-speaking adults ($N = 223$, $M_{age} = 24.9$ years) completed an online battery of validated self-report measures assessing childhood emotional abuse, depressive symptoms, rumination, and resilience. Mediation and moderation analyses were conducted using a bootstrapping procedure with 5,000 resamples. The findings supported a partial mediation model, indicating that rumination represented a substantial indirect pathway linking childhood emotional abuse to depressive symptoms. Specifically, the indirect effect accounted for approximately 74.7% of the total effect. Furthermore, resilience significantly moderated the relationship between childhood emotional abuse and depressive symptoms ($b = -0.04$, $SE = 0.01$, 95% CI $[-0.06, -0.02]$, $p < .001$), suggesting that the association between early emotional abuse and adult depressive symptomatology was weaker among individuals reporting higher levels of psychological resilience. These findings are consistent with cognitive vulnerability models of depression and suggest that repetitive negative thinking and resilience processes may play important roles in understanding individual differences in psychological adjustment following childhood emotional abuse. Although the cross-sectional design precludes causal inferences, the results provide additional evidence from an understudied cultural context and may have implications for interventions aimed at reducing maladaptive rumination and strengthening resilience among individuals exposed to early emotional adversity.

Keywords: childhood emotional abuse; depressive symptoms; rumination; psychological resilience; mediation; moderation.

How to cite: Kiraly, K., Dimén, B., Zau, I. C., Bernath, A. E., Gyorgy, M. D., Rusu, D. O., Șerban, I.-V., Farkas, J. & Delcea, C. (2026). Effect of childhood emotional abuse on depressive symptoms in adulthood: Rumination as a mediator and resilience as a moderator. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 17(Special Issue 1), 399-408.
<https://doi.org/10.70594/brain/17.S1/30>

1. Introduction

Childhood maltreatment is widely recognised as an important risk factor for mental health problems later in life. Among its different forms, childhood emotional abuse (CEA) is often considered one of the most difficult to identify because it usually leaves no visible signs. Emotional abuse may include repeated criticism, humiliation, rejection, verbal aggression, or emotional neglect from caregivers. Despite its less visible nature, previous studies have consistently shown that emotional abuse during childhood is associated with a higher risk of depression, anxiety, and other forms of psychological distress in adulthood (Gilbert et al., 2009; Stoltenborgh et al., 2015). More broadly, previous evidence has demonstrated that different forms of childhood abuse are associated with an increased risk of depressive symptomatology in adulthood (Radell et al., 2021). In particular, emotional abuse has been identified as a specific and differential risk factor for the development of depressive disorders in adulthood (Martins et al., 2014). Depression is increasingly understood as a multifactorial condition influenced by biological, social, and psychological determinants, highlighting the importance of early adverse experiences in shaping later mental health outcomes (Jeste et al., 2024). However, not all individuals who experience emotional abuse develop mental health difficulties, suggesting that additional psychological processes may influence this relationship.

One factor that may help explain this association is rumination. Rumination refers to a tendency to repeatedly think about negative emotions, personal difficulties, and stressful experiences without actively trying to solve them (Nolen-Hoeksema et al., 2008). Rumination has consistently been associated with a wide range of psychopathological outcomes, particularly depressive disorders (Ehring, 2021). Cognitive theories further suggest that rumination may narrow attentional focus towards negative information and contribute to the maintenance of depressive symptoms (Whitmer & Gotlib, 2013). Rumination has also been associated with specific patterns of brain functional connectivity, supporting its role as a transdiagnostic mechanism involved in emotional dysregulation and depressive symptomatology (Mısır et al., 2023). Individuals who have experienced emotional abuse during childhood may become more vulnerable to this type of repetitive negative thinking because early experiences of rejection or devaluation can shape the way they interpret themselves and the world around them. Previous research has shown that rumination is strongly related to depressive symptoms and may represent an important pathway through which early adverse experiences are associated with later psychological problems (Michl et al., 2013; Topper et al., 2017; Yalın et al., 2026).

