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

Robert C. Whitaker, MD, MPH,^{a,b,c,d} Tracy Dearth-Wesley, PhD, MPH,^{a,b,c} Allison N. Herman, MEd, MPH^{a,b,c}

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.

abstract

NIH

^aColumbia-Bassett Program, Vagelos College of Physicians and Surgeons, Columbia University, New York, New York; ^bColumbia-Bassett Program, Bassett Medical Center, Cooperstown, New York; ^cBassett Research Institute, Bassett Medical Center, Cooperstown, New York; and ^dDepartment of Pediatrics, Vagelos College of Physicians and Surgeons, Columbia University, New York, New York

Drs Whitaker and Dearth-Wesley, and Ms Herman conceptualized and designed the study, analyzed and interpreted the data, drafted the initial manuscript, and critically reviewed and revised the manuscript; and all authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work.

DOI: https://doi.org/10.1542/peds.2023-064690

Accepted for publication Dec 6, 2023

Address correspondence to Robert C. Whitaker, MD, MPH, Bassett Medical Center, 1 Atwell Rd, Cooperstown, NY 13326. E-mail: robert.whitaker@bassett.org

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2024 by the American Academy of Pediatrics

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.

To cite: Whitaker RC, Dearth-Wesley T, Herman AN. The Association of Childhood Parental Connection With Adult Flourishing and Depressive Symptoms. *Pediatrics*. 2024;153(3):e2023064690

Downloaded from http://publications.aap.org/pediatrics/article-pdf/153/3/e2023064690/1598991/peds.2023-064690.pdf by Columbia University user

The negative consequences of childhood emotional neglect have been recognized for over a half century,^{1,2} and emotional neglect can be as harmful to children as sexual abuse, physical abuse, or physical neglect.³ 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.³ 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.⁴⁻¹⁰ One of the most commonly used instruments to assess emotional neglect¹¹ is the 5-item subscale from the Childhood Trauma Questionnaire (CTQ)-Short Form,⁴ which was used to assess emotional neglect in the landmark Adverse Childhood Experiences Study¹² and in subsequent instruments based on that study.^{13,14} The 5 CTQ items are each positively worded items about connection (eg, "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.^{15,16} In contrast to studies showing an association between emotional neglect and depressive symptoms,³ several studies have shown that parent-child or family connection is associated with adult flourishing, defined as psychological or eudaimonic well-being,^{17–24} and that this association occurs even in the presence of adversity and chronic disease in childhood.^{23,24} The emphasis on parental connection rather than neglect can shift attention to children's and families' 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.²⁵⁻²⁷ 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 where obtained. During these visits, participants completed an additional SAQ.^{28,29} Our study sample (N = 2118) 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.³⁰ 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.⁴ 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;

2

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,³¹ a widely used measure of eudaimonic well-being.^{32,33} 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.³⁴ 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.²⁴ 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

Downloaded from http://publications.aap.org/pediatrics/article-pdf/153/3/e2023064690/1598991/peds.2023-064690.pdf

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,⁴ the mean (SD) score was 9.8 (4.6), and 17.5% could be classified as reporting emotional neglect during childhood (CTQ score \geq 15).³⁵ On the basis of the validated cut point of \geq 16 for the Center for Epidemiologic Studies Depression score,^{34,36-38} 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] = -0.30, 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

4

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.^{17–24} Six of these studies^{17,18,21–24} used a measure of connection from MIDUS that asked about parental attention, affection, and communication.³⁹ 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,¹² 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^{40,41} and the potential underlying mechanisms^{42,43} 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 commonrater bias could partly explain our findings. Although recall of family relationship dynamics has been shown to be accurate,⁴⁴ 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, respectfully. The strength of the associations we found may have been underestimated by controlling for certain factors,

