The Association of Childhood Parental Connection With Adult Flourishing and Depressive Symptoms

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OBJECTIVES: To determine whether a common measure of childhood emotional neglect, scored instead as a continuous measure of increasing parental connection, is associated with adult flourishing and depressive symptoms, and to compare the magnitude of these 2 associations.

METHODS: We pooled cross-sectional survey data from the Midlife in the United States study, collected from 2 national cohorts (2004–2006 and 2011–2014) of English-speaking, US adults, aged 25 to 74 years. Using the 5-item emotional neglect subscale of the Childhood Trauma Questionnaire, a score of increasing childhood parental connection was created by not reverse-scoring responses. The adult outcomes were standardized scores of flourishing, from Ryff’s Psychological Well-Being Scale, and depressive symptoms, from the Center for Epidemiologic Studies Depression Scale.

RESULTS: Data were available for 2079 of 2118 participants (98.2%). The mean (SD) age was 53.1 (12.6) years and 54.6% were female. After adjusting for covariates (age, gender, race and ethnicity, marital status, chronic disease, socioeconomic disadvantage), the adult flourishing score was 0.74 (95% confidence interval 0.63–0.86) SD units higher in those in the highest quartile of childhood parental connection compared with the lowest, whereas the depressive symptoms score was lower by a similar magnitude (−0.65 [95% confidence interval −0.77 to −0.54] SD units).

CONCLUSIONS: When emotional neglect is reframed as parental connection, it has associations with adult flourishing and depressive symptoms that are of similar magnitude but opposite direction. Clinicians and researchers should consider the more positive and aspirational frame of parental connection and its potential contribution to life course flourishing.

WHAT’S KNOWN ON THIS SUBJECT: Emotional neglect is often conceptualized and assessed as a harmful omission of attention to a child’s emotional experience. However, emotional neglect exists on a continuum of parental connection in which higher levels of connection may be associated with positive outcomes.

WHAT THIS STUDY ADDS: A common measure of childhood emotional neglect, when rescored as a measure of increasing parental connection, had a graded, positive association with adult flourishing that was of similar strength, but opposite direction, to its negative association with adult depressive symptoms.

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The negative consequences of childhood emotional neglect have been recognized for over a half century, and emotional neglect can be as harmful to children as sexual abuse, physical abuse, or physical neglect. However, emotional neglect represents only 1 end of a spectrum describing the emotional climate, created by parents or primary caregivers, which reflects the love, care, and support they provide to their children that is necessary for children’s healthy social and emotional development. The distinguishing feature of emotional neglect is the omission of the emotional connection between parent and child that allows the child to feel safe and seen, or understood, in terms of their inner life, including their thoughts and emotions, both positive and negative, and their developing identity in response to life experiences. In this sense, emotional neglect can also be viewed as a lost opportunity for parental connection.

Research on the prevalence and long-term consequences of emotional neglect has highlighted its impact on mental health disorders, particularly depression. Several validated, self-report instruments have been used to retrospectively measure emotional neglect, and most of the items ask adults about the absence or presence (with reverse scoring) of perceived connection with parents or primary caregivers before 18 years of age. One of the most commonly used instruments to assess emotional neglect is the 5-item subscale from the Childhood Trauma Questionnaire (CTQ)–Short Form, which was used to assess emotional neglect in the landmark Adverse Childhood Experiences Study, and in subsequent instruments based on that study. The 5 CTQ items are each positively worded items about connection (e.g., “There was someone in my family who helped me feel important or special”), which could also be framed as measures of emotional connection rather than emotional neglect.

Adult outcomes are affected not just by adverse early life experiences but also by positive ones, including the presence of parent-child connection. In contrast to studies showing an association between emotional neglect and depressive symptoms, several studies have shown that parent-child or family connection is associated with adult flourishing, defined as psychological or eudaimonic well-being, and that this association occurs even in the presence of adversity and chronic disease in childhood. The emphasis on parental connection rather than neglect can shift attention to children’s strengths instead of their limitations, risks, or challenges; and it allows parents and pediatricians to focus on the benefits to children of connection instead of the harms of neglect.

