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Thriving in midlife: The roles of childhood nurturance and adult defense mechanisms

Michael D. Nevarez, M.D.¹, Melinda I. Morrill, Ph.D.¹, and Robert J. Waldinger, M.D.¹

¹Harvard Study of Adult Development, Massachusetts General Hospital, Harvard Medical School, Boston, MA

Abstract

The current study examined whether reliance on more adaptive defense mechanisms throughout early adulthood may help explain previously documented relationships between childhood nurturance and better midlife functioning. Utilizing a unique longitudinal study, data were from age 18 through midlife (age 63) on 135 males. Childhood nurturance was assessed upon study entry and defense mechanism usage was assessed throughout earlier adulthood. Percentage of ‘engaging’ (more adaptive) vs. ‘avoidant’ (less adaptive) defenses mediated the relationship between childhood nurturance and 3 midlife outcomes: participants’ relationship quality with their children, marriage stability, and maximum earned income. Results suggest that greater childhood nurturance relates to more adaptive defensive styles in early adulthood, which is then associated with healthier midlife functioning at work and in relationships.

1. Introduction

Studies have documented connections between nurturing childhood environments and more adaptive adult functioning, as emphasized in an Institute of Medicine report (Institute of Medicine, 2009). Higher levels of childhood nurturance are associated with better romantic relationships (Waldinger & Schulz, 2016) and buffer against the effects of childhood poverty on midlife health (Miller et al., 2011). In addition, lack of nurturance predicts worse mental and physical health (Repetti, Taylor, & Seeman, 2002), more substance abuse (Repetti et al., 2002), and higher job-related stress in adulthood (Hintsanen et al., 2010). Healthy emotion processing styles have been proposed as one mechanism by which nurturing childhood environments may foster adaptive adult functioning (Repetti, Robles, & Reynolds, 2011). Using rare prospectively collected data spanning adolescence to midlife, the present study

Location of work and address for reprints: Massachusetts General Hospital, Harvard Study of Adult Development, 151 Merrimac St, 2nd Floor, Boston, MA 02114, Email address for corresponding author: mnevarez@partners.org.

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examines the role of defense mechanisms – a subset of emotion processing styles – in the association of childhood experiences with adult functioning.

Compared with the childhood antecedents of early adulthood, childhood predictors of midlife functioning have received relatively little research attention, despite midlife being a significant stage for familial and professional life, as well as a key inflection point for subsequent aging. Most studies of the antecedents of adult functioning rely on middle-aged adults' recollections of childhood or use prospectively-collected data that do not reach into midlife. To our knowledge, no prospective studies have incorporated data on childhood experience, earlier adult emotion processing styles, and midlife functional outcomes in multiple domains. This combination of longitudinal data is crucial to examine proposed pathways from childhood experience to major areas of midlife functioning. Using information spanning 45 years, we sought to examine how levels of nurturance in childhood may predict midlife functioning, and how the adaptiveness of defense mechanisms may mediate this link.

1.1 The role of nurturance

In a nurturing family, children can count on the environment to provide for their emotional security, physical safety and well-being, and they acquire strategies that will eventually allow them to maintain emotional and physical health independent of caregivers (Repetti et al., 2002). Such an environment allows for critical interpersonal experiences that shape the development of effective emotion management styles. Thus, childhoods marked by positive maternal (Chopik, Moors, & Edelstein, 2014) and/or paternal (Schwartz & Finley, 2006) nurturance are associated with more adaptive emotion regulation and better adult interpersonal functioning. Similarly, cross-sectional studies of healthy emotion regulation are associated with better interpersonal functioning (Brennan & Shaver, 1995), higher income, and wealth (Côté, Gyurak, & Levenson, 2010). In addition, healthier childhood emotion regulation prospectively predicted less substance dependence and crime, and better personal finances (Moffitt et al., 2011).

