

Do Cherished Children Age Successfully? Longitudinal Findings From the Veterans Affairs Normative Aging Study

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Although early adversity has been linked to worse mental and physical health in adulthood, few studies have investigated the pathways through which positive and negative dimensions of early experiences can jointly influence psychological well-being in later life. This study examined: (a) profiles of early experiences across multiple domains, (b) the relations of these profiles to hedonic and eudaimonic well-being in later life, and (c) whether midlife social support mediated these relations. We first conducted latent class analysis of early experiences using data from 1,076 men in the VA Normative Aging Study who completed the Childhood Experiences Scale (age: $M = 69$, $SD = 7$). Analyses yielded 3 profiles of early experiences, labeled as *cherished* (strong support and some losses), *harshly disciplined* (harsh parental discipline, low positive reinforcement, and nonnormative stressors), and *ordinary* (few stressors and low parental attention). Next, we applied structural equation modeling to data on a subset of this sample assessed 7 years later on hedonic and eudaimonic well-being ($n = 496$; age: $M = 76$, $SD = 7$). In general, the *cherished* group reported stronger qualitative social support in midlife than the *harshly disciplined* and *ordinary* groups, which in turn was related to greater hedonic (life satisfaction, positive affect) and eudaimonic (competence, positive relations with others) well-being in later life. The *cherished* group also reported higher autonomy than the *ordinary* group, but this association was independent of midlife social support. Our findings suggest that experiencing adversity in the context of a nurturing early environment can promote successful aging through the maintenance of supportive relationships in midlife.

Keywords: early adversity, hedonic well-being, eudaimonic well-being, successful aging, latent class analysis

Supplemental materials: <http://dx.doi.org/10.1037/pag0000050.supp>

This article was published Online First October 5, 2015.

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This study was supported by National Institutes of Health grants R01-AG032037, R01-AG018436, a Senior Research Career Scientist Award from the Clinical Science Research and Development Service, U. S. Department of Veterans Affairs to Avron Spiro, and a BU/VA Boston CTSI Pilot Grant to Lewina O. Lee. The VA Normative Aging Study is a research component of MAVERIC and is supported by the VA Cooperative Studies Program/Epidemiological Research Centers. The views expressed in this article are those of the authors and do not necessarily represent the views of the U.S. Department of Veterans Affairs or other support institutions.

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Early experiences are a powerful determinant of life span developmental trajectories. Adults with high levels of early adversity tend to have difficulties with psychosocial adjustment, often manifesting as poor mental health (Edwards, Holden, Felitti, & Anda, 2003) and relationship functioning (Umberson, Williams, Powers, Liu, & Needham, 2005; Whisman, 2006). A small number of studies have shown that the negative psychosocial consequences of early adversity persist into later life (e.g., Clark, Caldwell, Power, & Stansfeld, 2010). However, few researchers have considered the positive dimensions of early experiences (but see An & Cooney, 2006; Huppert, Abbott, Ploubidis, Richards, & Kuh, 2010; Rothrauff, Cooney, & An, 2009), and even fewer have examined the positive later-life outcomes of early experiences. Given tremendous heterogeneity observed in response to early adversity (Rutter, 2013; Werner & Smith, 1992), a person-centered approach may be particularly useful in characterizing the complex combinations of early psychosocial stressors and protective factors, and their effects on developmental outcomes.

The present study examines whether and how early experiences are related to psychological well-being in later life, testing the hypothesis that more positive early psychosocial experiences have far-reaching and positive effects on both hedonic and eudaimonic well-being in later life. In light of the strong association between social ties and mental health, one possible mediating path between early experiences and successful aging is that children who enjoy caring relationships may be more likely to have supportive relationships throughout their life span (Mikulincer & Shaver, 2009). Thus, we also examined whether midlife social support mediates the relation between early psychosocial experiences and psychological well-being in later life.

Early Experiences, Later-Life Psychological Well-Being, and Successful Aging

Accumulating evidence supports an association between early adversity and negative psychosocial outcomes in later life. Wilson et al. (2006) found that a composite index of childhood adversity was associated with higher neuroticism, emotional isolation, and smaller social network among older adults. Negative childhood life events, such as parental divorce, are associated with worse mental health in adulthood (Amato & Booth, 1991). In general, childhood adversity is related to higher rates of psychopathology (Clark et al., 2010; Rothrauff et al., 2009; Shaw, Krause, Chatters, Connell, & Ingersoll-Dayton, 2004), greater negative affect (Pitzer & Fingerman, 2010), and stronger affective reactivity to stressors in older adults (Mallers, Charles, Neupert, & Almeida, 2010).

Theories of successful aging distinguish between the absence of disease/ill-being and the presence of health/well-being (e.g., Rowe & Kahn, 1987). Psychological ill-being and well-being are distinct constructs with different psychological and biological correlates (Keyes, 2002; Ryff et al., 2006), as well as genetic, neural, and motivational substrates (Franz et al., 2012; Urry et al., 2004). Thus, one cannot infer any association between early experiences and psychological well-being based on established relations between early adversity and psychological ill-being (e.g., depression). However, few studies have examined adulthood well-being outcomes of positive early experiences. Initial evidence suggests there are long-term benefits of favorable early experiences. Adults who remembered their parents as authoritative, rather than author-

itarian or uninvolved, reported greater eudaimonic well-being (Rothrauff et al., 2009). Among women, higher levels of parental care and lower levels of parental authoritarianism and overprotection assessed retrospectively at age 42 were associated with higher levels of eudaimonic well-being 10 years later (Huppert et al., 2010). Retrospectively reported early parental warmth and affection were related to greater psychological well-being and social integration in later life (An & Cooney, 2006; Andersson & Stevens, 1993).

Psychological well-being is typically characterized from the theoretical perspectives of hedonism or eudaimonism. The hedonic view emphasizes the evaluation of one's feelings toward life (Waterman, 2007), as indicated by subjective well-being (Diener, Suh, Lucas, & Smith, 1999), defined as life satisfaction, presence of positive affect, and absence of negative affect (Ryan & Deci, 2001). The eudaimonic view focuses on the pursuit of self-realization and living in accordance with one's true values (Waterman, 2008). Measurement of eudaimonic well-being has utilized a multidimensional approach to characterize human realization (Ryff & Singer, 1998). Early theories of successful aging (e.g., Rowe & Kahn, 1999) focused on the hedonic aspects of well-being, while more recent work incorporates the construct of resilience within successful aging, and focuses more on eudaimonic characteristics (Aldwin & Igarashi, 2015). While each perspective offers a unique understanding of well-being (Henderson & Knight, 2012), no research has examined both hedonic and eudaimonic well-being as outcomes of early experiences. In this study, we modeled hedonic and eudaimonic well-being as multidimensional constructs and examined how various facets of psychological well-being related to a broad array of positive and negative early experiences.

Early Experiences and Later-Life Well-Being: Mediating Role of Social Support

The effects of early care on developmental outcomes are far-reaching and shape social functioning even in later life. Bowlby's attachment theory (Bowlby, 1973, 1988) identified a secure early relationship with one's primary caretaker as the foundation for building positive internal representations of the self and others, expectations regarding social interactions and support availability, and patterns of affect regulation and help-seeking. Subsequent research confirmed that there are enduring effects of early experiences on later social functioning (Fraley, Roisman, & Haltigan, 2013; Luecken, Roubinov, & Tanaka, 2013). In a prospective study from infancy into adulthood, securely attached children were more likely to perceive their romantic relationships favorably and have higher interviewer-rated relationship security (Roisman, Collins, Sroufe, & Egeland, 2005). Adults who recalled higher levels of parental care had more positive perceptions of themselves and their current relationships (Sarason et al., 1991). On the other hand, "risky families" characterized either by conflict and aggression, or cold and neglectful relationships present multiple biopsychosocial risks that hinder the acquisition of social competence (Repetti, Taylor, & Seeman, 2002). Children reared within such environments lack role models for complex social skills; they are prone to developing social schemas of self as ineffective and others as unsupportive, information processing biases involving rejection sensitivity and poor attention to social cues, and are biologically predisposed toward physiological reactivity (Miller,

Chen, & Parker, 2011). These challenges contribute to difficulties forming trusting relationships and limit the amount of perceived and actual support when needed (Cassidy & Shaver, 2008). Several longitudinal studies have documented the harmful impact of negative early psychosocial environments on subsequent social support and relationship functioning (Colman & Widom, 2004; Gayman, Turner, Cisló, & Eliassen, 2011; Johnson et al., 2002).