The purpose of this study was to use a population-based sample of US adults to help reframe childhood emotional neglect by determining whether parent-child connection, assessed without reverse scoring the emotional neglect items on the CTQ, was associated with both higher levels of adult flourishing and lower levels of adult depressive symptoms. Our secondary aim was to determine whether the magnitude of these associations was similar. These data could help alter the dialogue in public health, child welfare, and clinical pediatrics to emphasize child and family assets, opportunities for parent-child connection, and the possibilities for flourishing.

METHODS

Study Population and Data

We used survey data from the Midlife in the United States (MIDUS) study. MIDUS is an ongoing study of psychosocial and behavioral factors affecting health and aging among noninstitutionalized, English-speaking adults, aged 25 to 74 years, living in the contiguous United States. We pooled data from 2 national MIDUS cohorts: MIDUS 2, collected between 2004 and 2006, and MIDUS Refresher 1, collected between 2011 and 2014. Added to each cohort was a subsample of African Americans recruited from Milwaukee, Wisconsin. Data from each cohort were initially collected in a survey project using phone interviews and mailed self-administered questionnaires (SAQ). Participants who completed both the phone interview and SAQ were eligible to participate in the MIDUS biomarker project, which required visiting a general clinical research center where biospecimens were obtained. During these visits, participants completed an additional SAQ. Our study sample consisted of the biomarker project participants from the MIDUS 2 (N = 1255) and MIDUS Refresher 1 (N = 863) cohorts, including the Milwaukee subsamples. Biomarker project participants did not significantly differ from nonbiomarker participants in the national MIDUS sample with respect to most sociodemographic characteristics (age, gender, race, marital status, and income), ratings of subjective health, and chronic health conditions. However, biomarker project participants were significantly better educated as compared with nonparticipants. We conducted cross-sectional analysis combining questionnaire data for each cohort that were collected in the survey and biomarker projects. Our study of this deidentified, publicly available data set from MIDUS did not require institutional review board approval.

Measures

Primary Exposure: Childhood Parental Connection

Childhood–parental connection was measured from 5 items used to assess emotional neglect in the CTQ–Short Form. The items asked about “experiences growing up as a child and a teenager,” and began with the stem, “When I was growing up...” followed by these items:

- there was someone in my family who helped me feel that I was important or special;
- I felt loved;
people in my family looked out for each other; people in my family felt close to each other; and my family was a source of strength and support.

Although the items reference family rather than parents, we name this construct parental connection because of the primary opportunity that parents or other household caregivers have in making the child feel safe and seen. Response options for each item were as follows: (1) never true, (2) rarely true, (3) sometimes true, (4) often true, and (5) very often true. Rather than reverse scoring these responses, as suggested in the CTQ scoring of the emotional neglect subscale, we calculated a parental connection score by summing the 5 items (possible range 5–25), with higher scores reflecting a greater level of connection. The internal consistency (Cronbach’s α) of the score in the current study was 0.89. Because the distribution of parental connection scores was skewed toward positive values and to facilitate clinical interpretation of our findings, parental connection was also examined as a categorical variable using quartiles: low (<18), medium–low (18 to <22), medium–high (22 to <25), and high (25).

**Primary Outcomes: Adult Flourishing and Depressive Symptoms**

The flourishing score was based on the 42-item version of Ryff’s Psychological Well-Being Scale, a widely used measure of eudaimonic well-being. The scale has 7 items for each of the 6 dimensions of flourishing: purpose in life, self-acceptance, positive relations with others, personal growth, environmental mastery, and autonomy. Participants rated items on a Likert-type scale, ranging from strongly agree (1) to strongly disagree (7). Positively worded items were reverse scored so that higher scores indicated greater flourishing. A flourishing score was calculated by summing across the 42 items (possible range 42–294), and the internal consistency (Cronbach’s α) of the score in the current study was 0.93.

Depressive symptoms were assessed with the validated 20-item Center for Epidemiologic Studies Depression Scale. Participants rated the frequency of symptoms during the past week on a scale of 0 (rarely or none of the time) to 3 (most or all of the time). Four items reflecting the absence of depressive symptoms were reverse scored so that higher scores indicated greater amounts of depressive symptoms. A depressive symptoms score was calculated by summing across the 20 items (possible range 0–60), and the internal consistency (Cronbach’s α) of the scale in the current study was 0.89.