	No. (%) in	Flourishing z Sco	re	Depressive Symptoms	z Score
Characteristic	Category ^e	Mean (95% CI)	P ^f	Mean (95% CI)	P ^f
All	2079 (100.0)	0.00 (1.00)	_	0.00 (1.00)	_
Age, y ^a			<.001		<.001
<30	51 (2.4)	-0.23 (-0.50 to 0.04)		0.30 (0.03-0.57)	
30–39	258 (12.4)	-0.17 (-0.29 to -0.05)		0.25 (0.13-0.37)	
40–49	535 (25.7)	-0.16 (-0.24 to -0.08)		0.11 (0.03-0.19)	
50–59	567 (27.3)	0.00 (-0.08 to 0.08)		0.00 (-0.09 to 0.08)	
60–69	443 (21.3)	0.16 (0.07-0.25)		-0.21 (-0.30 to -0.11)	
≥70	225 (10.8)	0.32 (0.19-0.45)		-0.20 (-0.33 to -0.07)	
Gender			.050		.004
Female	1136 (54.6)	0.04 (-0.02, 0.10)		0.06 (0.00-0.12)	
Male	943 (45.4)	-0.05 (-0.11 to 0.02)		-0.07 (-0.13 to -0.01)	
Race and ethnicity			<.001		<.001
Black, non-Hispanic	361 (17.5)	-0.14 (-0.24 to -0.04)		0.43 (0.33–0.53)	
Hispanic, any race	75 (3.6)	0.07 (-0.15 to 0.30)		-0.14 (-0.37 to 0.08)	
White, non-Hispanic	1538 (74.4)	0.05 (0.00 to 0.10)		-0.10 (-0.15 to -0.06)	
Other race, non-Hispanic	93 (4.5)	-0.25 (-0.45 to -0.05)		0.15 (-0.37 to 0.08)	
Marital status			<.001		<.001
Married	1302 (62.8)	0.10 (0.04-0.15)		-0.15 (-0.21 to -0.10)	
Divorced or separated	354 (17.1)	-0.10 (-0.20 to 0.00)		0.19 (0.08-0.29)	
Never married	309 (14.9)	-0.34 (-0.45 to -0.23)		0.42 (0.31–0.53)	
Widowed	109 (5.3)	0.14 (-0.05 to 0.32)		0.04 (-0.15 to 0.22)	
Current chronic disease score ^b			<.001		<.001
0	627 (30.2)	0.07 (0.00 to 0.15)		-0.22 (-0.29 to 0.14)	
1	613 (29.5)	0.08 (0.00-0.16)		-0.08 (-0.15 to 0.00)	
2	443 (21.3)	-0.06 (-0.15 to 0.03)		0.10 (0.01-0.19)	
3	225 (10.8)	-0.12 (-0.25 to 0.01)		0.24 (0.11–0.37)	
4–9	171 (8.2)	-0.26 (-0.41 to -0.11)		0.49 (0.34-0.64)	
Current SED score ^c			<.001		<.001
0—1	433 (20.9)	0.41 (0.32-0.50)		-0.36 (-0.45 to -0.27)	
2–3	593 (28.6)	0.24 (0.16-0.31)		-0.26 (-0.33 to -0.18)	
4—5	567 (27.3)	-0.10 (-0.17 to -0.02)		0.09 (0.01-0.17)	
6—8	483 (23.3)	-0.54 (-0.62 to -0.46)		0.53 (0.45-0.62)	
Childhood SED score ^d			<.001		<.001
0	439 (21.2)	0.17 (0.08-0.26)		-0.05 (-0.14 to 0.05)	
1	469 (22.6)	0.05 (-0.04 to 0.14)		-0.12 (-0.21 to -0.03)	
2	565 (27.2)	-0.03 (-0.11 to 0.06)		-0.03 (-0.11 to 0.05)	
3	351 (16.9)	-0.10 (-0.20 to 0.00)		0.09 (-0.01 to 0.20)	
4–6	251 (12.1)	-0.20 (-0.32 to -0.08)		0.24 (0.12-0.37)	

—, not applicable.

 $^{\rm a}$ The combined sample mean (SD) = 53.1 (12.6) years.

^b 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).

^c 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.

^d 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.

e 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 (3 cases), and childhood SED score (4 cases).

^f 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.

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.

Downloaded from http://publications.aap.org/pediatrics/article-pdf/153/3/e2023064690/1598991/peds.2023-064690.pdf by Columbia University user