At the same time, childhood adversity does not affect all individuals in the same way. Some people appear to adapt relatively well despite experiencing significant emotional difficulties during childhood. This has led researchers to focus on resilience, generally defined as the ability to cope with adversity and maintain psychological functioning in stressful situations (Connor & Davidson, 2003; Southwick et al., 2016). Cognitive models of resilience further suggest that adaptive cognitive processes may buffer the effects of stressful experiences and facilitate psychological adjustment (Parsons et al., 2016). Recent conceptual work has further emphasised the dynamic and multidimensional nature of resilience processes (den Hartigh & Hill, 2022). Recent evidence further suggests that resilience is influenced by multiple individual, social, and contextual factors, emphasising its complex and multidimensional nature (Schäfer et al., 2024).

Higher levels of resilience have been associated with better emotional regulation, more adaptive coping strategies, and lower levels of depression and anxiety. Therefore, resilience may act as a protective factor that reduces the negative impact of childhood emotional abuse on adult mental health outcomes.

Although previous studies have separately examined the roles of rumination and resilience, relatively few investigations have explored both processes within the same analytical model. In addition, most available evidence comes from Western European, North American, or East Asian populations, while research involving Central and Eastern European populations remains relatively

limited. Examining these relationships in different cultural settings may help determine whether existing psychological models can be generalised across populations.

Therefore, the present study aimed to examine the relationship between retrospective childhood emotional abuse and depressive symptoms among Hungarian-speaking adults from the Transylvanian region. More specifically, the study investigated whether rumination functioned as an explanatory mechanism linking childhood emotional abuse with depressive symptoms and whether psychological resilience may reduce the strength of this association. Based on previous findings, it was hypothesised that: **(1)** rumination would partially mediate the relationship between childhood emotional abuse and depressive symptoms, and **(2)** resilience would moderate this relationship, such that the association between childhood emotional abuse and depressive symptoms would be weaker among individuals with higher levels of resilience.

2. Methods

2.1. Participants and Procedure

The target population comprised Hungarian-speaking adults (aged 18 years or older) residing primarily within the Transylvanian region. Data were collected over a four-week period using convenience and snowball sampling through social media platforms (Facebook, Instagram, Tik Tok and Twitter). Participants completed the questionnaire through an online Google Forms survey, which required approximately 10–15 minutes to complete. A mandatory electronic informed consent agreement prefaced the survey, ensuring participant anonymity, data confidentiality, and the right to unconditional withdrawal (no.114/February 2026, Faculty of Psychology, Babes-Bolyai University, Cluj-Napoca).

The final sample consisted of $N = 223$ respondents, with a predominance of female participants ($n = 164$, 73.5%) relative to male participants ($n = 59$, 26.5%). The group exhibited a mean age of $M = 24.9$ years, heavily clustered within the 18–30 age bracket ($n = 193$, 86.5%) compared with the 38–57 age group ($n = 30$, 14.5%). Occupationally, the sample was predominantly composed of secondary or tertiary students ($n = 139$, 62.3%), followed by contractually active employees ($n = 52$, 23.3%), and a residual heterogeneous group of unemployed individuals or managers ($n = 32$, 14.3%).

A post-hoc G*Power analysis indicated that the sample size provided adequate statistical power to detect moderate mediation effects, although power for interaction effects may have been more limited.

2.2. Ethical Considerations

The study was conducted in accordance with the ethical principles for research involving human participants. Before participation, respondents received information regarding the aims of the study, confidentiality procedures, and their rights as participants. Electronic informed consent was obtained from all respondents prior to completing the survey. Participation was voluntary and anonymous, and participants were informed that they could withdraw at any time without consequences. Only individuals aged 18 years or older were eligible to participate.