1.2 The role of defense mechanisms

Emotion regulation encompasses a broad range of processes responsible for monitoring and altering aspects of emotional experiences. Defense mechanisms are a subset of these regulatory processes that are largely outside of awareness and are directed particularly at modulating internal distress. More adaptive defense mechanisms have been linked prospectively with better late-life health (Malone, Cohen, Liu, Vaillant, & Waldinger, 2013), higher adult work satisfaction (Larsen et al., 2010), and greater security of attachment to spouses (Waldinger, Cohen, Schulz, & Crowell, 2015). Empirical research demonstrates that defenses develop in predictable ways across the lifespan (Costa et al., 1991), are stable throughout adulthood (Vaillant, 2000), and are related to one's affective wellbeing (Cramer, 2008). Research suggests that parents' defenses shape children's emotional development. For example, Porcerelli (2016) found that healthier maternal defense mechanisms during pregnancy predicted better attachment security, social-emotional competence, and less problematic behavior in their toddlers.

In addition, more nurturing childhood environments are associated with more adaptive (mature) defense mechanism use in midlife (Martin-Joy et al., 2017). Defenses are often categorized as adaptive or maladaptive based on the degree to which they facilitate engagement with the reality of an experience or support the avoidance or distortion of reality (Waldinger & Schulz, 2010). Defensive maneuvers such as minimizing, denying, or distorting threatening information bring short-term reduction of anxiety at the potential cost of longer-term dysfunction. From this perspective, a defense such as repression—dealing with an uncomfortable reality by banishing it from awareness—can be relieving in the moment but detrimental over time. On the other hand, suppression allows a person to compartmentalize temporarily an anxiety-provoking situation to protect current functioning, but to return later to address the concern at an appropriate time. Repression would therefore be considered an avoidant defense, and suppression a more engaging defense. The current study utilizes this categorization of engaging and avoidant defenses to explore midlife outcomes.

1.3 The present study

We utilized prospectively-collected data to examine associations of childhood nurturance with midlife functioning in three major domains of adult life – parental relationships, romantic relationships, and work. We hypothesized that greater childhood nurturance would predict more adaptive functioning at work (as indexed by earned income) and more satisfying relationships with spouses and children in midlife, and that these links would be mediated by reliance on more adaptive defenses earlier in adulthood.

2. Method

2.1 Participants

Between 1939 and 1942, 268 male college sophomores (ages 18–19) were recruited for an intensive multidisciplinary study (Vaillant, 2000). These students were selected for exemplary mental and physical health based on college entrance examinations and their deans' perceptions. All were white; 50% were on scholarships or worked during college; 64% eventually obtained graduate degrees. In adult life most worked as physicians, lawyers, university professors, or business executives. The students' parents were interviewed and extensive family, social, and medical histories were obtained. On entering the study, the men were assessed by internists, psychiatrists, psychologists, and anthropologists. Participants completed questionnaires every 2 years thereafter, and were re-interviewed by study staff at approximately ages 30 and 45. Of the original study group of 268 men, 12 dropped out of the study during college and 8 were killed in World War II. The 135 participants who had complete data from early childhood, defense mechanism ratings between ages 18 to 47, and midlife outcomes (> age 50) in relational and earned income domains were included in the current study based on the availability of these measures. T-tests indicated that these 135 participants did not differ significantly from the 133 for whom complete data were not available on the following measures: IQ, childhood social class, lifetime history of alcohol dependence, diagnosis of a depressive disorder, relationship quality with their children (ages 50–63), marriage stability (age 50), and maximum earned income (age 55). T-tests indicated differences in two measures, both with medium effect sizes: 1) childhood nurturance ($t =$