**Covariates**

The covariates selected include 7 factors that might potentially confound the association between parental connection during childhood and adult flourishing and/or depressive symptoms. Participants reported their age, gender, race, ethnicity, and marital status. From responses to the race and ethnicity questions, we created a single race and ethnicity variable with 4 groups: Black, non-Hispanic; Hispanic, any race; white, non-Hispanic; and other race, non-Hispanic. The latter group included American Indian or Alaska Native, Asian American, Native Hawaiian or Pacific Islander, and other racial backgrounds specified by the participant. The construction of the remaining covariates is described in detail elsewhere and summarized here. A current chronic disease score (range 0–9) was created on the basis of questions about diagnosed medical conditions and treatments for 9 disease categories. A current socioeconomic disadvantage (SED) score (range 0–8) was created from 4 variables that pertained to the participant’s educational attainment and current financial situation, with higher scores reflecting greater current SED. The childhood SED score (range 0–6) was created on the basis of retrospective reports of welfare receipt and duration, parental education, and financial status relative to others, with higher scores reflecting greater childhood SED.

**Statistical Analysis**

Participants were excluded if they were missing >1 item for either the parental connection, flourishing, or depressive symptoms scores (n = 39), leaving an analytic sample of 2079 (98.2%). To facilitate comparison between the 2 outcome measures and their associations with parental connection, we standardized the 3 raw scores (created z scores) using the mean and SD of each raw score in the sample. A significance threshold of \( P < .05 \) from 2-sided testing was used throughout.

The bivariate associations of each covariate (as levels) with both flourishing and depressive symptoms z scores were examined using t tests and one-way analysis of variance. Pearson correlations were used to assess bivariate associations between parental connection, flourishing, and depressive symptoms scores. To estimate adjusted mean flourishing/depressive symptoms z scores for each quartile of childhood parental connection, we used regression-based margins, standardized to the distribution of the 7 covariates in the study population (age [continuous], gender, race and ethnicity, marital status, and the scores [continuous] for current chronic disease, current SED, and childhood SED). To further examine the association between childhood parental connection and adult flourishing/depressive symptoms, while adjusting for all covariates, we also used multivariable linear regression with childhood parental connection z score as the key independent variable and flourishing/depressive symptoms z scores as the dependent variables.

**RESULTS**

Among the 2079 MIDUS participants included in our analysis, the mean (SD) age was 53.1 (12.6) years, 54.6% were female, 17.5% were non-Hispanic Black, and 74.4% were non-Hispanic white (Table 1). The mean (SD) parental
connection, flourishing, and depressive symptoms scores were 20.2 (4.6), 231.7 (35.1), and 8.9 (8.0), respectively. When the parental connection score was instead computed as the CTQ emotional neglect score by reverse scoring all items, the mean (SD) score was 9.8 (4.6), and 17.5% could be classified as reporting emotional neglect during childhood (CTQ score ≥15). On the basis of the validated cut point of ≥16 for the Center for Epidemiologic Studies Depression score, 17.3% could be classified as depressed.

Higher scores for flourishing and lower scores for depressive symptoms were found among those who were older, Hispanic, married, had lower chronic disease burden, and had lower current or childhood SED (Table 1). The absolute magnitude of the zero-order Pearson correlations between the parental connection score and both the flourishing (r [2077] = 0.31, P < .001) and depressive symptoms scores (r [2077] = 0.15, P < .001) were similar and lower than the correlation between flourishing and depressive symptoms scores (r [2077] = −0.54, P < .001). After adjustment for all 7 covariates, mean (95% confidence interval [CI]) adult flourishing z scores increased from the lowest to highest quartiles of childhood parental connection: −0.32 (−0.40 to −0.25), −0.08 (−0.15 to 0.00), 0.07 (0.00 to 0.14), 0.42 (0.33–0.50) (Table 2; Fig 1). The adjusted flourishing z score was 0.74 (0.63–0.86) SD units higher among those in the highest versus lowest quartile of parental connection. For each 1 SD increase in the childhood parental connection score, there was a 0.24 (95% CI 0.20–0.28) SD unit increase in the adjusted adult flourishing z score. Similar findings were seen in race and ethnicity subgroups with sufficient sample sizes for analyses: a 0.21 (95% CI 0.12–0.30) SD unit increase among non-Hispanic Black participants and a 0.23 (95% CI 0.18–0.28) SD unit increase among non-Hispanic white participants. The adjusted mean (95% CI) adult depressive symptoms z scores decreased from the lowest to highest quartiles of childhood parental connection: 0.32 (0.24–0.40), 0.11 (0.03–0.18), −0.15 (−0.22 to −0.07), and −0.33 (−0.42 to −0.25) (Table 2; Fig 1). The adjusted depressive symptoms z score was −0.65 (−0.77 to −0.54) SD units lower among those in the highest versus lowest quartile of parental connection. For each 1 SD increase in the childhood parental connection score, there was a −0.23 (95% CI −0.27 to −0.19) SD unit decrease in the adjusted adult depressive symptoms z score. Subgroup findings were similar between non-Hispanic Black participants (−0.20 [95% CI −0.31 to −0.09] SD unit decrease) and non-Hispanic white participants (−0.24 [95% CI −0.29 to −0.20] SD unit decrease).