Given the legacy of early experiences in social functioning and a robust association between social support and mental health (Bowling et al., 2003; Diener & Seligman, 2002), social support is a likely pathway through which early experiences influence adulthood well-being. This notion is consistent with the chain-of-risk model of life course processes (Kuh, Ben-Shlomo, Lynch, Hallqvist, & Power, 2003), in which a sequence of exposures confers increased (or decreased) risk for later-life conditions. Numerous studies have found that poor social support and relationship problems mediated the association between early adversity and worse mental health outcomes (Shaw & Krause, 2002; Shaw et al., 2004), but whether social support mediates the association between positive early experiences and psychological well-being in later life has not been examined. Moreover, because support and relationship variables were assessed concurrently with the psychosocial outcomes in the aforementioned studies, they were unable to assess the directionality of the associations. To evaluate social support as an antecedent to psychological well-being more rigorously, we assessed social support in midlife and psychological well-being in later life (18 years later). Specifically, we evaluated the quality and quantity of social support in midlife as mediators of the relation between early psychosocial experiences and later-life psychological well-being. Given the moderate temporal stability of these social support constructs (Krause, 1999; Martire, Schulz, Mittelmark, & Newsom, 1999; van Tilburg, 1998), we hypothesized that they would confer long-term benefits on well-being.

Person-Centered Approach to Conceptualizing Early Experiences

A common feature of studies relating childhood experiences to adulthood outcomes is a focus on one type of childhood factor (e.g., adverse events, socioeconomic status). Studies on early adversity also tend to consider more severe aspects of adversity, such as physical or sexual abuse, and rely on samples selected for such experiences (Davidson, Devaney, & Spratt, 2010). Such design features likely limit generalizability to wider populations, whose early conditions encompass a broader and more representative spectrum of experiences.

In contrast, a person-centered approach (Magnusson, 1998) provides a more holistic conceptualization of childhood experiences. Individuals with similar profiles across multiple indicators of early experiences are classified into a group, or latent class. Linkage of group membership to an outcome suggests an association between a constellation of early environmental factors that define each group and the outcome, akin to a many-way interaction. This approach has been used to discern patterns of childhood adversity in relations to early developmental outcomes (e.g., Dunn et al., 2011; Trickett, Kim, & Prindle, 2011), and examine successful aging as a multidimensional construct (e.g., Morack, Ram, Fauth, & Gerstorf, 2013; Pruchno, Wilson-Genderson, Rose, & Cartwright, 2010). We applied latent class analysis to a broad array of

positive and negative early psychosocial experiences, and examined how class membership as a summary index of early life circumstances related to later-life psychological well-being.

The Current Study

In the present study, we examined the association between early psychosocial experiences and later-life psychological well-being. Using a person-centered approach, we represented early psychosocial experiences as a multifaceted construct. Successful aging was conceptualized in terms of both hedonic and well-being. We evaluated a chain-of-risk model involving the quantity and quality of midlife social support as mediators of the association between early experiences and later-life well-being. Data are from men participating in the Veterans Affairs Normative Aging Study (NAS), a long-running study of community-dwelling men born 1903–1945. We tested three hypotheses: First, there would be at least one group with more nurturing early environments, and another group with higher levels of early adversity. Second, men with profiles indicating more nurturing early environments would report greater hedonic and eudaimonic well-being in later life. Third, social support in midlife would mediate the effects of childhood psychosocial experiences on later-life psychological well-being. Thus, men with profiles indicating more nurturing early environments would report higher levels of qualitative and quantitative support in midlife, and stronger midlife social support would be associated with greater hedonic and eudaimonic well-being in later life.

Method

Sample

The sample was from the NAS, a longitudinal investigation of normal and pathological aging processes in 2,280 men founded at the Boston VA Outpatient Clinic (Spiro & Bossé, 2001). Between 1961 and 1970, over 6,000 men were screened for the absence of chronic or major physical and mental illnesses, and for geographic stability, defined as kinship ties in the Boston area and stated intentions to remain local.

To identify patterns of early experiences, the analytic sample comprised 1,076 NAS men (mean age = 69.3, $SD = 7.3$) who responded to a 1995 mail survey, which contained a childhood experiences measure (response rate = 70%). To examine longitudinal associations among retrospectively reported childhood experiences, social support, and psychological well-being, we included a subset of men with data on both childhood experiences assessed in 1995 and psychological well-being assessed in 2003. Of the 1,076 respondents of the 1995 survey, 844 were contacted again in 2003. Eight hundred sixteen (97%) were alive at the time of mailing, of whom 85 (10%) refused or were too ill to participate, 235 (29%) did not respond, and 496 (61%) participated; the last group formed the analytic sample for the longitudinal analysis. In 2003, the mean age of this group was 75.5 ($SD = 6.6$). Sensitivity analyses comparing respondents and nonrespondents of the 2003 survey indicated minor differences: Respondents were younger ($M = 67.8$ vs. 70.6), and their parents were more likely to have been homeowners when they were young (65% vs. 58%) than nonrespondents (see Table 1). The two groups did not differ on other childhood socioeconomic status variables, midlife social

Table 1

Descriptive Statistics for the Latent Class Analysis (LCA) Sample ($N = 1076$) and a Comparison of Those Who Later Responded ($N = 496$) vs. Did Not Respond ($N = 580$) to the 2003 Psychological Well-Being Survey

	LCA Sample (Hypothesis 1, $n = 1,076$)			2003 Respondents (Hypotheses 2 and 3, $n = 496$)			2003 Nonrespondents ($n = 580$)			t/χ^2 (df)
	N	M/n (%)	SD	N	M/n (%)	SD	N	M/n (%)	SD	
Childhood socioeconomic status										
Father's education	1,022	2.6	1.6	473	2.6	1.6	549	2.5	1.5	-1.01 (1,020)
Mother's education	1,025	2.6	1.4	475	2.7	1.4	550	2.6	1.4	-1.78 (1,023)
Father's occupation	1,032	1.9	1.4	478	2.0	1.5	554	1.9	1.4	-.50 (1,030)
Parental home ownership (1 = Y, 0 = N)	1,058	650 (61.4)		486	316 (65.0)		572	334 (58.2)		4.87 (1)
Midlife social support										
Quantitative support	963	13.4	2.5	460	13.5	2.4	503	13.4	2.5	-.55 (961)
Qualitative support	965	6.8	2.2	463	6.9	2.1	502	6.8	2.2	-.45 (963)
Later-life hedonic well-being										
Positive affect	—	—	—	445	32.2	7.3	—	—	—	—
Negative affect	—	—	—	449	13.9	4.6	—	—	—	—
Life satisfaction	—	—	—	481	25.7	5.8	—	—	—	—
Later-life eudaimonic well-being										
Autonomy	—	—	—	489	14.2	2.5	—	—	—	—
Environmental mastery	—	—	—	489	15.1	2.7	—	—	—	—
Personal growth	—	—	—	489	13.8	2.6	—	—	—	—
Positive relations with others	—	—	—	481	14.4	2.9	—	—	—	—
Purpose in life	—	—	—	481	14.1	2.6	—	—	—	—
Self-acceptance	—	—	—	481	14.5	3.0	—	—	—	—
Covariates (all in 2003 except age)										
Age (1996)	—	—	—	496	67.8	6.6	580	70.6	7.6	6.27 (1,074)
Married (1 = Y, 0 = N)	—	—	—	484	387 (80.0)		—	—	—	—
Retired (1 = Y, 0 = N)	—	—	—	482	451 (93.6)		—	—	—	—
Self-rated health (0–4, higher = better)	—	—	—	477	2.8	.9	—	—	—	—
Number of health conditions	—	—	—	488	2.9	2.0	—	—	—	—
Latent class assignment										.45 (2)
Class 1: "cherished"	458	(42.5)		215	(43.3)		240	(41.4)		
Class 2: "harshly disciplined"	157	(14.6)		67	(13.5)		83	(14.3)		
Class 3: "ordinary"	461	(42.8)		214	(43.1)		257	(44.3)		

Note. Bold indicates $p \leq .05$. The latent class analysis sample was based on men who completed the Childhood Experiences Scale in 1995. Of these men, a subset responded to the 2003 survey wherein later-life psychological well-being was assessed ($n = 496$); this served as the longitudinal analysis sample. The t -test and χ^2 test reported here refer to comparison between respondents and non-respondents of the 2003 survey. Education variables were coded as: 1 = did not complete grammar school, 2 = completed grammar school, 3 = some high school, 4 = completed high school, 5 = some college, 6 = completed college, 7 = beyond college. Occupation was coded as: 0 = unskilled, 1 = semi-skilled, 2 = skilled/foreman, 3 = white collar, 4 = semi-professional, 5 = professional/managerial/proprietary. Self-rated health was rated as: 0 = poor, 1 = fair, 2 = good, 3 = very good, 4 = excellent. Scores for hedonic and eudaimonic well-being reflect observed scores on each measure.

support, and latent class distribution of early experiences. Of the 2003 respondents, data on midlife social support were available for 467 (94%) from a survey administered in 1985, when their average age was 57.5 ($SD = 6.6$).

Measures

Early experiences. Early experiences from birth to age 19 were measured with the Childhood Experiences Scale (CES; Aldwin, Levenson, Cupertino, & Spiro, 1998), designed for use with the general population. Domains include close relationships, significant life events, parental discipline, extracurricular activities, parental positive regard, and self-perceptions. The scale included a balance of positive, neutral, and negative items, which likely ameliorated participants' discomfort in endorsing adverse events (see Figure 1 for item content). Each event or experience was coded dichotomously to indicate occurrence. We excluded two items on global childhood ratings that provided little information about specific events or experiences.