2.3. Measurement Instruments

Retrospective childhood emotional abuse was operationalized utilizing the emotional abuse subscale of the short-form Childhood Trauma Questionnaire (CTQ-SF; Bernstein et al., 2003). This five-item self-report psychometric subscale evaluates chronic exposure to parental verbal aggression, familial devaluation, and emotional rejection during upbringing. Responses are charted on a 5-point Likert-type continuum ranging from 1 (*never true*) to 5 (*very often true*). Aggregate scores span from 5 to 25, wherein higher values index an elevated severity of early emotional maltreatment. The Hungarian adaptation of the subscale demonstrated robust internal consistency within the current group, yielding a Cronbach's alpha coefficient of $\alpha = 0.886$.

Adult depressive symptomatology was quantified via the revised Center for Epidemiologic Studies Depression Scale (CES-D-R; Eaton et al., 2004). This 20-item dimensional inventory measures the frequency of depressive manifestations over the preceding two-week epoch in strict alignment with standardized diagnostic criteria. Scale items are appraised on a Likert metric ranging from 0 (*not at all or less than one day*) to 4 (*almost every day*), generating a maximum potential composite score of 80. Elevated configurations denote a more pronounced severity of depressive distress. Within the contemporary sample, the Hungarian iteration displayed exemplary psychometric reliability, as evidenced by Cronbach's alpha coefficient of $\alpha = 0.937$.

Ruminative response styles were evaluated employing the Ruminative Response Scale (RRS) (Treyner et al., 2003), a 22-item self-report instrument engineered to assess an individual's propensity to passively and repetitively dwell on the symptoms, causes, and implications of a depressed mood. Respondents rate items on a 4-point Likert metric ranging from 1 (*almost never*) to 4 (*almost always*), with cumulative scores spanning from 22 to 88. Superior score profiles signify an exacerbated tendency towards maladaptive cognitive rumination. In the present sample, the Hungarian version demonstrated exceptional internal consistency, achieving a Cronbach's alpha coefficient of $\alpha = 0.947$.

Psychological resilience was operationalised utilising the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003), a 25-item psychometric tool designed to capture dynamic stress-coping capacity and psychological elasticity. Items are evaluated on a 5-point Likert continuum ranging from 0 (*not at all true*) to 4 (*almost always true*), resulting in total potential scores up to 100. Higher aggregate scores reflect superior levels of baseline psychological resilience. The Hungarian translation implemented in this study exhibited high internal reliability, generating a Cronbach's alpha coefficient of $\alpha = 0.920$.

2.4. Research Design and Statistical Analysis

The investigation used a cross-sectional, single-measure correlational research design without active experimental manipulation. Data preparation, descriptive computations, and internal reliability tests were conducted via IBM SPSS Statistics (Version 25), whereas inferential path modelling was performed in Jamovi (Version 2.7.24) using the medmod module. Prior to definitive model estimation, standard linear regression assumptions were systematically verified. Residual independence was confirmed using the Durbin-Watson statistic, and variance inflation factors ($VIF = 2.04$) indicated no debilitating multicollinearity. Linearity was visually assessed through scatter plots, and residual normality was evaluated using Q-Q plots.

However, diagnostic plot analysis revealed a funnel-shaped error distribution for the mediation model (violating homoscedasticity) and a right-skewed residual distribution for the moderation model (violating normality). To preserve parameter estimation validity and control for these distribution anomalies, both conditional paths were computed utilising a robust, non-parametric bootstrapping paradigm with 5,000 resamples. Path coefficients and indirect effects were deemed statistically significant if their bias-corrected 95% confidence intervals did not encompass zero.

3. Results

3.1. Descriptive Statistics and Preliminary Analyses

Prior to conducting the primary inferential path analyses, descriptive statistics were computed to map the distribution characteristics and operational parameters of the psychometric variables within the group ($N = 223$). The sample generated a mean score of 9.2 ($SD = 4.02$) for retrospective childhood emotional abuse and an average adult depressive symptomatology score of 18.2 ($SD = 13.1$). Regarding potential mechanisms and boundary variables, cognitive rumination exhibited a mean configuration of 39.0 ($SD = 12.7$), whereas baseline psychological resilience generated a mean score of 59.1 ($SD = 14.5$). Comprehensive distribution screening and multivariate diagnostic tests indicated that all indices fell within acceptable psychometric ranges,

with an absence of extreme multivariate anomalies. Consequently, the complete dataset was retained for formal conditional process modelling. The complete descriptive profile, including medians and observed score continuums, is systematically detailed in Table 1.