TABLE 2 Association of Childhood Parental Connection With Adult Flourishing and Depressive Symptoms	Idhood Parent	al Connection With Adult Flo	ourishing and Depressive S	ymptoms			
		A	Adult Flourishing z Score		Adult	Adult Depressive Symptoms z Score	ore
Quartile of Childhood Parental Connection Score	No. (%)	Unadjusted Mean (95% CI)	Adjusted Mean (95% CI) ^a	Adjusted Difference (95% CI) ^b	Unadjusted Mean (95% CI)	Adjusted Mean (95% Cl) ^a	Adjusted Difference (95% CI) ^b
Low	539 (25.9)	-0.43 (-0.51 to -0.35)	-0.32 (-0.40 to -0.25)	Reference	0.42 (0.34–0.50)	0.32 (0.24-0.40)	Reference
Medium-low	547 (26.3)	-0.08 (-0.15 to 0.00)	-0.08 (-0.15 to 0.00)	0.24 (0.14-0.35)	0.09 (0.01-0.17)	0.11 (0.03-0.18)	-0.21 (-0.32 to -0.10)
Medium-high	546 (26.3)	0.08 (0.00-0.16)	0.07 (0.00 to 0.14)	0.39 (0.28-0.50)	-0.18 (-0.26 to -0.10)	-0.15 (-0.22 to -0.07)	-0.47 (-0.57 to -0.36)
High	447 (21.5)	0.51 (0.42–0.60)	0.42 (0.33-0.50)	0.74 (0.63-0.86)	-0.40 (-0.49, -0.31)	-0.33 (-0.42 to -0.25)	-0.65 (-0.77 to -0.54)
a N = 2056. There was listwise deletion of 23 cases that were missing data	eletion of 23 cas	ses that were missing data on re	ace and ethnicity, marital status	s, current SED score, and/or	on race and ethnicity, marital status, current SED score, and/or childhood SED score, which were covariates included in the regression model. Adjusted for	ere covariates included in the r	egression model. Adjusted for
the following variables: age (continuous), gender, race and ethnicity, marital	nuous), gender, i	race and ethnicity, marital status	s, current chronic disease score	: (continuous), current SED	status, current chronic disease score (continuous), current SED score (continuous), and childhood SED score (continuous).	od SED score (continuous).	
^b Obtained from the ß coefficients for the dummy variables in the regression representing the medium-high, and high quartiles of childhood parental connection, using adult flourishing or adult depressive symptoms z	s for the dummy	y variables in the regression rep	presenting the medium-low, mer	dium-high, and high quarti.	les of childhood parental conner	ction, using adult flourishing or	adult depressive symptoms z
score as the dependent variable. The differences between quartiles were determined by examining regression coefficients for those with medium-high, or high childhood parental connection relative to those with low parenter connection relative to those with low parenter connection relative to those with new content of the dependent variable.	The differences t	between quartiles were determir.	ned by examining regression cot	officients for those with me	dium-low, medium-high, or high	i childhood parental connection	relative to those with low pa-
rental connection.							

Implications

Our focus on the association of childhood parental connection and positive adult outcomes aligns with emerging frameworks that recognize the importance of positive childhood experiences, with adult-child relationships being central to children's healthy development.^{15,16} Our findings support these frameworks by showing how the opportunity for childhood parental connection, rather than the avoidance of emotional neglect, may contribute to the life course development of flourishing, where the term flourishing refers to eudaimonic well-being. This view of flourishing as eudaimonic well-being does not preclude the possibility of positive emotions and life satisfaction.³³ However, it allows parents and pediatricians to consider together how parental connection, in the face of the challenges inherent in life, may contribute to the development of purpose, self-acceptance, and growth.^{23,24,45,46}

It may be possible to overcome the long-standing "neglect of neglect"47-50 and improve children's well-being by focusing more on increasing parents' connection with children and less on preventing emotional neglect. As we have learned more about the negative long-term consequences of adverse childhood experiences,^{51,52} researchers and clinicians interested in children's well-being are understandably caught between the competing demands of improving children's well-being and protecting them from avoidable harms. Amid these demands, parents and children may benefit from more emphasis on the opportunities for greater parental connection and the potential positive consequences.^{53,54} Furthermore, the satisfaction of both parents and pediatricians might be improved by focusing on the strengths and aspirations of children, parents, and families rather than on their limitations and the potential harms.^{55,56}

At the mechanistic level, we now understand that the social nervous system requires the affordance of adult connection to reach its developmental potential,⁵⁷ and our data suggest that more adult connection in childhood may mean more flourishing in adulthood. To improve child well-being at the population level, research is needed to better understand what kinds of connection matter most for children at different stages of development and facing different types of adversity and how to best support parents in creating those connections. For children and adolescents, for example, the framework of developmental relationships may be helpful.^{58,59} A more solution-oriented view toward the development of well-being would suggest taking a closer look at the positive effects of certain nurturing commissions than on the negative impact of their omission.