In most studies of long-term outcomes of early experiences, one limitation is the reliance on retrospective assessments. Validity threats include forgetting, current mood during the assessment, and a lack of endorsing negative events. However, reviews on retrospective assessment of early adversity concluded that validity and reliability threats are often overstated, and current mood likely has little, if any, effects on recall of childhood events (Brewin, Andrews, & Gotlib, 1993; Hardt & Rutter, 2004). In an independent validation sample aged 22–66, the CES items showed good stability, with 85% having moderate or better κ values over 5 years, and all having concordance rates (percentage item agreement across occasions) above 70% (Yancura & Aldwin, 2009). Age and depression were unrelated to response consistency over time. More important, the CES was administered eight years before the assessment of psychological well-being; thus, reducing the likelihood of reverse causality.

Social support. Following our prior work (Bossé, Aldwin, Levenson, Spiro, & Mroczek, 1993; Bossé, Aldwin, Levenson,

Workman-Daniels, & Ekerdt, 1990), we defined *quantitative social support* using indicators of perceived or structural support (Brisette, Cohen, & Seeman, 2000). It was a manifest variable calculated as the sum of network size and social interaction frequency (Cronbach's $\alpha = .69$), and computed only for men with complete data on both components. Network size was based on five items assessing marital status, number of people in respondent's household, number of children, number of relatives within an hour's drive, and number of close friends. Each item was coded into a 3-point scale (0 = 0, 1 = 1, and 2 = 2+) and summed. Social interaction frequency was based on three items assessing the frequency of seeing children, friends, and other relatives. Item responses were coded into a 3-point scale (0 = *never* to 2 = *weekly or more*) and summed.

Qualitative social support was defined using indicators of perceived or functional support (Wills & Shinar, 2000). It was a manifest variable based on the number of confidants and extent of reliance on family and friends during crisis (Bossé et al., 1990, 1993; Cronbach's $\alpha = .61$), and calculated only for men with complete data on all components. Number of confidants was considered an indicator of social support quality because it involves the appraisal of a relationship as close and trusting, thus, providing information on relationship quality. It was assessed on a 3-point scale (0 = 0, 1 = 1, and 2 = 2+). Two items assessed the extent to which one could rely on family members and friends for help in a crisis on a 4-point scale (0 = *not at all* to 4 = *completely*). Scores on the three items were summed.

In other studies using the NAS sample, both quantitative and qualitative social support were moderately stable over a 6-year period ($r = .59$ and $.56$, respectively; Toyokawa, 2012), and neither was affected by retirement (Bossé et al., 1993).

Psychological well-being. Psychological well-being was examined via the constructs of hedonic and eudaimonic well-being. *Hedonic well-being* was represented by indicators of subjective well-being, including *positive affect* (PA), *negative affect* (NA), and *life satisfaction* (LS). PA and NA in the past four weeks were measured with subscales of the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988; Cronbach's α : PA = .90, NA = .87). LS was measured with Liang's (1984) 11-item version of the Life Satisfaction Inventory: Form A (LSI-A; Neugarten, Havighurst, & Tobin, 1961; Cronbach's $\alpha = .76$) and five items of the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985; Cronbach's $\alpha = .89$). A confirmatory factor analysis (CFA) conducted on our sample supported a tripartite structure of subjective well-being (Diener, 1984) consisting of correlated latent PA, NA, and LS factors (see Supplemental Document A). For parsimony and to reduce sampling error, when a latent factor was represented by six or more items, we used item parcels created with random assignment as manifest indicators (Little, Cunningham, Shahar, & Widaman, 2002). Each of the latent PA and NA constructs was indicated by three item parcels created from 10 PANAS items. The latent LS construct was indicated by two lower-order constructs: the first was indicated by four item parcels created from the LSI-A, and the second was indicated by five SWLS items.

Eudaimonic well-being was assessed with six self-report scales that tapped different aspects of human realization, including autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (Ryff &

Singer, 1998; Cronbach's α : .64 to .79). Each aspect was modeled as a latent factor indicated by five items. A CFA conducted on our sample supported a model consistent with prior findings (Abbott, Ploubidis, Huppert, Kuh, & Croudace, 2010; Burns & Machin, 2009; see Supplemental Document A), including: (a) A higher-order factor subsuming the environmental mastery, personal growth, purpose in life, and self-acceptance factors. It has been described as a motivational dimension of well-being (Abbott et al., 2010) similar to Ryan and Deci's (2000) notion of competence. We labeled this factor as *competence*; it represents a positive evaluation of one's past, self-efficacy in dealing with challenges, and confidence in one's ability to grow in a valued direction. (b) Two first-order factors representing *autonomy* and *positive relations with others*. (c) Two correlated method factors representing positively and negatively worded items, respectively. The three substantive factors were intercorrelated, but they were orthogonal to the method factors.

Covariates. Because *childhood socioeconomic status* (SES) is a powerful predictor of subsequent physical and mental health (McLaughlin et al., 2011; Miller et al., 2011), we assessed the unique contribution of childhood psychosocial experiences on later-life well-being, net of the effects of childhood SES. *Childhood SES* was assessed via questionnaire at NAS entry (1961–1970). Following Peters et al. (2011), four indicators were used: Paternal and maternal education (1 = *did not complete grammar school* to 7 = *beyond college*), paternal occupation (0 = *unskilled* to 5 = *professional/managerial/proprietary*), and parental home ownership during childhood (1 = *yes*, 0 = *no*). For simplicity, the first principal component of these indicators was used as a composite index of childhood SES.

Age, marital status (1 = *married*, 0 = *otherwise*), and *retirement status* (1 = *retired*, 0 = *not*) were assessed as part of the 2003 mail survey. Later-life health was assessed in 2003 with two measures: *Self-rated health* was assessed with an item that ranged from 0 = *poor* to 4 = *excellent*. *Number of health conditions* was the sum of 17 items assessing physical health conditions (1 = *ever diagnosed*, 0 = *never*).

Analysis Plan

We computed descriptive statistics for all manifest indicators. For Hypothesis 1, we used latent class analysis (LCA) to identify patterns of early experiences. For Hypotheses 2 and 3, we conducted structural equation model (SEM) analysis to examine the associations among early psychosocial experiences, midlife social support, and later-life psychological well-being. LCA and SEM analyses were conducted with Mplus Version 7.1 (Muthén & Muthén, 1998–2012).

Latent class analysis (LCA). In LCA, class indicators were 45 dichotomously coded variables from the CES. Following Masyn (2013), analysis began with a 1-class ($k = 1$) model; k was increased incrementally until the model was no longer well-identified. Model fit was assessed using the Bayes information criterion (BIC; Schwarz, 1978), consistent Akaike's information criterion (CAIC; Bozdogan, 1987), and the approximate weight of evidence criterion (AWE; Banfield & Raftery, 1993). Relative fit of k versus ($k + 1$) classes was evaluated with the approximate Bayes factor (BF), the adjusted Lo-Mendell-Rubin likelihood ratio test (LMR-LRT; Lo, Mendell, & Rubin, 2001), and the parametric

bootstrapped likelihood ratio test (BLRT; McLachlan & Peel, 2000). The approximate correct model probability (cmP) was used to compare each model against an entire set of fitted models (Kass & Wasserman, 1995).

Among candidate models selected based on fit indices, classification diagnostics were used to evaluate the precision of latent class assignment. Relative entropy is an overall index of classification precision. Class-specific diagnostics included average posterior class probability (AvePP), odds of correct classification ratio (OCC; Nagin, 2005), and modal class assignment proportion (mcaP_k). Based on fit indices, classification diagnostics, and model utility, we selected a final, best-fitting, unconditional model (i.e., one omitting predictors and outcomes of classes).

To substantively interpret the classes in the best-fitting model, we plotted the estimated item endorsement probability (P_E) for each CES item by class and examined its class homogeneity and class separation. For each item, class homogeneity was defined as $P_E \leq .30$ or $P_E \geq .70$ (i.e., most men in a class either denying or endorsing the item). Class separation was the odds ratio (OR) of item endorsement between two classes; $OR \geq 2.5$ or ≤ 0.4 was used to indicate notable class separation. Each class was best characterized by items showing response homogeneity for that class or items with notable class separation.