**DISCUSSION**

**Findings in Context**

We have shown that the CTQ measure of emotional neglect, when scored instead as a positive measure of parental connection, has associations with both adult flourishing and depressive symptoms that are of similar magnitude and opposite direction. To our knowledge, these 2 adult outcomes have not been assessed in the same sample using the CTQ emotional neglect items to measure childhood parental connection. Our findings are consistent with studies of childhood parental connection and adult flourishing and with separate studies of childhood emotional neglect and adult depressive symptoms. In a meta-analysis of studies examining the association between emotional neglect, assessed specifically by the CTQ, and depressive symptoms, the summary effect size was 0.30.3 We found the same effect size, but opposite in direction (−0.30), for the association between our measure of parental connection, based on the CTQ, and depressive symptoms.

Several studies of adults have assessed the association between recalled parental connection during childhood and adult flourishing, measured as in this study using Ryff’s Psychological Well-Being Scale. Six of these studies used a measure of connection from MIDUS that asked about parental attention, affection, and communication. All 6 studies found a graded, positive association between parental connection and flourishing, as we did here when we assessed parental connection using the positively-worded emotional neglect items from the CTQ, but without reverse scoring them.

In the Adverse Childhood Experiences Study, approximately 15% of adults reported childhood emotional neglect, on the basis of the established CTQ cut point, and the negative, long-term consequences of that exposure and the potential underlying mechanisms have been documented. When we applied the standard CTQ scoring to our national MIDUS sample, approximately 17.5% met criteria for emotional neglect using the CTQ. Although our study has reframed emotional neglect as parental connection, it also provides a more comprehensive look at the continuum of connection that extends beyond just those reporting emotional neglect on the basis of an established cut point. In considering the full continuum of parental connection in our sample, our study found graded associations with both adult flourishing and depressive symptoms.

**Limitations**

Because of the cross-sectional design, we cannot assume there is a causal association between recalled parental connection in childhood and flourishing or depressive symptoms in adulthood. Furthermore, reverse-causality and common-rater bias could partly explain our findings. Although recall of family relationship dynamics has been shown to be accurate, it is possible that those who reported greater flourishing or depression may have been more likely to recall their childhood experiences more positively or negatively, respectively. The strength of the associations we found may have been underestimated by controlling for certain factors,
such as adult chronic health conditions and SED that could be on the causal pathway between childhood parental connection and adult flourishing or depressive symptoms. Conversely, the strength of the association may have been overestimated because of unmeasured confounders. Although the MIDUS sample frame was developed to be nationally representative, our findings were based on a subsample and cannot necessarily be applied to all US adults.