CONCLUSIONS

Using data from a cross-sectional study of US adults, we have shown that the CTQ, a widely used measure of emotional neglect, can also be used as a measure of parental connection if its 5 positively worded items are not reversed

6

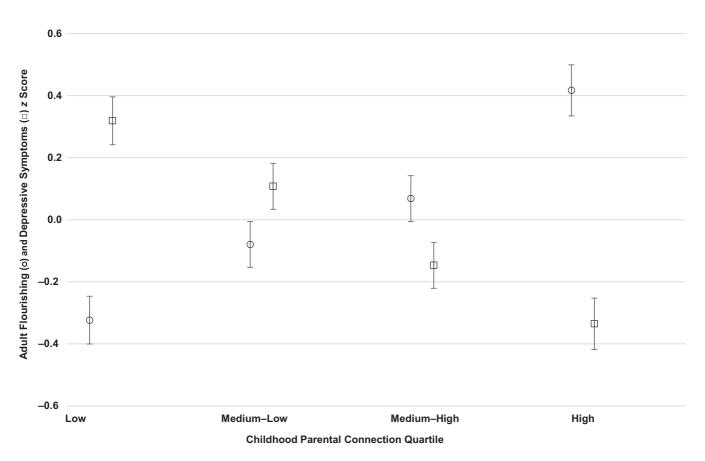


FIGURE 1

Adult flourishing and depressive symptoms scores across quartiles of childhood parental connection (N = 2056). Points are mean (95% Cl) adult flourishing (\bigcirc) and depressive symptoms (\square) z scores adjusted for 7 covariates: age, gender, race and ethnicity, marital status, current chronic disease score, current SED score, and childhood SED score.

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

FUNDING: No external funding. Publicly available data from the Midlife in the United States study were used for this research. Since 1995, the Midlife in the United States study has been funded by the following: John D. and Catherine T. MacArthur Foundation Research Network, National Institute on Aging (P01-AG020166) and National Institute on Aging (U19-AG051426).

CONFLICT OF INTEREST DISCLOSURES: The authors have indicated they have no conflicts of interest relevant to this article to disclose.

REFERENCES

- 1. Mulford RM. Emotional neglect of children: a challenge to protective services. *Child Welfare*. 1958;37(8):19-24
- Fontana VJ, Donovan D, Wong RJ. The maltreatment syndrome in children. N Engl J Med. 1963;269(26):1389–1394
- Humphreys KL, LeMoult J, Wear JG, Piersiak HA, Lee A, Gotlib IH. Child maltreatment and depression: a meta-analysis of studies using the Childhood Trauma Questionnaire. *Child Abuse Negl.* 2020;102:104361
- Bernstein DP, Stein JA, Newcomb MD, et al. Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse Negl.* 2003;27(2):169–190

Downloaded from http://publications.aap.org/pediatrics/article-pdf/153/3/e2023064690/1598991/peds.2023-064690.pdf by Columbia University user

- 5. Gibb BE, Alloy LB, Abramson LY, et al. History of childhood maltreatment, negative cognitive styles, and episodes of depression in adulthood. *Cognit Ther Res.* 2001;25(4):425–446
- Engels M-L, Moisan D. The Psychological Maltreatment Inventory: development of a measure of psychological maltreatment in childhood for use in adult clinical settings. *Psychol Rep.* 1994; 74(2):595–604
- Rohner R, Khaleque A. Handbook for the Study of Parental Acceptance and Rejection, Revised Ed. Storrs, CT: University of Connecticut, Center for the Study of Parental Acceptance and Rejection; 2005
- 8. Maggiora Vergano C, Lauriola M, Speranza AM. The Complex Trauma Questionnaire (ComplexTQ): development and preliminary psychometric properties of an instrument for measuring early relational trauma. *Front Psychol.* 2015;6:1323
- Salokangas RK, Schultze-Lutter F, Patterson P, et al. Psychometric properties of the Trauma and Distress Scale, TADS, in an adult community sample in Finland. *Eur J Psychotraumatol.* 2016;7(1):30062
- Teicher MH, Parigger A. The 'Maltreatment and Abuse Chronology of Exposure' (MACE) Scale for the retrospective assessment of abuse and neglect during development. *PLoS One.* 2015;10(2): e0117423
- Baker AJ. Adult recall of childhood psychological maltreatment: definitional strategies and challenges. *Child Youth Serv Rev.* 2009; 31(7):703–714
- 12. Dong M, Anda RF, Felitti VJ, et al. The interrelatedness of multiple forms of childhood abuse, neglect, and household dysfunction. *Child Abuse Negl.* 2004;28(7):771–784
- Stevens JE. What ACEs do you have? Available at: https://acestoohigh. com/got-your-ace-score/. Accessed October 23, 2023
- Cronholm PF, Forke CM, Wade R, et al. Adverse childhood experiences: expanding the concept of adversity. Am J Prev Med. 2015;49(3):354–361
- Sege RD, Harper Browne C. Responding to ACEs with HOPE: health outcomes from positive experiences. *Acad Pediatr.* 2017;17(7S): S79–S85
- 16. Garner A, Yogman M. Committee on Psychosocial Aspects of Child and Family Health, Section on Developmental and Behavioral Pediatrics, Council on Early Childhood. Preventing childhood toxic stress: partnering with families and communities to promote relational health. *Pediatrics*. 2021;148(2):e2021052582
- 17. An JS, Cooney TM. Psychological well-being in mid to late life: the role of generativity development and parent–child relationships across the lifespan. *Int J Behav Dev.* 2006;30(5):410–421
- 18. Chen Y, Kubzansky LD, VanderWeele TJ. Parental warmth and flourishing in mid-life. *Soc Sci Med.* 2019;220:65–72
- Huppert FA, Abbott RA, Ploubidis GB, Richards M, Kuh D. Parental practices predict psychological well-being in midlife: life-course associations among women in the 1946 British birth cohort. *Psychol Med.* 2010;40(9):1507–1518
- Lee LO, Aldwin CM, Kubzansky LD, et al. Do cherished children age successfully? Longitudinal findings from the Veterans Affairs Normative Aging Study. *Psychol Aging.* 2015;30(4):894–910