Structural equation models (SEM). Based on the best-fitting latent class model, individual probabilities of class membership were used as manifest indicators in SEM to evaluate the longitudinal associations among early experiences, social support, and psychological well-being. Separate models examined hedonic and eudaimonic well-being as outcomes. For each outcome, analysis proceeded as follows: First, we developed measurement models composed of all structural manifest variables (latent class probabilities, childhood SES, age, marital status, retirement status, self-rated health, number of health conditions, and qualitative and quantitative social support) and latent variables representing psychological well-being. Correlations among exogenous variables are presented in Supplemental Document B. To evaluate Hypothesis 2, we compared a series of structural models, beginning with a saturated model that specified the regression of later-life psychological well-being on latent class membership and covariates. Nonsignificant paths ($p > .10$) emitting from covariates were trimmed. For Hypothesis 3, the saturated structural model included the regression of midlife social support variables on latent class membership, childhood SES, and age, and the regression of later-life psychological well-being on midlife social support, latent class membership and covariates. Indirect and direct effects from latent class membership to psychological well-being were estimated. Nonsignificant paths emitting from covariates were trimmed first, followed by nonsignificant indirect and direct paths. Across all models, psychological well-being and social support were always adjusted for childhood SES and age. To avoid model misspecification, a path was deleted only if its removal did not produce a significant deterioration in model fit. Nested models were evaluated using the Satorra-Bentler (Satorra & Bentler, 2001) χ^2 difference test. Nonnested models were evaluated with the comparative fit index (CFI; Bentler, 1990), Tucker-Lewis fit index (TLI; Tucker & Lewis, 1973), root mean square error of approximation (RMSEA; Steiger, 1990), standardized root-mean-square residual (SRMR; Bentler, 2007), and BIC (Schwarz, 1978). Data missingness and nonlinearity were handled using full information maxi-

mum likelihood robust (MLR) estimation. Because bootstrapped confidence intervals (CI) cannot be computed in conjunction with MLR estimation, we calculated the 95% CI of the indirect effects using the distribution of products algorithm in RMediation (Tofghi & MacKinnon, 2011). Indirect effects are considered statistically significant if the 95% CI does not contain 0.

Results

Hypothesis 1: Profiles of Childhood Experiences

Using LCA, we compared one- to nine-class models of the men's early experiences. Fit indices (see Table 2) suggest that the three-class model performed best on multiple criteria, whereas the two-class model performed best on only one. The eight- and nine-class models were poorly identified and not considered further. Relative entropy was higher in the three-class model (.80) than the two-class model (.68), suggesting the former was more precise in classifying individuals. Both models performed adequately on other classification diagnostics (details available upon request). Based on empirical and substantive considerations, the three-class model was selected as the final model. According to the most likely class assignment for each man, the class proportions were: 42.5% ($n = 458$; Class 1), 14.6% ($n = 157$; Class 2), and 42.8% ($n = 461$; Class 3).

Figures 1a–d are plots of class-specific estimated P_E for each CES item based on the 3-class model. Consistent with the socio-historical background of poverty (Great Depression) and war (WWII/ Korean War) during which most men grew up, family economic hardship was common ($P_E \geq .69$). Parental divorce, death or severe injury of family members, severe injuries to oneself, and sexual molestation were uncommon ($P_E \leq .30$).

Based on the LCA results, we labeled each latent class to summarize their pattern of early experiences. Class 1 was labeled as *cherished* children, based on high endorsement of positive relationships, parental discipline that favored milder punishment and use of rewards, and positive parental and self-regard. While this group was most likely to have suffered the loss of a sibling, friend or cousin ("other serious losses"), they also endorsed the highest levels of close familial and external relationships (Figure 1a). They were most likely to endorse milder forms of parental discipline (e.g., sent to room, grounding), and fell between Classes 2 and 3 on harsher discipline (e.g., struck with fists/kicked, sarcasm/harsh comments; Figure 1b). They reported the highest levels of parental positive reinforcement (Figure 1c) and extracurricular activities (Figure 1d). They were also most likely to report being regarded favorably by parents and having a proud accomplishment.

Class 2 was labeled as *harshly disciplined* children. Their early experiences were notable for harsh parental discipline, less positive reinforcement, and more frequent negative events than other classes. *Harshly disciplined* children were most likely to experience rare but significant negative events, including parental divorce and sexual molestation (Figure 1a). They were most likely to receive harsh and abusive parental discipline (e.g., struck with fists/kicked, sarcasm), or not receive any discipline at all, and be subjected to unfair punishment and treatment (Figure 1b). Unlike the other classes, a majority of this group recalled their parents as rarely pleased; they received remarkably less verbal praise and

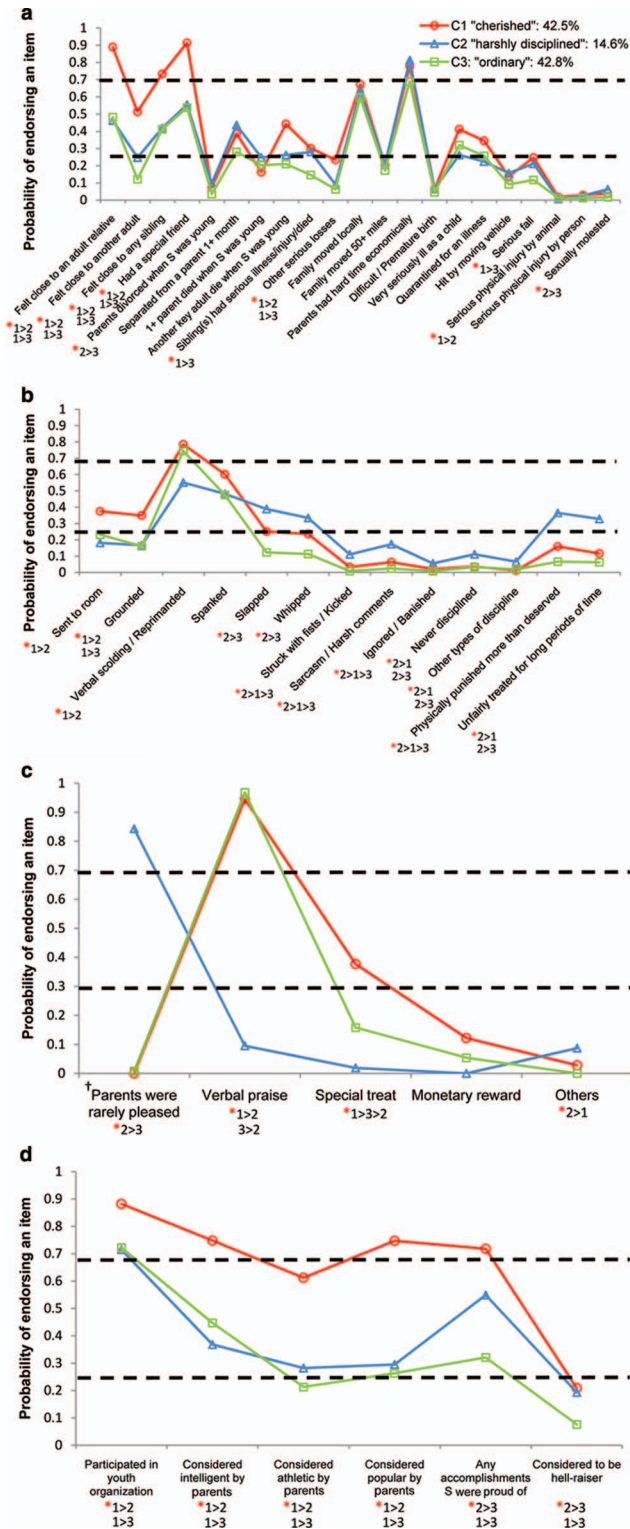


Figure 1 (opposite)

fewer special treats, and never received monetary rewards (Figure 1c). They were less likely to have positive regard from their parents than the *cherished* group, and were more likely to be considered as "hell-raisers" (similar to the current label of "problem child") than Class 3.

Class 3 was labeled as *ordinary* children. In general, their early experiences were more neutral compared with the other classes. While they endorsed some close relationships, they were least likely to be close to a nonrelative adult (Figure 1a). They reported few negative life events (Figure 1a), especially parental divorce, and lower levels of most forms of parental discipline than other classes (Figure 1b). While *ordinary* children were equally likely as the *cherished* children to receive verbal praise, they were less likely to receive special treats (Figure 1c) and parental positive regard (Figure 1d). They were least likely to be considered hell-raisers, perhaps a reason for the relatively little parental attention they received. Thus, *ordinary* children had less adverse childhood experiences than the *harshly disciplined* children, but they were not held in the special regard given to the *cherished* children.

Hypothesis 2: Early Experiences and Later-Life Psychological Well-Being

Hedonic well-being. Next, we examined the association between early experiences and later-life psychological well-being. For hedonic well-being as outcome, the latent constructs of LS, PA, and NA were regressed on latent class probabilities and covariates using SEM. From the saturated structural model, $\chi^2(df) = 387.5 (181)$, CFI = .947, TLI = .934, RMSEA = .048, BIC = 20621, SRMR = .035, we eliminated retirement status because it was not related to any outcome, and constrained three nonsignificant regression paths (number of health conditions \rightarrow LS; marital status \rightarrow PA; marital status \rightarrow NA) to zero. The final model fit the data well: $\chi^2(df) = 382.1 (172)$, CFI = .945, TLI = .933, RMSEA = .050, BIC = 20082, SRMR = .036. Table 3 summarizes the model estimates.

Hypothesis 2 was partially supported: In later life, the *cherished* group had higher LS and PA than the *ordinary* group, and marginally higher LS and PA than the *harshly disciplined* group. Class membership was not associated with NA. Among the covariates, higher childhood SES was associated with higher LS and PA, but unrelated to NA. Married men reported higher LS. Better self-rated health and fewer health conditions were linked to greater hedonic well-being across all indicators, except that the number of health conditions was unrelated to LS.