–2.96, $p < .01$; Cohen's $d = 0.37$), with the study sample showing slightly higher levels of nurturance ($M = 11.73$, $SD = 4.59$) than those not in the analyses ($M = 10.13$, $SD = 4.04$), and 2) percentage of engaging defense mechanisms in earlier adulthood (ages 18–47) ($t = -2.55$, $p = .01$; Cohen's $d = 0.33$), with the study sample showing slightly higher percentage of engaging defenses ($M = 0.32$, $SD = 0.06$) than those not included in analyses ($M = 0.30$, $SD = 0.06$). Using regression-based power estimates for 135 participants (Cohen, 1988), we had .99 power to detect large effects ($r_{\text{effect}} > .50$), .90 power to detect medium effects ($r_{\text{effect}} > .30$), and are underpowered to detect small effects ($r_{\text{effect}} > .10$) (Cohen, 1988). Links between early family social environments and adult emotion processing and health outcomes reveal small-to-medium ($r_{\text{effect}} > .20$) to medium ($r_{\text{effect}} < 0.50$) effect size ranges (Repetti et al., 2002). All procedures involved with the study were reviewed and approved by the Partners Human Research Committee.

2.2 Measures

2.2.1 Childhood Nurturance—Two independent raters assessed the quality of each participant's relationship with parents and the overall nurturance in the childhood home environment after reviewing the following data: psychiatrist's and family worker's notes on the participant's reports of his home life; family worker's interviews with parents in the home; and a developmental history obtained from parents by the family worker. Four measures from this early assessment were created by study staff: 1) relationship quality with participant's mother (0=distant, hostile, or smothering; 1=average; and 2=nurturing, encouraged positive autonomy, fostered self-esteem), 2) relationship quality with participant's father (0=distant, hostile, or smothering; 1=average; and 2=nurturing, encouraged positive autonomy, fostered self-esteem), 3) general warmth and cohesiveness of the participant's home atmosphere with emphasis on interactions between the parents (0=poor, non-congenial home, lack of family cohesiveness; 1=average; 2=warm, cohesive), and 4) a global impression by the interviewer regarding the level of nurturance and positive aspects of participant's childhood environment (both inside and outside of the home) given all of the information reviewed (0=poor, negative, non-nurturing environment; 1=average; 2=positive and healthy early environment). The two coders' ratings were added and adjusted (each summed score raised by 1), resulting in a scale of 1–5 for each of the four measures. An overall composite of early childhood nurturance was made by summing the four measures (4=worst score; 20=best score). Inter-rater reliability for these childhood measures has been found to be good ($r = 0.71$) (Vaillant GE, 1974), and predictive validity for these variables has been supported in prior studies (McLaughlin et al., 2010; Waldinger, Vaillant, & Orav, 2007).

2.2.2 Defense Mechanisms in Earlier Adulthood, Ages 18 to 47—Defense mechanisms were identified using vignettes taken from multiple interview transcripts between the ages of 18 and 47. Each participant was interviewed for an average of 3–4 hours at three points in time by study staff: during college, and at approximately ages 30 and 45. From each of the 3 interviews at their respective times, 20–30 page summaries were made of the interaction, which included verbatim content and numerous direct quotations from the participant. Interview protocols were designed to focus on challenges in participants'

relationships, health, and work, and to elicit descriptions of behaviors used to cope with these challenges (Vaillant, 1992).

Fifteen individual defenses were assessed by three independent raters blind to other information about participants. Raters identified 10–30 vignettes across the 3 interview transcripts illustrating coping styles during challenging times. Since there were a limited number of vignettes describing challenging situations at any given interview time point, the rating of the defenses was done across all 3 time points to have adequate data available to assess the presence (or absence) of 15 separate defenses. Therefore, our defense rating spans 3 interviews that took place during the ages of 18 and 47. Coders gave each vignette a single rating for the best-fitting defense based on the coding manual developed by Vaillant (Vaillant, 1992). These codes were then tallied and given the following scores based on the frequency with which each defense appeared across all vignettes: 1 = no significant vignettes noted illustrating this defense; 2 = defense evident in at least 1 vignette; 3 = evident in at least 2 or 3 vignettes; and 4 = evident in at least 4 or more vignettes, or if no defense was rated this frequently, the two or three most frequently used individual defenses were rated 4. Inter-rater reliability for these frequency ratings have ranged from $r = .72$ to $.84$ (Vaillant, 1992). These ratings have shown good external validity, with more mature defenses predicting better outcomes in late life in the domains of physical health (Malone et al., 2013), well-being (Waldinger & Schulz, 2010), and spousal relationships (Waldinger et al., 2015). This defense mechanism assessment was an early theoretical contribution to the DSM-IV Defensive Functioning Scale (Perry et al., 1998) and shares the interview-based method of rating defenses as they emerge (Porcerelli, Cogan, Markova, Miller, & Mickens, 2011).