Table 1 Descriptive Statistics for the Primary Psychometric Indices (N = 223)

Variable	Mean	SD	Median	Minimum	Maximum
Childhood Emotional Abuse	9.2	4.02	8	5	20
Adult Depressive Symptoms	18.2	13.1	13	4	66
Cognitive Rumination	39.0	12.7	34	22	76
Psychological Resilience	59.1	14.5	58	31	93

3.2. Mediation Analysis

Rumination as a Behavioural Pathway (H1)

To evaluate the first hypothesis (H1), positing that cognitive rumination mediates the association between childhood emotional abuse and depressive symptoms, a path analysis was executed. To preserve parameter estimation validity against the heteroscedasticity anomalies identified during the diagnostic phase, standard errors and 95% confidence intervals (CIs) were derived utilising a non-parametric bootstrapping paradigm with 5,000 resamples. The structural path estimations revealed that retrospective childhood emotional abuse was a highly significant, positive direct predictor of adult cognitive rumination (path a), indicating that elevated developmental trauma closely associates with intensified maladaptive cognitive patterns in adulthood. After controlling for childhood emotional abuse, cognitive rumination remained a significant positive predictor of depressive symptoms (path b). The total effect (Path c') indicated a significant association between childhood emotional abuse and depressive symptoms. Crucially, the indirect effect compounding this architecture via the mediating pathway of rumination was highly significant (path ab). Because the bias-corrected 95% bootstrap confidence interval did not include zero, the indirect effect was statistically significant, supporting the mediating role of rumination. The direct effect of childhood emotional abuse on depression remained statistically significant after controlling for the mediator (path c), validating a model configuration of partial mediation. Notably, the indirect effect accounted for approximately 74.7% of the total effect, indicating that rumination represented a substantial pathway linking childhood emotional abuse and depressive symptoms and providing support for Hypothesis 1. The granular decomposition of these path trajectories is displayed in Table 2.

Table 2. Bootstrapped Parameter Estimates for the Ruminative Mediation Model (H1)

Model Pathway	Effect (b)	SE	Z	p	95% Lower CI	95% Upper CI
Path a: CEA →Rumination	2.25	0.14	15.70	< .001	1.95	2.53
Path b: Rumination →Depression	0.79	0.06	12.70	< .001	0.69	0.92
Total Effect (Path c'): CEA →Depression	2.40	0.15	15.70	< .001	2.07	2.69
Direct Effect (Path c'): CEA →Depression	0.60	0.16	3.76	< .001	0.28	0.92
Indirect Effect (ab): CEA → Rumination →Depression	1.79	0.16	10.60	< .001	1.46	2.11

Note. CEA = Childhood Emotional Abuse. Confidence intervals are bias-corrected and based on 5,000 bootstrap resamples.

3.3. Moderation Analysis: Resilience as a Moderator (H2)

The second hypothesis (H2), which advanced the proposition that psychological resilience operates as a dynamic protective buffer mitigating the direct depressogenic impact of early emotional trauma, was evaluated via an interactive conditional process model utilising 5,000 bootstrap resamples. Linear regression models isolated childhood emotional abuse as a robust positive predictor of depressive symptomatology, whereas psychological resilience emerged as a substantial negative predictor. More importantly, the explicit localised interaction term (Childhood

Emotional Abuse * Resilience) reached statistical significance, establishing that psychological elasticity actively modifies the underlying trajectory of the primary distress pathway.