- Moran KM, Turiano NA, Gentzler AL. Parental warmth during childhood predicts coping and well-being in adulthood. *J Fam Psychol.* 2018;32(5):610–621
- 22. Rothrauff TC, Cooney TM, An JS. Remembered parenting styles and adjustment in middle and late adulthood. *J Gerontol B Psychol Sci Soc Sci.* 2009;64(1):137–146
- 23. Whitaker RC, Dearth-Wesley T, Herman AN, Nagel KE, Smith HG, Weil HFC. Association of childhood family connection with flourishing in young adulthood among those with type 1 diabetes. JAMA Netw Open. 2020;3(3):e200427
- 24. Whitaker RC, Dearth-Wesley T, Herman AN. Childhood family connection and adult flourishing: associations across levels of childhood adversity. *Acad Pediatr.* 2021;21(8):1380–1387
- University of Wisconsin, Madison, Institute on Aging. History and overview of MIDUS. Available at: http://midus.wisc.edu/scopeofstudy. php#History. Accessed October 23, 2023
- MIDUS. Sample flow across projects, sociodemographics, and response rates (all waves). Available at: https://www.midus.wisc.edu/ findings/Understanding_Data_Collection_in_MIDUS.pdf. Accessed October 23, 2023
- University of Wisconsin, Madison, Institute on Aging. MIDUS data timelines. Available at: https://www.midus.wisc.edu/data/timeline. php. Accessed October 23, 2023
- University of Wisconsin, Madison, Institute on Aging. Project 4–Biomarker Project. Available at: https://midus.wisc.edu/midus2/ project4/. Accessed October 23, 2023
- Institute for Social Research, University of Michigan. Midlife in the United States (MIDUS Refresher 1): Biomarker Project, 2012–2016. Available at: https://www.icpsr.umich.edu/web/ICPSR/studies/36901. Accessed October 23, 2023
- Dienberg Love G, Seeman TE, Weinstein M, Ryff CD. Bioindicators in the MIDUS national study: protocol, measures, sample, and comparative context. *J Aging Health.* 2010;22(8):1059–1080
- Ryff CD. Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *J Pers Soc Psychol.* 1989; 57(6):1069–1081
- Ryan RM, Deci EL. On happiness and human potentials: a review of research on hedonic and eudaimonic well-being. *Annu Rev Psychol.* 2001;52(1):141–166
- Huta V, Waterman AS. Eudaimonia and its distinction from hedonia: developing a classification and terminology for understanding conceptual and operational definitions. *J Happiness Stud.* 2014;15(6): 1425–1456
- Radloff LS. The CES-D Scale: a self-report depression scale for research in the general population. *Appl Psychol Meas*. 1977;1(3):385–401
- 35. Bernstein D, Fink L. Childhood Trauma Questionnaire: A Retrospective Self-Report Questionnaire and Manual. San Antonio, TX: xxxx; 1998
- 36. Spitzer RL, Endicott J, Robins E. Research diagnostic criteria: rationale and reliability. *Arch Gen Psychiatry*. 1978;35(6):773–782
- Roberts RE, Vernon SW. The Center for Epidemiologic Studies Depression Scale: its use in a community sample. *Am J Psychiatry*. 1983;140(1):41–46