We followed a similar approach as existing research by re-categorizing defenses based on the degree to which they represented avoidance or engagement with stressful phenomena (Waldinger & Schulz, 2010). Avoidant defenses included most of the defenses labeled immature or neurotic in Vaillant's defense hierarchy (Vaillant, 1992): acting out, displacement, dissociation, hypochondriasis, isolation of affect, passive aggression, projection, reaction formation, and repression. Psychosis and schizoid fantasy were not included insofar as they represented a clear break from reality and were deemed qualitatively different from other ways of managing emotion. Engaging defenses were ones in which individuals appeared to be making efforts to manage uncomfortable emotions without disengaging from the stressful source of those emotions. Except for altruism, engaging defenses included all those labeled mature in the Vaillant hierarchy: anticipation, humor, sublimation, and suppression. Altruism was excluded from this grouping because it did not involve direct engagement with uncomfortable stimuli. Validity of the defense ratings and Vaillant's hierarchy is supported by concurrent links with overall mental health (Vaillant, 1994).

Overall scores for avoidant and engaging defenses were calculated by summing the ratings reflecting the number of times these defenses appeared in interview vignettes. Because the number of vignettes analyzed and the number of defenses identified varied across participants, the percentage of engaging defenses out of total defenses was computed

(=engaging defenses divided by sum of engaging plus avoidant defenses) and used in analyses.

2.2.3 Participant's Relationship Quality with Children, Ages 50 to 63—Two independent raters used the following information collected between ages 50 and 63 for this measure: interview transcripts in which participants were asked about their relationship with each child, vignettes that mentioned the participant's children, and participant's open-ended responses to questionnaire items about their children. Relationship quality was scored for each man's two oldest children assessed by both raters on a 4-point scale: 1) father rejects or shows no interest in child, 2) father does not seem to know child, very little communication between them, not especially supportive of child, 3) supportive and positive relationship; closeness not striking but not a poor or negative relationship, and 4) very supportive with consistent interest in the child, many activities together and consistent communication. If the participant had at least 2 children, the ratings for each child were averaged and the totals were summed for a range of 2–8 points. If only one child was rated, the score for that child was doubled.

2.2.4 Marriage Stability, Age 50—A self-report questionnaire at age 50 asked about marriage stability with the prompt, 'Separation or divorce has been considered,' with 4 responses coded as – 1) *accomplished*, 2) *seriously*, 3) *only casually*, and 4) *never*. The same question was also asked of participants' spouses the following year. Supporting the validity of this item, participant responses in our study sample were significantly correlated with spousal report ($r = 0.76, p < .001$) for the 93 dyads where both partners reported this information, albeit these outcomes were assessed one year apart. (Of note, the 93 spouses who provided this information were not part of the original study cohort, and therefore measures of their childhood nurturance and defense mechanism ratings are not available.)

2.2.5 Maximum Earned Income, Age 55—Biennial self-report questionnaires collected earned income values for participants during midlife. Self-reported earned income at age 55 (1977) was used to index midlife work functioning. If age 55 questionnaire data were unavailable, the highest earned income value was taken from either the age 53 or age 57 questionnaires and adjusted for inflation recorded in thousands of 1977 dollars.