To systematically deconstruct this conditional mechanism, a simple slopes analysis was evaluated across three distinct operational strata: low ($-1SD$), average (*Mean*), and high ($+1SD$) resilience. The simple slopes analysis showed that the association between childhood emotional abuse and depressive symptoms became progressively weaker as psychological resilience increased. Specifically, the association between childhood emotional abuse and depressive symptoms was strongest among individuals with low resilience. This predictive magnitude was incrementally eroded at average levels of resilience and reached its weakest, highly buffered state among individuals possessing high levels of baseline resilience. This systematic erosion of predictive significance across expanding strata fully validates the conditional buffering hypothesis formulated in Hypothesis 2. The exhaustive statistical architecture of this conditional process layout is presented in Table 3.

Table 3. Conditional Process Model: Moderation and Simple Slopes Analysis of Resilience (H2)

Predictor / Conditional Strata	b	SE	Z	p	95% CI Lower	95% CI Upper
Primary Interaction Model						
Childhood Emotional Abuse (CEA)	1.89	0.20	9.39	< .001	1.48	2.28
Psychological Resilience	-0.22	0.05	-4.17	< .001	-0.32	-0.11
Interaction Term (CEA Resilience)	-0.04	0.01	-3.52	< .001	-0.06	-0.02
Conditional Slopes (Simple Slopes)						
Low Resilience ($-1SD$)	2.42	0.18	13.66	< .001	1.50	2.30
Average Resilience (<i>Mean</i>)	1.89	0.20	9.34	< .001	1.50	2.28
High Resilience ($+1SD$)	1.37	0.31	4.45	< .001	0.74	1.93

Note. All metrics were derived using non-parametric bootstrapping with 5,000 resamples to ensure robust parameter validation against residual non-normality.

4. Discussion

The main aim of the present study was to examine the relationship between childhood emotional abuse and depressive symptoms in adulthood and to explore the potential roles of rumination and psychological resilience in this association. Overall, the findings were consistent with both proposed hypotheses. Specifically, childhood emotional abuse was positively associated with depressive symptoms, and this relationship was partially explained by higher levels of rumination. In addition, resilience appeared to weaken the association between childhood emotional abuse and depressive symptoms, suggesting that individuals with greater psychological resources may be less vulnerable to the long-term effects of early adverse experiences.

The findings regarding rumination are in line with previous studies indicating that repetitive negative thinking may represent an important mechanism linking childhood adversity with later psychological difficulties (Li et al., 2020; Ji, 2024; Yu et al., 2024). Experiences of emotional rejection, criticism, and neglect during childhood may contribute to the development of negative beliefs about oneself and the social environment. According to Beck's cognitive model (Beck & Haigh, 2014), these early experiences may shape maladaptive schemas that increase vulnerability to depressive symptoms later in life.

Individuals exposed to emotional abuse may be more likely to engage in rumination when confronted with stressful situations in adulthood. Instead of actively coping with emotional difficulties, they may repeatedly focus on negative emotions and distressing experiences, which can prolong negative mood states and increase psychological vulnerability. The present findings support previous research suggesting that rumination may represent one of the mechanisms through which childhood emotional abuse is associated with depressive symptoms.

At the same time, the mediation observed in the present study was partial, indicating that additional factors may also contribute to this relationship. Other cognitive processes, interpersonal difficulties, attachment patterns, or maladaptive schemas may also play an important role in explaining why some individuals exposed to childhood emotional abuse experience higher levels of depressive symptoms than others. Previous studies have similarly suggested that maladaptive

cognitive schemas and psychological resources may contribute to individual differences in psychological adjustment following adverse experiences (Delcea et al., 2023).

The findings also highlighted the potential importance of psychological resilience. The significant interaction effect suggests that the relationship between childhood emotional abuse and depressive symptoms differs according to individuals' levels of resilience. More specifically, the association between emotional abuse and depressive symptoms was stronger among participants reporting lower resilience and weaker among those with higher resilience.