### TABLE 1 Participant Characteristics and Their Association With Adult Flourishing and Adult Depressive Symptoms

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>No. (%) in Category&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Flourishing z Score Mean (95% CI)</th>
<th>p&lt;sup&gt;f&lt;/sup&gt;</th>
<th>Depressive Symptoms z Score Mean (95% CI)</th>
<th>p&lt;sup&gt;f&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>2079 (100.0)</td>
<td>0.00 (1.00)</td>
<td>—</td>
<td>0.00 (1.00)</td>
<td>—</td>
</tr>
<tr>
<td>Age, y&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>&lt;30</td>
<td>51 (2.4)</td>
<td>−0.23 (−0.50 to 0.04)</td>
<td>&lt;.001</td>
<td>0.30 (0.03–0.57)</td>
<td>&lt;.001</td>
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<tr>
<td>30–39</td>
<td>258 (12.4)</td>
<td>−0.17 (−0.29 to −0.05)</td>
<td>&lt;.001</td>
<td>0.25 (0.13–0.37)</td>
<td>&lt;.001</td>
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<tr>
<td>40–49</td>
<td>555 (25.7)</td>
<td>−0.16 (−0.24 to −0.08)</td>
<td>&lt;.001</td>
<td>0.11 (0.03–0.19)</td>
<td>&lt;.001</td>
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<td>50–59</td>
<td>567 (27.3)</td>
<td>0.00 (−0.08 to 0.08)</td>
<td>&lt;.001</td>
<td>0.00 (−0.09 to 0.08)</td>
<td>&lt;.001</td>
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<tr>
<td>60–69</td>
<td>443 (21.3)</td>
<td>0.16 (0.07–0.25)</td>
<td>&lt;.001</td>
<td>−0.21 (−0.30 to −0.11)</td>
<td>&lt;.001</td>
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<tr>
<td>≥70</td>
<td>225 (10.8)</td>
<td>0.32 (0.19–0.45)</td>
<td>&lt;.001</td>
<td>−0.20 (−0.33 to −0.07)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
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<tr>
<td>Female</td>
<td>1136 (54.6)</td>
<td>0.04 (−0.02, 0.10)</td>
<td>&lt;.001</td>
<td>0.06 (0.00–0.12)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Male</td>
<td>943 (45.4)</td>
<td>−0.05 (−0.11 to 0.02)</td>
<td>&lt;.001</td>
<td>−0.07 (−0.13 to −0.01)</td>
<td>&lt;.001</td>
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<td>Race and ethnicity</td>
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<tr>
<td>Black, non-Hispanic</td>
<td>361 (17.5)</td>
<td>−0.14 (−0.24 to −0.04)</td>
<td>&lt;.001</td>
<td>0.43 (0.35–0.53)</td>
<td>&lt;.001</td>
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<td>Hispanic, any race</td>
<td>75 (3.6)</td>
<td>0.07 (−0.15 to 0.30)</td>
<td>&lt;.001</td>
<td>−0.14 (−0.37 to 0.08)</td>
<td>&lt;.001</td>
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<tr>
<td>White, non-Hispanic</td>
<td>1538 (74.4)</td>
<td>0.05 (0.00 to 0.10)</td>
<td>&lt;.001</td>
<td>−0.10 (−0.15 to −0.06)</td>
<td>&lt;.001</td>
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<tr>
<td>Other race, non-Hispanic</td>
<td>93 (4.5)</td>
<td>−0.25 (−0.45 to −0.05)</td>
<td>&lt;.001</td>
<td>0.15 (−0.37 to 0.08)</td>
<td>&lt;.001</td>
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<tr>
<td>Marital status</td>
<td></td>
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<tr>
<td>Married</td>
<td>1302 (62.8)</td>
<td>0.10 (0.04–0.15)</td>
<td>&lt;.001</td>
<td>−0.15 (−0.21 to −0.10)</td>
<td>&lt;.001</td>
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<tr>