Figure 1 (opposite). (a–d, top to bottom). Estimated CES item endorsement probabilities based on the 3-class model ($n = 1076$): (a) close relationships and significant life events; (b) parental discipline; (c) positive reinforcements from parents; (d) extracurricular activities, parental positive regard and self-perceptions. Notes: S = Subject. *Items with odds ratio (OR) of item endorsement ≤ 0.25 or ≥ 0.4 between 2 classes (e.g., "1>2" means Class 1 was more likely to endorse the item than Class 2). Probability of item endorsement below 0.3 or above 0.7, as marked by the dashed lines, indicates class homogeneity on an item. †For the item "Parents were rarely pleased" (Fig. 1c), Class 1 had an endorsement probability of 0 and the associated ORs could not be calculated. See the online article for the color version of this figure.

Table 2

Fit Indices for 1- To 7-Class Models in Latent Class Analysis of the Childhood Experiences Scale

<i>k</i>	LL	#par	BIC	CAIC	AWE	^a BF	^a Adjusted LMR-LRT		cmP
							<i>p</i> -value		
1	-20847	45	42009	42054	42458	1.90e-154	.04		1.13e-240
2	-20333	91	41301	41392	42209	5.97e-87	.00		5.96e-87
3	-19974	137	40904	41041	42271	630.81	.13		.998
4	-19820	183	40917	41100	42743	5.49e+26	.43		.001
5	-19721	229	41040	41269	43326	1.19e+30	.59		2.88e-30
6	-19629	275	41178	41453	43923	1.82e+33	.58		2.42e-60
7	-19545	321	41332	41653	44536	—	—		1.33e-93
8	Not well-identified								
9	Not well-identified								

Note. *k* = number of classes; LL = log-likelihood; #par = number of model parameters; BIC = Bayes Information Criterion; CAIC = consistent Akaike's information criterion; AWE = approximate weight of evidence criterion; BF = approximate Bayes factor; LMR-LRT = Lo-Mendell-Rubin likelihood ratio test. Bold = best-fitting model for a fit index.

For BIC, CAIC, and AWE, smaller values indicate a better fit. For BF, values > 1 favors the *k*-class model over the (*k* + 1)-class model (1 > BF > 3: weak evidence, 10 > BF > 3: moderate evidence, BF > 10: strong evidence), <1 favors the (*k* + 1)-class model over the *k*-class model. For the adjusted LMR-LRT, *p* > .05 suggest that *k* number of classes is adequate for the data relative to (*k* + 1) classes. cmP values across a defined set of models (*k* = 1 to 7 here) sum to 1. The cmP value for class *k* approximates the actual probability of this model being correct relative to the remaining models in the given set, assuming equal weight placed on the prior probabilities of all the models. Results for the parametric bootstrapped likelihood ratio test (BLRT) are not shown because all *k* vs. (*k* + 1) class comparisons yielded *p* < .0001, suggesting this test was unable to distinguish among the models.

^a Comparison was made against the (*k* + 1) class.

Eudaimonic well-being. From the saturated structural model for eudaimonic well-being ($\chi^2(df) = 956.1$ (583), CFI = .914, TLI = .901, RMSEA = .036, BIC = 39642, SRMR = .041), we eliminated retirement status, number of health conditions, and two nonsignificant regression paths (marital status → competence; marital status → positive relations with others). The final structural model fit the data well: $\chi^2(df) = 882.1$ (531), CFI = .917, TLI = .904, RMSEA = .037, BIC = 37060, SRMR = .041. Table 4 summarizes the model estimates.

Hypothesis 2 was partially supported: In later life, the *cherished* group had higher levels of competence and positive relations with others than the *harshly disciplined* group; they also had higher levels of competence, autonomy, and positive relations with others than the *ordinary* group. Among the covariates, higher childhood SES was related to greater competence, but not other eudaimonic well-being indicators. Married men had lower autonomy. Better self-rated health in later-life was positively associated with all eudaimonic well-being indicators.

Hypothesis 3: Mediation by Midlife Social Support

Hedonic well-being. Next, we considered midlife social support as a mediator of the association between early experiences and later-life hedonic well-being. Fit indices for the fully saturated model were: $\chi^2(df) = 466.4$ (213), CFI = .938, TLI = .920, RMSEA = .049, BIC = 24768, SRMR = .039. Model trimming eliminated retirement status and 10 additional nonsignificant paths. The final structural model fit the data well: $\chi^2(df) = 463.3$ (209), CFI = .937, TLI = .923, RMSEA = .050, BIC = 24193, SRMR = .042. *R*² were 33.6% for LS, 29.3% for PA, and 18.5% for NA. Figure 2 displays the model estimates.

As hypothesized, the *cherished* group reported higher levels of qualitative and quantitative social support in midlife than the other groups (Table 5, top). Higher qualitative support in midlife was related to higher LS, PA, and lower NA in later life. Contrary to our hypothesis, higher quantitative support in midlife was related to higher NA, but not LS and PA.

Table 3

Results From Final Structural Equation Models For Regression of Later-Life Hedonic Well-Being On Early Experiences

	Life satisfaction			Positive affect			Negative affect		
	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>
C1: "cherished" (ref.)	—	—	—	—	—	—	—	—	—
C2: "harshly disciplined"	-.04	.02	.06	-.17	.10	.08	.08	.05	.13
C3: "ordinary"	-.03	.01	.01	-.17	.07	.02	-.02	.04	.68
Childhood socioeconomic status	.01	.01	.01	.07	.03	.01	-.01	.02	.39
Age	.00	.00	.79	-.01	.01	.06	-.00	.00	.22
Married vs. not	.04	.01	.01	= 0			= 0		
Self-rated health	.06	.01	<.001	.29	.04	<.001	-.13	.02	<.001
Number of health conditions	= 0	—	—	-.04	.02	.04	.02	.01	.03

Note. = 0 represents paths set to 0 in the model trimming process. C1, C2, and C3 refer to probability of being assigned to latent class 1, 2, and 3, respectively. Childhood socioeconomic status was a composite index based on the first principal component of paternal and maternal education, paternal occupation, and parental home ownership during childhood. Higher scores represent higher childhood socioeconomic status. Bold: *p* ≤ .05; italics: *p* ≤ .10.

Table 4
Results From Final Structural Equation Models for Regression of Later-Life Eudaimonic Well-Being On Early Experiences

	Competence			Autonomy			Positive relations with others		
	B	SE	p	B	SE	p	B	SE	p
C1: "cherished" (ref.)	—	—	—	—	—	—	—	—	—
C2: "harshly disciplined"	-.16	.07	.02	.03	.06	.63	-.30	.09	.002
C3: "ordinary"	-.13	.05	.01	-.11	.05	.04	-.27	.07	<.001
Childhood socioeconomic status	.04	.02	.02	-.03	.02	.15	-.01	.02	.56
Age	-.00	.00	.18	.00	.00	.96	.00	.00	.93
Married vs. not	= 0	—	—	-.15	.05	<.001	= 0	—	—
Self-rated health	.16	.03	<.001	.10	.03	<.001	.11	.03	.001

Note. = 0 represents paths set to 0 in the model trimming process. C2 and C3 refer to probabilities of being assigned to latent Class 2 and 3, respectively (reference = Class 1 "cherished"). Childhood socioeconomic status was a composite index based on the first principal component of paternal and maternal education, paternal occupation, and parental home ownership during childhood. Higher scores represent higher childhood socioeconomic status.
* $p \leq .05$. ** $p \leq .10$.

As shown in the lower portion of Table 5, midlife qualitative support mediated the relations between childhood experiences and LS and PA, but not NA. Relative to the *harshly disciplined* and *ordinary* groups, the *cherished* group had higher levels of LS and PA in later life because they had greater qualitative support in midlife.

Findings for NA were complicated by its unexpected association with quantitative support. As mentioned, the *cherished* group had higher levels of both qualitative and quantitative support in midlife than the other groups. However, the two support variables had opposite relations with NA in later life—higher qualitative support was related to lower NA, but higher quantitative support was related to *higher* NA. Post hoc analyses¹ revealed that the two social support variables, which were positively correlated, $r = .30, p < .001$, operated as suppressors (Conger, 1974) in relation to NA. Although qualitative support had a weak positive correlation with NA, $r = -.10, p = .07$

and quantitative support was uncorrelated with NA, $r = .07, p = .17$, their associations with NA were strengthened when we accounted for their overlapping variance by entering both as predictors of NA. In other words, after accounting for the protective influence of qualitative support on NA in later life, greater quantitative support was linked to higher subsequent NA. Indirect effects in Table 5 indicate that compared with the *cherished* group, the *harshly disciplined* group had *lower* NA in later life because of lower quantitative support in midlife; they were also linked to *higher* NA because of lower qualitative support, although this indirect path was nonsignificant ($B = 0.03, 95\% \text{ CI} = -0.001, 0.07$). The opposite indirect effects yielded a nonsignificant total effect. A similar pattern of results were obtained for the *ordinary* group, but in this instance both indirect paths were nonsignificant.