These findings are consistent with previous research identifying resilience as an important protective factor in the context of childhood adversity (Poole et al., 2017; Hu et al., 2025; Mutiso et al., 2025). Individuals with higher resilience may possess greater emotional flexibility, stronger coping skills, and more adaptive ways of interpreting stressful experiences. Furthermore, the present findings align with broader evidence indicating that depressive symptoms are shaped by a complex interplay of psychosocial factors and individual differences in psychological adjustment. For example, Bondar et al. (2025) demonstrated that psychosocial characteristics contribute to the identification and manifestation of depressive symptoms among patients with ischaemic heart disease, highlighting the importance of considering psychological and social factors alongside individual vulnerability. These resources may help individuals manage difficult life experiences more effectively and reduce the long-term emotional consequences associated with childhood emotional abuse.

Importantly, the present findings suggest that the effects of childhood emotional abuse are not uniform or inevitable. Although early emotional adversity is associated with an increased risk of depressive symptoms, individual differences in psychological resources may influence how people adapt to these experiences over time. Higher resilience may help individuals maintain psychological functioning despite exposure to significant emotional stress during childhood.

5. Clinical Implications

The present findings may also have several practical implications. Given the observed role of rumination, interventions aimed at reducing repetitive negative thinking may be beneficial for individuals with a history of childhood emotional abuse. Therapeutic approaches such as Rumination-Focused Cognitive Behavioural Therapy (RFCBT), Mindfulness-Based Cognitive Therapy (MBCT), and Acceptance and Commitment Therapy (ACT) may help individuals develop more adaptive ways of responding to distress and reduce maladaptive patterns of repetitive thinking.

Similarly, interventions designed to strengthen psychological resilience may also contribute to better psychological adjustment. Enhancing coping skills, promoting self-efficacy, improving emotion regulation abilities, and strengthening social support networks may help individuals better manage the long-term consequences of early adverse experiences.

However, these practical implications should be interpreted cautiously. The present study employed a cross-sectional design and relied exclusively on self-report measures; therefore, causal conclusions cannot be drawn, and the effectiveness of specific therapeutic approaches was not directly examined.

Overall, the findings suggest that both cognitive vulnerabilities and protective psychological resources should be considered when examining the relationship between childhood emotional abuse and adult depressive symptoms. Future studies using longitudinal and clinically representative samples may further clarify the mechanisms underlying these associations and contribute to the development of more targeted intervention strategies.

6. Limitations and Future Research

Several limitations should be acknowledged. First, the cross-sectional design prevents causal interpretations regarding the relationships among childhood emotional abuse, rumination, resilience, and depressive symptoms. Second, childhood emotional abuse was assessed retrospectively and may therefore be influenced by recall bias. Third, all variables were measured

using self-report instruments, increasing the possibility of common-method variance and social desirability effects. Fourth, the use of convenience and snowball sampling procedures, together with the predominance of young female participants, limits the generalisability of the findings. Finally, the study did not include structured clinical interviews; therefore, depressive symptoms should not be interpreted as equivalent to clinical diagnoses of depression.

Future studies would benefit from longitudinal designs and more diverse and clinically representative samples in order to better understand the temporal relationships among these variables.

7. Conclusions

The present study examined the relationship between childhood emotional abuse and depressive symptoms in adulthood by considering the roles of rumination and psychological resilience within a Transylvanian Hungarian sample. The findings suggest that childhood emotional abuse is associated with higher levels of depressive symptoms and that this relationship may be partially explained by increased rumination. In addition, higher levels of psychological resilience appeared to weaken the association between early emotional abuse and depressive symptoms.

These results are generally consistent with previous studies highlighting the importance of both cognitive vulnerabilities and protective psychological factors in understanding adaptation following childhood adversity (Hu et al., 2025; Ji, 2024; Yu et al., 2024). Although causal conclusions cannot be drawn due to the cross-sectional design, the findings contribute additional evidence from an understudied cultural context and support the relevance of considering both maladaptive cognitive processes and resilience-related resources when examining the long-term psychological consequences of childhood emotional abuse.

From a practical perspective, the results suggest that interventions aimed at reducing repetitive negative thinking and strengthening resilience may be beneficial for individuals reporting a history of childhood emotional abuse. Future longitudinal and clinically representative studies are needed to further clarify the temporal relationships among these variables and to better understand the mechanisms underlying psychological adaptation following early adverse experiences.

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