2.3 Data Analysis

Distributions for all variables of interest were examined for normality. All measures exhibited normality except for marriage stability and maximum earned income. Marriage stability was negatively skewed due to many reporting stable marriages; therefore, a reciprocal root transformation was used (after reverse scoring). Maximum earned income was positively skewed due to a few very high earners, and a log10 transformation was used. Means, standard deviations, and Pearson correlations (2-tailed) were then examined. Finally, hierarchical linear regression models were tested to analyze whether engaging defenses mediated links between childhood nurturance and midlife outcomes. Analyses were conducted using IBM SPSS version 23 utilizing bias-corrected bootstrapping via the PROCESS for SPSS v2.13.2 macro by Andrew F. Hayes (Hayes, 2013). Mediation analyses assessed the strength of mediation by the size of the indirect effect, not solely by the

resultant lack of a direct effect. To assess the strength of an indirect effect, we utilized the 'kappa-squared' index from the PROCESS output. This index is defined as the ratio of the indirect effect relative to its maximum possible value in the data; it is bounded between 0 and 1, with a value closer to 1 representing a larger indirect effect (Preacher & Kelley, 2011).

3. Results

3.1 Bivariate correlations

Means, standard deviations, and correlations among variables of interest are presented in Table 1. We found a statistically significant association between childhood nurturance and engaging defenses, as well as between engaging defenses and each midlife outcome. These Pearson correlation coefficients represented medium effect sizes based on guidelines given by Cohen for the social and behavioral sciences (Cohen, 1988), which we had adequate power to detect. We also found significant correlations between childhood nurturance and mid-life relationship quality with own children ($r = 0.22$, $p = 0.03$), and between childhood nurturance and maximum earned income ($r = 0.23$, $p = 0.02$), both representing small-to-medium effect sizes. Midlife outcomes were not significantly intercorrelated, except for a correlation between relationship quality with own children and earned income ($r = 0.22$, $p = 0.01$).

3.2 Mediation models

Our models examined the percentage of engaging defenses in earlier adulthood as a mediator of the link between childhood nurturance and midlife functional outcomes. Bias-corrected bootstrap confidence intervals for the indirect effects based on 10,000 bootstrap samples were significant and are presented in Figure 1. The relationship between childhood nurturance and participants' relationship with their children at midlife was mediated by percent of engaging defense mechanisms used in earlier adulthood, accounting for 14.4% of the variance ($p < .001$). The indirect effect of childhood nurturance on participants' relationship with their children through engaging defenses was statistically significant. Utilizing the Preacher and Kelly method for estimating indirect effect size measures for mediation models (Preacher & Kelley, 2011), this represented a relatively small effect size, $\kappa^2 = 0.10$, 95% BCa CI [0.04, 0.19]. This is consistent with the hypotheses that those participants who experienced greater nurturance in their families of origin would exhibit more engaging defense mechanisms in midlife, and that this in turn would be associated with reports of better relationships with their children.

The relationship between childhood nurturance and midlife marriage stability was mediated by percentage of engaging defense mechanisms used in earlier adulthood, accounting for 7.3% of the variance ($p < .01$). The indirect effect of childhood nurturance on marriage stability through engaging defenses was also significant, and represented a relatively small effect size, $\kappa^2 = 0.07$, 95% BCa CI [0.02, 0.15]. This is consistent with the hypothesis that participants from more nurturing families of origin who used more engaging defenses as adults would report greater midlife marriage stability.

Finally, the relationship between childhood nurturance and maximum earned income in midlife was mediated by percentage of engaging defense mechanisms used in earlier adulthood, accounting for 16.8% of the variance ($p = .001$). The indirect effect was also significant, representing a relatively small effect size, $\kappa^2 = 0.11$, 95% BCa CI [0.05, 0.20] and is consistent with the hypothesis that healthier childhood nurturance is associated with higher maximum earned income in midlife through an association with more engaging defense mechanisms in adulthood.