Eudaimonic well-being. We next examined midlife social support as mediator of the association between early experiences and later-life eudaimonic well-being. Fit indices for the fully saturated model were: $\chi^2(df) = 1052.6 (645)$, CFI = .911, TLI = .896, RMSEA = .036, BIC = 43736, SRMR = .042. Retirement status, number of health conditions, and four non-significant paths were eliminated, producing a final SEM that showed good model-data fit: $\chi^2(df) = 974.3 (591)$, CFI = .915, TLI = .896, RMSEA = .036, BIC = 41142, SRMR = .042. R^2 were 26.9% for competence, 11.3% for autonomy, and 29.7%

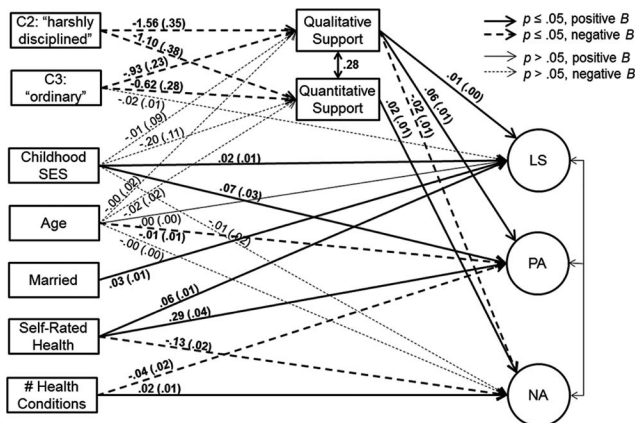


Figure 2. Unstandardized structural path coefficients (B) and SE (in parentheses) from the final structural model on the longitudinal association among early experiences, midlife social support, and later-life hedonic well-being. Notes: C2 = latent class 2; C3 = latent class 3; LS = life satisfaction; PA = positive affect; NA = negative affect. Only structural components of the model are displayed. Double-headed arrows represent correlations. Correlations among exogenous variables were modeled but not shown (see Supplemental Document B).

¹ Modeling suppression (as done here by including both dimensions of social support as predictors of NA) can improve prediction substantially by removing criterion-irrelevant variance from the predictor of interest (Paulhus, Robins, Trzesniewski, & Tracy, 2004; Tzelgov & Henik, 1991). When suppression is identified, it is important to interpret how the predictor and the suppressor combine to influence the outcome (Maassen & Bakker, 2001). We followed the procedure described by Cheung and Lau (2008) in evaluating suppression effects. We used the distribution of product method (Tofighi & Mackinnon, 2011) to evaluate whether the suppression effects ($\beta_{21}\beta_{Y2.1}$) were statistically significant, that is, a 95% confidence interval (CI) that does not include zero. The results suggest that adjusting for qualitative support boosted the association between quantitative support and NA ($\beta_{21}\beta_{Y2.1} = -0.04, 95\% \text{ CI} [-0.08, -0.002]$). Adjusting for quantitative support also strengthened the association between qualitative support and NA, although this effect was marginally significant ($\beta_{21}\beta_{Y2.1} = 0.03, 95\% \text{ CI} [0.00, 0.06]$).

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Table 5

Results From Final Structural Equation Model of Midlife Social Support Mediating the Association Between Later-Life Hedonic Well-Being and Early Experiences, Adjusted for Childhood Socioeconomic Status and Covariates

	Qualitative support			Quantitative support			Life satisfaction			Positive affect			Negative affect		
	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>
Mediation components															
C1: "cherished" (ref.)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C2: "harshly disciplined"	-1.56	.35	<.001	-1.10	.38	.004	—	—	—	—	—	—	—	—	—
C3: "ordinary"	-.93	.23	<.001	-.62	.28	.03	—	—	—	—	—	—	—	—	—
Qualitative Support	—	—	—	—	—	—	.01	.003	.01	.06	.01	<.001	-.02	.01	.05
Quantitative Support	—	—	—	—	—	—	= 0	—	—	= 0	—	—	.02	.01	.01
Summary of direct, indirect, and total effects															
	Life satisfaction			Positive affect			Negative affect								
	<i>B</i>	<i>SE</i>	<i>p</i> /95% CI	<i>B</i>	<i>SE</i>	<i>p</i> /95% CI	<i>B</i>	<i>SE</i>	<i>p</i> /95% CI						
Direct effects															
C2: "harshly disciplined"	= 0	—	—	= 0	—	—	= 0	—	—						
C3: "ordinary"	-.02	.01	.09	= 0	—	—	= 0	—	—						
Indirect effects															
C2 → Qualitative Support → outcome	-.01	.01	(-.03, -.00)	-.10	.04	(-.16, -.04)	.03	.02	(-.00, .07)						
C2 → Quantitative Support → outcome	= 0	—	—	= 0	—	—	-.02	.01	(-.04, -.00)						
C3 → Qualitative Support → outcome	-.01	.00	(-.02, -.00)	-.06	.02	(-.10, -.02)	.02	.01	(-.04, .00)						
C3 → Quantitative Support → outcome	= 0	—	—	= 0	—	—	-.01	.01	(-.03, .00)						
Total effects															
C2	-.01	.01	.04	-.10	.04	.01	.01	.02	.54						
C3	-.03	.01	.02	-.06	.02	.01	.01	.01	.51						

Note. For indirect effects, 95% confidence intervals (CI) that do not overlap with 0 are considered significant and marked in bold. C2 and C3 refer to the probability of being assigned to latent Class 2 and 3, respectively. Qualitative Support = qualitative social support; Quantitative Support = quantitative social support. = 0 represents paths set to 0 in the model trimming process. See Figure 2 for all regression coefficients of the mediation model. Bold: $p \leq .05$; italics: $p \leq .10$.

for positive relations with others. Figure 3 displays model estimates and Table 6 summarizes the mediation results.

As before, the *cherished* group reported higher qualitative and quantitative social support in midlife than either the *harshly disciplined* and *ordinary* groups. Higher qualitative support in midlife was associated with higher competence and positive relations with others, and marginally higher autonomy in later life. Higher quantitative support in midlife was related only to greater positive relations with others in later life.

Supporting Hypothesis 3, higher qualitative support in midlife mediated the higher levels of later-life competence and positive relations with others in the *cherished* group, compared with the *harshly disciplined* and *ordinary* groups. After accounting for the indirect effects via social support, the direct pathways from early experiences to these outcomes remained significant, suggesting other unmeasured factors could explain the associations.

With regard to autonomy, the mediation hypothesis was not supported. The significant total effect for the *ordinary* group and marginal total effect for the *harshly disciplined* group suggested the *cherished* group had greater autonomy than both groups of men, but these associations were independent of midlife social support (i.e., no indirect effects).

Quantitative support in midlife was only related to positive relations with others in late life. Specifically, compared with the *cherished* group, the *harshly disciplined* group had lower levels of positive relations with others in later life, and this could be

attributed to their lower levels of midlife quantitative support. Otherwise, the association between early experiences and eudaimonic well-being were independent of midlife quantitative support.

Discussion

Based on self-report of early psychosocial experiences, this study identified three groups of men, labeled as *cherished*, *harshly disciplined*, and *ordinary*. The groups were most distinct on parental discipline, social support availability, and negative life events during childhood. As hypothesized, the early experiences of the *cherished* group were linked to greater hedonic and eudaimonic well-being in later life compared with those of the other two groups, independent of childhood SES, later-life health and marital status. Quality, but not quantity, of midlife social support mediated the relation between nurturing early experiences and greater psychological well-being in later life.

Profiles of Childhood Experiences

Unique combinations of variables across domains characterized the profiles of childhood experiences, reinforcing the notion that focusing solely on adversity, and excluding neutral or positive experiences, do not fully capture the heterogeneity of early experiences. This heterogeneity is particularly well-illustrated by the

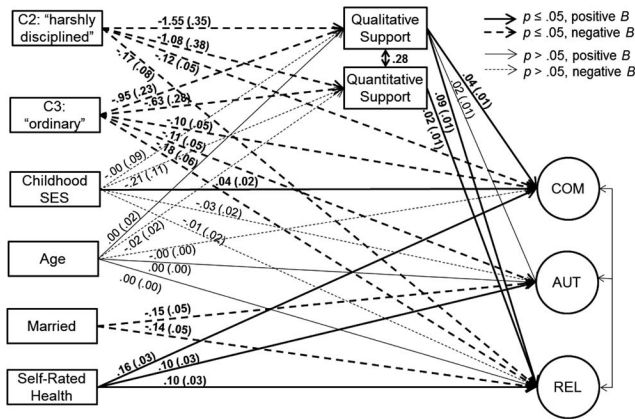


Figure 3. Unstandardized structural path coefficients (B) and SE (in parentheses) from the final structural model on the longitudinal association among early experiences, midlife social support, and later-life eudaimonic well-being. Notes: C2 = latent class 2; C3 = latent class 3; SES = socioeconomic status; COM = competence; AUT = autonomy; REL = positive relations with others. Only structural components of the model are displayed. Double-headed arrows represent correlations. Correlations among exogenous variables were modeled but not shown (see Supplemental Document B).

profile of the *cherished* children. Despite having the most nurturing early experiences, this group also had the highest rate of serious losses in childhood. Numerous buffers likely ameliorated the long-term negative effects of these losses on their later-life well-being. Presence of close relationships inside and outside of the family reflects secure early attachment, available support and positive role models. Compared with other groups, the *cherished* group reported that their parents more frequently used milder forms of discipline, provided positive reinforcement, and held them in positive regard. High participation in extracurricular activities suggests the presence of external support, and opportunities to gain practical skills and develop a sense of belonging to a community.