- Myers JK, Weissman MM. Use of a self-report symptom scale to detect depression in a community sample. *Am J Psychiatry*. 1980; 137(9):1081–1084
- Rossi A. Caring and Doing for Others: Social Responsibility in the Domains of Family, Work, and Community. Chicago, IL: The University of Chicago Press; 2001
- 40. Gardner MJ, Thomas HJ, Erskine HE. The association between 5 forms of child maltreatment and depressive and anxiety disorders: a systematic review and meta-analysis. *Child Abuse Negl.* 2019;96:104082
- Norman RE, Byambaa M, De R, Butchart A, Scott J, Vos T. The long-term health consequences of child physical abuse, emotional abuse, and neglect: a systematic review and meta-analysis. *PLoS Med.* 2012;9(11):e1001349
- Braquehais MD, Picouto MD, Casas M. The psychobiological consequences of emotional neglect. In: Spiteri Y, Galea E, eds. *Psychology of Neglect*. Hauppauge, NY: Nova Science Publishers, Inc; 2012:123–138
- Glaser D. Emotional abuse and neglect (psychological maltreatment): a conceptual framework. *Child Abuse Negl.* 2002;26(6-7):697–714
- Brewin CR, Andrews B, Gotlib IH. Psychopathology and early experience: a reappraisal of retrospective reports. *Psychol Bull.* 1993; 113(1):82–98
- Ivtzan I, Lomas T, Hefferon K, Worth P. Second Wave Positive Psychology: Embracing the Dark Side of Life. New York, NY: Routledge; 2015
- Ryff CD, Singer B. Flourishing under fire: resilience as a prototype of challenged thriving. In: Keyes CLM, Haidt J, eds. *Flourishing: Positive Psychology and the Life Well-Lived.* Washington, D.C.: American Psychological Association; 2003:15–36
- Wolock I, Horowitz B. Child maltreatment as a social problem: the neglect of neglect. Am J Orthopsychiatry. 1984;54(4):530–543
- 48. Berliner L. The problem with neglect. *J Interpers Violence*. 1994; 9(4):556

- 49. Dubowitz H. Neglecting the neglect of neglect. *J Interpers Violence*. 1994;9(4):556–560
- McSherry D. Understanding and addressing the "neglect of neglect": why are we making a mole-hill out of a mountain? *Child Abuse Negl.* 2007;31(6):607–614
- Hughes K, Bellis MA, Hardcastle KA, et al. The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *Lancet Public Health*. 2017;2(8):e356–e366
- Petruccelli K, Davis J, Berman T. Adverse childhood experiences and associated health outcomes: a systematic review and metaanalysis. *Child Abuse Negl.* 2019;97:104127
- 53. Bethell C, Jones J, Gombojav N, Linkenbach J, Sege R. Positive childhood experiences and adult mental and relational health in a statewide sample: associations across adverse childhood experiences levels. *JAMA Pediatr*. 2019;173(11):e193007
- 54. Sege RD. Reasons for HOPE. *Pediatrics*. 2021;147(5):e2020013987
- 55. Harper Browne C. The strengthening families approach and protective factors framework: a pathway to healthy development and well-being. In: Shapiro CJ, Harper Browne C, eds. *Innovative Approaches to Supporting Families of Young Children*. Switzerland: Springer International Publishing; 2016:1–24
- Brito A, Boller K. Changing the pediatric paradigm: focusing on strengths. *Pediatr Clin North Am.* 2020;67 (2):247–258
- Cozolino L. The Neuroscience of Human Relationships: Attachment and the Developing Social Brain, 2nd ed. New York, NY: W. W. Nortan & Company, Inc.; 2014
- Li J, Julian MM. Developmental relationships as the active ingredient: a unifying working hypothesis of "what works" across intervention settings. Am J Orthopsychiatry. 2012;82(2):157–166
- Scales PC, Roehlkepartain EC, Houltberg BJ. The Elements of Developmental Relationships: A Review of Selected Research Underlying the Framework. Minneapolis: Search Institute; 2022

Downloaded from http://publications.aap.org/pediatrics/article-pdf/153/3/e2023064690/1598991/peds.2023-064690.pdf