<td>Divorced or separated</td>
<td>354 (17.1)</td>
<td>−0.10 (−0.20 to 0.00)</td>
<td>&lt;.001</td>
<td>0.10 (0.08–0.29)</td>
<td>&lt;.001</td>
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<tr>
<td>Never married</td>
<td>309 (14.9)</td>
<td>−0.34 (−0.45 to −0.23)</td>
<td>&lt;.001</td>
<td>0.42 (0.31–0.53)</td>
<td>&lt;.001</td>
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<tr>
<td>Widowed</td>
<td>109 (5.3)</td>
<td>0.14 (−0.05 to 0.32)</td>
<td>&lt;.001</td>
<td>0.04 (−0.15 to 0.22)</td>
<td>&lt;.001</td>
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<tr>
<td>Current chronic disease score&lt;sup&gt;b&lt;/sup&gt;</td>
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<tr>
<td>0</td>
<td>627 (30.2)</td>
<td>0.07 (0.00 to 0.15)</td>
<td>&lt;.001</td>
<td>−0.22 (−0.29 to −0.14)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>1</td>
<td>613 (29.5)</td>
<td>0.08 (0.00–0.16)</td>
<td>&lt;.001</td>
<td>−0.08 (−0.15 to 0.00)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>2</td>
<td>443 (21.3)</td>
<td>−0.06 (−0.15 to 0.03)</td>
<td>&lt;.001</td>
<td>0.10 (0.01–0.19)</td>
<td>&lt;.001</td>
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<tr>
<td>3</td>
<td>225 (10.8)</td>
<td>−0.12 (−0.25 to 0.01)</td>
<td>&lt;.001</td>
<td>0.24 (0.11–0.37)</td>
<td>&lt;.001</td>
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<td>4–9</td>
<td>171 (8.2)</td>
<td>−0.26 (−0.41 to −0.11)</td>
<td>&lt;.001</td>
<td>0.40 (0.34–0.46)</td>
<td>&lt;.001</td>
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<tr>
<td>Current SED score&lt;sup&gt;c&lt;/sup&gt;</td>
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<tr>
<td>0–1</td>
<td>433 (20.9)</td>
<td>0.41 (0.32–0.50)</td>
<td>&lt;.001</td>
<td>−0.36 (−0.45 to −0.27)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>2–3</td>
<td>593 (28.8)</td>
<td>0.24 (0.16–0.31)</td>
<td>&lt;.001</td>
<td>−0.26 (−0.33 to −0.18)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>4–5</td>
<td>567 (27.3)</td>
<td>−0.10 (−0.17 to −0.02)</td>
<td>&lt;.001</td>
<td>0.00 (0.01–0.17)</td>
<td>&lt;.001</td>
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<tr>
<td>6–8</td>
<td>483 (23.3)</td>
<td>−0.54 (−0.62 to −0.46)</td>
<td>&lt;.001</td>
<td>0.55 (0.45–0.62)</td>
<td>&lt;.001</td>
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<tr>
<td>Childhood SED score&lt;sup&gt;d&lt;/sup&gt;</td>
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<tr>
<td>0</td>
<td>439 (21.2)</td>
<td>0.17 (0.08–0.26)</td>
<td>&lt;.001</td>
<td>−0.05 (−0.14 to 0.05)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>1</td>
<td>469 (22.8)</td>
<td>0.05 (−0.04 to 0.14)</td>
<td>&lt;.001</td>
<td>−0.12 (−0.21 to −0.03)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>2</td>
<td>565 (27.2)</td>
<td>−0.03 (−0.11 to 0.06)</td>
<td>&lt;.001</td>
<td>−0.05 (−0.11 to 0.05)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>3</td>
<td>351 (16.9)</td>
<td>−0.10 (−0.20 to 0.00)</td>
<td>&lt;.001</td>
<td>0.00 (−0.01 to 0.20)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>4–6</td>
<td>251 (12.1)</td>
<td>−0.20 (−0.32 to −0.08)</td>
<td>&lt;.001</td>
<td>0.24 (0.12–0.37)</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