4. Discussion

A common understanding is that early life experiences affect later adult functioning, but potential mechanisms for this relationship are unclear. The goal of this study was to investigate whether midlife functioning was linked with early nurturing environments, and whether these associations were mediated by adaptiveness of defenses. Consistent with previous findings, early childhood nurturance was positively correlated with adult engaging defenses, the mature coping styles that effectively regulate negative emotional experiences (Thienemann, Shaw, & Steiner, 1998). This is consistent with the view that young children develop emotion regulation through sensitive caregiver relationships. As caregivers appropriately respond to the young child's proximity-seeking behaviors – such as crying and smiling – the foundation for their emotional and behavioral regulation systems is established (Porcerelli et al., 2016). Our findings are also consistent with the hypothesis that greater reliance on adaptive defenses represents a mechanism by which early childhood nurturance impacts major domains of functioning in midlife: positive relationships with one's children, strong marital relationships, and earned income. Each of these is discussed in turn below.

Our data support the hypothesis that a nurturing familial environment in childhood has an indirect effect on adult positive relationship quality with one's own children decades later through engaging defenses. This highlights the central importance of emotion processes, and that family-of-origin relationships tend to be repeated across generations through affective pathways (Bridgett, Burt, Edwards, & Deater-Deckard, 2015). Lomanowska et al. (2015) described how the intergenerational transmission of impaired parenting passes through complex interdependent pathways between the impact of early adversity on young sensitive brains and resulting emotional and behavioral dysregulation that persists through adulthood.

Couples research has also linked family-of-origin experiences to adult romantic relationships (Collins & Read, 1990). Our findings are consistent with previous research findings that nurturing parenting in childhood was positively associated with loving adult romantic relationships, mediated by attachment style and self-control (Simons, Simons, Landor, Bryant, & Beach, 2014). Research has also found that high levels of avoidance mediated associations between negative childhood experiences and adult romantic relationship difficulties (McCarthy & Taylor, 1999).

Past research has indicated that emotion regulation is linked with higher income and other socioeconomic indicators (Côté et al., 2010; Moffitt et al., 2011), similar to our finding that engaging defenses mediated the association between childhood nurturance and mid-life earned income. Emotional skills gained from nurturing caregivers may facilitate effective

interactions with co-workers, stronger interpersonal work relationships, promotion, and increased compensation (Grandey, 2000). Research also suggests that social and emotional intelligence is as important to professional functioning as aspects of cognitive functioning such as IQ (Goleman & Boyatzis, 2008).

The finding that links among early childhood nurturance and three major domains of adult functioning are mediated in part by adaptive defenses, even with small effect sizes, suggests a powerful target both for preventative and tertiary interventions. Although childhood nurturance cannot be re-done and defense styles are primarily involuntary, promising interventions have been developed to decrease individual's avoidant reactivity to negative stimuli and to increase mindful and accepting approaches toward difficult internal and external experiences (Hayes, Luoma, Bond, Masuda, & Lillis, 2006). Moreover, our results support findings from prospective research on long-term dynamic psychotherapy that adaptive changes in defense mechanism usage may mediate long-term improvement in patient outcomes (Perry & Bond, 2012). These interventions could offer the possibility of adapting emotion processing styles to foster more positive well-being in mid-life.

There are several limitations to this study, which should be noted. First, the sample was fairly homogenous and may not be generalizable to non-college educated populations, women, or other generations. However, many participants were on scholarship and work-study during college, reflecting some socioeconomic diversity. In addition, the original cohort from which this study sample is drawn were selected based on their deans' positive perceptions, which may have restricted the variability in both the predictors and the outcomes. The current study was also underpowered to detect small effect sizes because our sample size was limited by the availability of data for all measures examined in this rare longitudinal cohort. Furthermore, information about childhood nurturance was obtained from both participants and their parents when participants were ages 18–19 and not prospectively throughout childhood.