Early experiences were less favorable among the *harshly disciplined* and *ordinary* groups. Their profiles suggest barriers to developing secure attachments. Bowlby (1982) described three types of support critical to forming secure attachments: *Proximity* is the physical and psychological presence of a caregiver. *Safe haven* refers to the primary caregiver as a source of emotional and instrumental support to overcome threats and obstacles. *Secure base* for exploration refers to primary caregivers providing support for goal pursuits (cf. Mikulincer & Shaver, 2009). For the *harshly disciplined* group, frequent harsh punishment and unfair treatment by adults resemble aggression-filled "risky families" (Repetti et al., 2002). Their parents were "rarely pleased," seldom provided reinforcements, and offered little positive regard, thus failing to provide a secure base for age-appropriate explorations and affiliative behaviors. In the context of a hostile environment, the higher frequencies of nonnormative stressors (parental divorce, sexual molestation) further suggest the absence of safe havens when confronted with adversity.

The *ordinary* group experienced relatively few stressors as children. They reported moderate levels of within-family support but less external support than other groups. While they recalled

fewer achievements than others, they also received the least parental discipline and were least likely to be considered hell-raisers. The lower levels of parental attention received by this group might have been more common among children in the early 20th century. It is also possible that the children were generally well-behaved and required little attention or management from their parents. While we consider these early experiences to be relatively neutral, the amount of support and resources conducive to the development of secure attachment and age-appropriate explorations was perhaps less readily available to the *ordinary* than the *cherished* children.

Early Experiences and Midlife Social Support

As hypothesized, the early experiences of the *cherished* group were associated with higher levels of social support quality and quantity in midlife. Sarason and colleagues posited that key early relationships can shape cognitive representations of the self and others, which in turn form the basis of perceived support in adulthood (Sarason, Pierce, & Sarason, 1990). Secure early relationships, such as those endorsed by the *cherished* group and lacking in the *harshly disciplined* group and (to a lesser extent) the *ordinary* group, promote the belief that one is valued and accepted by significant others. Individuals with a positive sense of acceptance have greater social skills and self-efficacy in social situations. They are more likely to perceive others' behaviors as supportive and be satisfied with the outcomes of social interactions, which enable them to form and engage in emotionally rewarding relationships (Sarason et al., 1990, 1991). On the other hand, as noted above, early environments of the *harshly disciplined* and *ordinary* groups likely restricted the development of secure attachments and social competence, and undermined the ability to form trusting and supportive relationships (Repetti et al., 2002).

Early Experiences, Later-Life Psychological Well-Being, and Mediation by Midlife Social Support

Our second hypothesis was partially supported—the early experiences of the *cherished* group were associated with specific aspects of both hedonic and eudaimonic well-being in later life than those of the *harshly disciplined* and *ordinary* groups. The similar relations of the latter two groups with later-life well-being suggest that it is perhaps a *cherished* upbringing in the context of stressors that conferred benefits on later well-being, rather than the magnitude of early adversity per se (that would have yielded stronger relations with well-being for the *harshly disciplined* group than the *ordinary* group). Our findings resonate with research identifying strong familial and external support as critical buffers that promoted children's adaptation to stressors (Werner & Smith, 1992). These longitudinal associations are in line with a life span developmental perspective on stress-related growth, wherein early support allowed the *cherished* children to acquire coping skills in the face of hardship; thus, transforming losses into turning points for growth and greater well-being over age (Aldwin, Levenson, & Kelly, 2009). Compared with the *cherished* group, the *ordinary* group had lower autonomy in later life, perhaps reflecting lifelong patterns of passivity.

Hedonic well-being. We observed higher levels of life satisfaction and positive affect in later life among the *cherished* compared with the *harshly disciplined* and *ordinary* groups. The re-

Table 6

Results From Final Structural Equation Model of Midlife Social Support Mediating the Association Between Later-Life Eudaimonic Well-Being and Early Experiences, Adjusted for Childhood Socioeconomic Status and Covariates

	Qualitative support			Quantitative support			Competence			Autonomy			Positive relations with others		
	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>
Mediation components															
C1: "cherished" (ref.)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C2: "harshly disciplined"	-1.55	.35	<.001	-1.08	.38	.01	—	—	—	—	—	—	—	—	—
C3: "ordinary"	-.95	.23	<.001	-.63	.28	.03	—	—	—	—	—	—	—	—	—
Qualitative Support	—	—	—	—	—	—	.04	.01	<.001	<i>.02</i>	<i>.01</i>	<i>.10</i>	.09	.01	<.001
Quantitative Support	—	—	—	—	—	—	= 0	—	—	= 0	—	—	.02	.01	.04
				Competence			Autonomy			Positive relations with others					
	<i>B</i>	<i>SE</i>	<i>p/95% CI</i>	<i>B</i>	<i>SE</i>	<i>p/95% CI</i>	<i>B</i>	<i>SE</i>	<i>p/95% CI</i>	<i>B</i>	<i>SE</i>	<i>p/95% CI</i>			
Direct effects															
C2: "harshly disciplined"		-.12	.05	.03	= 0	—	—	—	—	-.17	.08	.04			
C3: "ordinary"		-.10	.05	.04	-.11	.05	.03	-.18	.06	.003					
Indirect effects															
C2 → Qualitative Support → outcome		-.07	.02	(-.12, -.03)	<i>-.03</i>	<i>.02</i>	<i>(-.07, .01)</i>	-.14	.04	(-.21, -.07)					
C2 → Quantitative Support → outcome		= 0	—	—	= 0	—	—	-.02	.01	(-.05, -.00)					
C3 → Qualitative Support → outcome		-.04	.02	(-.08, -.02)	<i>-.02</i>	<i>.01</i>	<i>(-.04, .00)</i>	-.08	.03	(-.13, -.04)					
C3 → Quantitative Support → outcome		= 0	—	—	= 0	—	—	<i>-.01</i>	<i>.01</i>	<i>(-.03, .00)</i>					
Total effects															
C2		-.19	.06	.002	<i>-.03</i>	<i>.02</i>	<i>.10</i>	-.32	.09	<.001					
C3		-.14	.05	.004	-.12	.05	.01	-.27	.07	<.001					

Note. For indirect effects, 95% confidence intervals (CI) that do not overlap with 0 are considered significant and marked in bold. C2 and C3 refer to the probability of being assigned to latent class 2 and 3, respectively. Qualitative Support = qualitative social support; Quantitative support = quantitative social support. = 0 represents paths set to 0 in the model trimming process. See Figure 3 for all regression coefficients of the mediation model. Bold: $p \leq .05$; italics: $p \leq .10$.

gression coefficients were similar for the *harshly disciplined* and *ordinary* groups, but only marginally significant in the former. The smaller size of the *harshly disciplined* group (and therefore, weaker statistical power) likely contributed to the marginal findings.

Partially supporting Hypothesis 3, quality, but not quantity, of midlife social support mediated the association between early experiences and later-life life satisfaction and positive affect. This is consistent with meta-analytic findings that subjective well-being in old age is more strongly correlated with quality than quantity of social contact (Pinquart & Sörensen, 2000). Sarason et al. (1990, 1991) posited that adults with secure early attachments are more likely to perceive relationships as supportive, which may explain more frequent experiences of positive emotions in the *cherished* group.

Contrary to our hypothesis, early experiences were unrelated to negative affect in later life. While men with higher quality social support tended to have a greater amount of support, our results indicate that it is the quality, not quantity, of social support that protects against negative affect in later life. In particular, low parental control and support—characteristics of the *harshly disciplined* group—predispose children to entering and remaining in deviant peer groups (Jessor, 1991). As adults, individuals from adverse childhood environments are more likely to experience relationship difficulties or be in abusive relationships (Colman & Widom, 2004; Umberson et al., 2005); thus, a larger social network and more frequent social contact might not be beneficial. While the *harshly disciplined* group was linked to greater negative

affect in later life via lower-quality support in midlife, they also seemed to be protected against subsequent negative affect by having fewer interactions with less supportive networks compared with other men. The opposite associations of qualitative and quantitative support with negative affect reinforce the importance of considering both dimensions in understanding the relations between social support and well-being.

Eudaimonic well-being. The *cherished* group reported higher levels of competence and positive relations with others in later life than the other groups. The *cherished* group also reported greater autonomy than the *ordinary* group. Our findings suggest that supportive early environments can have a lasting impact on the ways individuals actualize their potential over the life span.