<sup>a</sup> The combined sample mean (SD) = 53.1 (12.6) years.

<sup>b</sup> Score based on having a disease in 0 to 9 categories of chronic disease (cardiovascular, cancer, diabetes, obesity, neurologic, pulmonary, rheumatologic, autoimmune/acquired immune, and gastrointestinal).

<sup>c</sup> Score based on 4 variables (highest level of education, perceived financial situation, enough money to meet needs, and difficulty paying monthly bills). A higher score (possible range 0–8) is more disadvantage.

<sup>d</sup> Score based on 3 variables (welfare receipt and duration, financial status relative to others, and parental education). A higher score (possible range 0–6) is more disadvantage.

<sup>e</sup> Percentages may not add to 100 because of rounding. Participants were missing data on the following: Race and ethnicity (12 cases), marital status (5 cases), current SED score (5 cases), and childhood SED score (4 cases).

<sup>f</sup> p value is for t test or one-way analysis of variance assessing how the flourishing or depressive symptoms z score was related to levels of a participant characteristic.
TABLE 2 Association of Childhood Parental Connection With Adult Flourishing and Depressive Symptoms

<table>
<thead>
<tr>
<th>Quartile of Childhood Parental Connection Score</th>
<th>Unadjusted Mean</th>
<th>Adjusted Mean</th>
<th>Adjusted Difference</th>
<th>Unadjusted Mean</th>
<th>Adjusted Mean</th>
<th>Adjusted Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. (%)</td>
<td>(95% CI)</td>
<td>(95% CI)</td>
<td>(95% CI)</td>
<td>(95% CI)</td>
<td>(95% CI)</td>
<td>(95% CI)</td>
</tr>
<tr>
<td>Low</td>
<td>0.43 (−0.15 to 0.51)</td>
<td>−0.32 (−0.40 to −0.25)</td>
<td>Reference</td>
<td>0.42 (0.34−0.50)</td>
<td>0.32 (0.24−0.40)</td>
<td>Reference</td>
</tr>
<tr>
<td>Medium–low</td>
<td>0.08 (0.00 to 0.15)</td>
<td>0.07 (0.00 to 0.14)</td>
<td>0.39 (0.28−0.50)</td>
<td>−0.18 (−0.26 to −0.10)</td>
<td>−0.15 (−0.22 to −0.07)</td>
<td>−0.47 (−0.57 to −0.38)</td>
</tr>
<tr>
<td>Medium–high</td>
<td>0.51 (0.32 to 0.65)</td>
<td>0.42 (0.35 to 0.50)</td>
<td>0.74 (0.63−0.86)</td>
<td>−0.40 (−0.49 to −0.31)</td>
<td>−0.35 (−0.42 to −0.29)</td>
<td>−0.65 (−0.77 to −0.54)</td>
</tr>
</tbody>
</table>

a N = 2056. There was listwise deletion of 25 cases that were missing data on race and ethnicity, marital status, current SED score, and/or childhood SED score, which were covariates included in the regression model. Adjusted for the following variables: age (continuous), gender; race and ethnicity, marital status, current chronic disease score (continuous), current SED score (continuous) and childhood SED score (continuous).

b Obtained from the coefficients for the dummy variables in the regression representing the medium–low, medium–high, and high quartiles of childhood parental connection, using adult flourishing or adult depressive symptoms score as the dependent variable. The differences between quartiles were determined by examining regression coefficients for those with medium–low, medium–high, or high childhood parental connection relative to those with low parental connection.

CONCLUSIONS

We used data from a cross-sectional study of US adults to examine the association between childhood parental connection and adult flourishing and depressive symptoms, adjusting for demographic, socioeconomic, and health covariates. Our findings suggest that higher levels of childhood parental connection are associated with lower levels of adult depressive symptoms and higher levels of adult flourishing.

Implications

Our findings have several implications for theoretical and empirical work on childhood experiences, adult health, and well-being. First, they extend findings from framework-based research by showing that childhood positive emotional experiences, rather than the avoidance of childhood difficulties, are associated with better adult well-being. Second, they have implications for how researchers should interpret self-report measures of childhood experience. Third, they suggest that interventions aimed at improving adult flourishing should focus on early-life experiences that foster positive emotional connections.
scored. This measure of parental connection during childhood has positive associations with adult flourishing, even after adjusting for potential confounding factors including age, marital status, chronic health conditions, and SED in both childhood and adulthood. These findings suggest that, in both research and clinical practice, there is a choice to consider about how we measure and discuss the continuum between emotional neglect and parental connection.

**ABBREVIATIONS**

CI: confidence interval  
CTQ: Childhood Trauma Questionnaire  
MIDUS: Midlife in the United States study  
SAQ: self-administered questionnaires  
SED: socioeconomic disadvantage

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**REFERENCES**


![Figure 1](image-url)  
**FIGURE 1**  
Adult flourishing and depressive symptoms scores across quartiles of childhood parental connection (*N* = 2056). Points are mean (95% CI) adult flourishing (○) and depressive symptoms (□) z scores adjusted for 7 covariates: age, gender, race and ethnicity, marital status, current chronic disease score, current SED score, and childhood SED score.


13. Stevens JE. What ACEs do you have? Available at: https://acestohigh.com/get-your-ace-score/. Accessed October 23, 2023