This study also did not utilize the full DSM-IV defensive functioning scale to assess defenses, although as discussed above, the method used was a theoretical precursor to the DSM diagnostic axis (Perry et al., 1998) and similar to other recent methods of assessing defenses in empirical research (Porcerelli et al., 2016). Nevertheless, our defense mechanism measure has important limitations, notably that the rating of a single defense per vignette may be restrictive (i.e., each vignette was assigned a single rating for the best-fitting defense), and the numerical rating system is unique to this method. In addition, due to relatively small numbers of vignettes available for coding defense mechanisms in each interview (i.e., at ages 18, 30, and 45), the defense mechanism measure aggregated vignettes across a large age range (18 to 47). This may limit its accuracy and does not allow for tracking change in defensive processes that may occur during those ages (e.g., living independently, marriage, raising children, etc.). In addition, due to the small numbers of vignettes, we were not able to analyze data from the three interviews as three separate repeated measures within the ages 18 to 47 timeframe. Previous studies (Vaillant, 2000) have suggested that defenses are relatively stable during earlier adulthood (ages 18 to 47), however other research suggests that defenses may change over time. For example, Cramer (2012) measured three defenses (denial, projection, and identification) utilizing the picture

card Thematic Apperception Test at ages 18 and 38 and found that the defenses of identification and denial changed over time, but that projection showed little change. Of note, identification and denial were not assessed in our measure so comparison is not possible. However, the defense mechanism in common with our measure, projection, showed little change in Cramer's study. In addition, Diehl et al. (2014) utilized the California Psychological Inventory, a self-report measure, to assess 3 coping mechanisms and 6 defense mechanisms from adolescence through older age. In this study, some defense mechanisms (sublimation, suppression, displacement, isolation of affect) showed age-related change during early adulthood and midlife, but comparison with our measure is challenging due to markedly different methods (self-report vs. context-specific interview narratives). Finally, Martin-Joy et. al. found in our same cohort that defenses grow more adaptive beyond midlife into late life (Martin-Joy et al., 2017). Therefore, studies of defense mechanisms over time have utilized different methods, and have had varied results depending on the developmental timeframe. Future studies in the field may benefit from the longitudinal study of multiple defense mechanism measures to further clarify this issue.

Finally, although modern mediation analyses and temporal separation between childhood nurturance, adult defensive styles, and midlife functioning are strengths of the study design, causation cannot be inferred given the non-experimental nature of the study.

Other mechanisms, such as genetic influences, could also undoubtedly influence midlife functioning, but are beyond the scope of this investigation. Future studies may benefit from examining additional biological and genetic interactions with childhood environments, defense styles, and midlife functioning. In addition, studies that have access to consistent defense mechanism measures from childhood through midlife across multiple timepoints may help answer key questions about whether and how defenses may change and adapt over the life course.

5. Conclusion

Using rare prospective data spanning several decades, this study adds to the growing body of evidence for the importance of emotion processing strategies that develop in childhood and reach across decades to shape personal and occupational functioning well into adult life. In addition, this study provides empirical evidence to support the common clinical observation that individuals function better in multiple domains across the lifespan when using more adaptive coping styles that may have roots in early childhood.

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Highlights

- Nurturing childhood environments lead to more adaptive adult functioning.
- Defense mechanisms are examined as mediators between nurturance and midlife functioning.
- Childhood nurturance leads to better midlife functioning through adaptive defenses

Figure 1.
Mediation models of childhood nurturance as a predictor of midlife outcomes, mediated by percentage of engaging defense mechanisms in earlier adulthood

Table 1

Means, Standard Deviations, and Pearson Correlations N=135

	Childhood Nurturance	Percentage of Engaging Defenses (earlier adulthood)	Relationship Quality with Children (midlife)	Marriage Stability (midlife) †	Maximum Earned Income (midlife) ‡
Percentage of Engaging Defenses (earlier adulthood)	0.32 **	–			
Relationship Quality with Children (midlife)	0.22 *	0.36 **	–		
Marriage Stability (midlife) †	0.17 ($p = .052$)	0.25 **	0.11	–	
Maximum Earned Income (midlife) ‡	0.23 **	0.40 **	0.22 *	0.12	–
M	11.73	0.32	4.97	0.82	1.73
SD	4.59	0.06	1.24	0.27	0.27

* $p < .05$,

** $p < .01$ (2-tailed)

† = reverse scored, reciprocal transformation

‡ = LG10 transformation