Stronger qualitative support in midlife mediated the association between early experiences of the *cherished* group and greater competence in later life. Competence represents self-efficacy in dealing with past and present challenges, and confidence in one's ability to grow in a fulfilling direction. Being cherished as a child and having the perception of support in adulthood likely enhance one's readiness to engage with challenges without fear of repercussion (e.g., being ridiculed) or failure. On the other hand, children who lack a secure base for exploration via trusted caregivers are less open to new experiences, which in turn restrict opportunities to gain skills and develop self-efficacy (Sarason et al., 1990). As adults, the perception of inadequate support may lead one to take on fewer challenges and limit exploratory behaviors, in turn contributing to lower self-efficacy and mastery.

Stronger qualitative support in midlife also mediated the association between the early experiences of the *cherished* group and more positive relations with others in later life. As predicted, *cherished* children were more capable of garnering support and forming trusting relationships in adulthood, which in turn contributed to a greater capacity for deep friendship, intimacy, and close identification with others in later life.

Ordinary children had lower levels of autonomy in later life, but contrary to expectation, this association was independent of midlife social support. Autonomy refers to an internal locus of evaluation and a sense of freedom from conventions (Ryff, 1989). Fewer childhood stressors and lower parental involvement suggest fewer opportunities to acquire self-knowledge and develop coping skills than the *cherished* group. While the early experiences of the *ordinary* group were not necessarily adverse, they were linked to a diminished ability to uphold one's values and opinions in later life. Mediation results further suggest this association was not explained by perceptions of support in adulthood.

Our findings are consistent with the chain-of-risk model of life course processes. Nonsignificant correlations between childhood SES and membership in the *harshly disciplined* and *ordinary* classes (Supplemental Document B) are inconsistent with the risk clustering model and correlations among adverse childhood experiences observed in the literature (Dong et al., 2004; Green et al., 2010). This discrepancy could be attributable to the severe nature of the adverse events (e.g., domestic violence, parental substance abuse) in other studies, and limited variation in our childhood SES variable given the sociohistorical context. Our findings set the stage for research to investigate additional links in the chain (e.g., adulthood SES) that could explain the association between nurturing early experiences and successful aging. Studies with prospective data on event timing are particularly well-positioned to extend current findings and investigate whether the effects of adversity (or support) on later-life outcomes are amplified when they occur during key developmental periods (i.e., sensitive period model; Kuh et al., 2003).

Limitations

There are several limitations to this study. As with most studies on later-life outcomes of early adversity, we relied on retrospective assessment of childhood experiences. As noted, this measure was administered 8 years before the assessment of psychological well-being, which can alleviate some concerns for reverse causality. Furthermore, several studies have found negligible differences between prospective and retrospective reports of early adversity in relation to mental health outcomes (Brown, Craig, Harris, Handley, & Harvey, 2007; Scott, McLaughlin, Smith, & Ellis, 2012).

Our results may have been affected by reporting bias (e.g., overreporting of stressors, support, and well-being by the *cherished* group or underreporting by the *ordinary* group). However, there was sufficient differentiation in the responses to suggest that this was unlikely—the *ordinary* group reported levels as high as the *cherished* group on some CES items (e.g., verbal scolding, spanked), while even the *harshly disciplined* group reported some adult support. We acknowledge that some CES items (e.g., items on perceptions) are more evaluative than others, and could be influenced by respondents' appraisals of their childhood.² Unfortunately, our data preclude us from evaluating the extent to which

objective occurrences versus appraisals of childhood experiences influence subsequent well-being, but this question merits additional research.

We treated hedonic and eudaimonic well-being as separate constructs, but whether they are theoretically distinct is controversial (e.g., Henderson & Knight, 2012; Kashdan, Biswas-Diener, & King, 2008). Our data indicate varying degrees of overlap between dimensions of hedonic and eudaimonic well-being ($r = 0.25-0.72$; Supplemental Document C). In response to a reviewer's request, we repeated the analyses for Hypothesis 3, adjusting for the shared variance between hedonic and eudaimonic well-being. Although some of the previously important associations were attenuated or became nonsignificant, early experiences were still linked to dimensions of hedonic (i.e., NA) and eudaimonic well-being (i.e., competence and positive relations with others) via midlife social support (Supplemental Documents D and E). However, this type of adjustment introduces multicollinearity among the predictors, which can yield unstable estimates (cf. Coyne, 2013), and results should be interpreted with caution. We then repeated the analysis a third time by modeling hedonic and eudaimonic dimensions as correlated outcomes, and obtained results that were highly similar to those reported in Tables 5 and 6 (available upon request), suggesting that accounting for the correlated nature of these constructs does not substantively alter their associations with early experiences and midlife social support. Future studies might consider an alternative latent structure of well-being that subsumes both hedonic and eudaimonic dimensions.

NAS men were selected for good mental and physical health at study entry in the 1960s, possibly leading to range restriction on CES items and psychological outcomes. This would limit the generalizability of our findings to men who might have suffered

² We repeated the latent class analysis (LCA) after removing 11 items we considered more evaluative in nature to determine whether the 3-class solution was largely driven by later-life perceptions of early experiences. The 11 items were: felt close to an adult relative; felt close to another adult; felt close to another sibling; had a special friend; physically punished more than deserved; unfairly treated for long periods of time; considered intelligent by parents; considered athletic by parents; considered popular by parents; any accomplishments you were proud of; considered to be a hell-raiser as a kid. Using the same procedures as described in the Analysis Plan, we evaluated 1- to 5-class models (models involving 6+ classes were not considered based on analyses using the full set of items). We found that the 3-class model provided the best fit to the data and performed well on classification diagnostics. The profiles of the 3 classes were rather similar between the solutions based on the full set vs. reduced set of items—when we compared the item endorsement probabilities for each class between the two solutions (e.g., endorsement probability for "serious fall" in Class 1 based on the full set vs. reduced set of items), all differences were below 11%. We also used Cohen's κ coefficient to compare each person's most-likely class assignment based on the two 3-class solutions. The κ was 0.54, suggesting a moderate level of agreement between the two solutions (Landis & Koch, 1977). We also repeated the analyses for Hypothesis 2 using the latent class probabilities from the solution based on the reduced set of items. Compared with the results based on the full set of items, the effect sizes were somewhat attenuated, but the overall pattern of results remained the same. The weaker effect sizes were likely because of the smaller amount of variance in early experiences captured by the reduced versus the full set of items. Because the 3-class solution held up even in the absence of items with an evaluative component, and these items allowed us to depict a richer picture of the sample's early experiences, we report results based on the full set of CES items.

greater childhood adversity or have worse well-being than our sample. Our sample was all male and mostly White, and results may not generalize to females and ethnic minorities. We also note that NAS men were born in the first half of the 20th century, and societal conventions regarding parental discipline and definitions of a “normative event” have changed over time. Although behaviors that reflect early care versus maltreatment are relatively stable over time, this caveat should be noted as readers make comparisons to later-born cohorts. Finally, we did not assess change in well-being from mid- to later-life, leaving open the possibility that lower psychological well-being influenced perceptions of social support in midlife. Future studies may consider examining bidirectional change between the two constructs.

Strengths and Future Directions

In this study, the person-centered approach allowed us to conceptualize early experiences as a multifaceted construct and examine their legacy from the life span developmental perspectives. Two benefits are worth noting: First, the unique combination of early psychosocial factors in each class and their association with subsequent well-being suggest that one may miss or underestimate individual differences by approaching early experiences in a unidimensional manner. Most studies that have considered the co-occurrence of childhood experiences focused exclusively on risk factors (e.g., Edwards et al., 2003; but see Chen, Miller, Lachman, Gruenewald, & Seeman, 2012). Our results, while exploratory, provide evidence for meaningful clustering across positive and negative early experiences. More research is needed to shed light on potential interactions between risk and protective factors that affect developmental outcomes. Second, in contrast to studies focusing on extreme stressors or clinical samples, our findings based on a relatively healthy sample suggest that focusing on subtler aspects of the early environment, such as parental discipline, and their interplay with other factors, can reveal enduring associations with developmental outcomes. Thus, our findings call for a more complex and nuanced approach to conceptualizing early experiences. Other methodological strengths of this study include the longitudinal assessment of midlife social support and later-life well-being, and adjustment for childhood SES in considering the developmental outcomes of early psychosocial experiences.

The present study contributes to a nascent area of research by demonstrating linkages between early environments and successful aging. The association between the early experiences of the *cherished* group, which was characterized by both loss and support, and facets of hedonic and eudaimonic well-being in later life, adds to our knowledge on stress-related growth across the life span. Future work can examine whether and how positive early experiences may confer benefits on other indicators of successful aging. Our finding of midlife qualitative support as a mediator of the association also bridges the developmental literature on the adulthood consequences of early attachment with life course models of early adversity. It suggests that interventions aimed at reducing loneliness and/or improving support perceptions (Masi, Chen, Hawkey, & Cacioppo, 2011) could have long-term benefits on well-being.

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Received December 19, 2014

Revision received July 16, 2015

Accepted July 21, 2015 ■