

Special Article

Early Parental Abuse and Daily Assistance to Aging Parents With Disability: Associations With the Middle-Aged Adults' Daily Well-being

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Abstract

Objectives: The current study examined the within-person association between providing daily assistance to aging parents with disability and adult children's daily mood in the context of early relationship with parents.

Methods: We used data from 782 participants and 5,758 daily interviews from the Midlife in the United States (MIDUS) Refresher, with 248 people self-reported providing daily assistance ranging from 1 to 8 days out of the entire daily-interview period. Multilevel models were fit to examine the moderating effect of physical and emotional abuse from parents in early life on the associations between daily assistance to parents today and yesterday and daily mood. Additional analyses were conducted to examine whether the moderating effect of parental abuse remained when the assistance was provided for other family members and friends.

Results: Providing assistance today and yesterday to parents had immediate and lagged associations with higher negative affect when adult children experienced childhood emotional abuse from parents. No significant findings were found for daily positive affect. The moderating effect of parental abuse became nonsignificant when the assistance was provided to other family members or friends.

Discussion: Daily assistance to parents with disability needs to be examined in the context of the relationship history with parents. The impact of childhood abuse can linger long after the actual incident. Frequent early emotional abuse from parents was associated with greater distress when the middle-aged provided daily assistance to their aging parents.

Keywords: Caregiving, Daily diary, Daily mood, Early parental abuse, Middle-aged adults

Extensive research shows that harsh parenting characterized by harmful interactions and physical punishment relate to a number of psychological and physical problems in children that persist throughout their lives. When people reach midlife, one emerging issue is that aging

parents may need assistance for disabilities. Parents' health needs and caregiving can each become stressful (Fingerman, Hay, Kamp Dush, Cichy, & Hosterman, 2007; Savla, Almeida, Davey, & Zarit, 2008). A middle-aged person's early experience may moderate the effects

of caregiving to aging parents, particularly if abuse had been involved.

This issue is important for two reasons. First, adult children are likely to be called upon to help their disabled parents when they have health needs (Cicirelli, 1993). Prior studies have shown that parents' age and health needs independently predicted adult children's assistance to parents (Whitbeck, Simons, & Conger, 1991). Second, ongoing care to parents, especially when it is intensive, is associated with compromised health and well-being among caregivers (Aneshensel, Pearlin, Mullan, Zarit, & Whitlatch, 1995), and these effects may be magnified in instances where parents had been abusive. In this situation, assistance may be motivated more by obligation than affection, which could be related to greater subjective burden among adult children (Cicirelli, 1993). Although the punitive relationship in childhood may have been decades ago, middle-aged children may still be affected by early parental abuse in their relationships with the parents and in other areas of their daily lives. An abusive relationship history with parents and the insidious restructuring of roles accompanying a parent's aging can be important stressors and sources of strain in midlife (Pearlin, 1989; Pearlin, Schieman, Fazio, & Meersman, 2005). From a developmental perspective, the historical context of early relationship with parents has largely been overlooked in caregiving research. The current study aims to examine the implication of daily assistance to aging parents with disability, among the middle-aged adults who had a history of parental abuse.

Early Parental Abuse and Well-being in Adulthood

Parent-child relationships fall along a continuum ranging from good and nurturing to harsh and abusive. Although the threshold is set arbitrarily, abusive interactions are nevertheless recognizable by both professional and lay persons (Glaser, 2002). The types of parental abuse considered in the present study are physical and emotional. Physical abuse has generally been defined as the intentional acts by a parent, which results in the child's physical injury (Simpson & Miller, 2002). Emotional abuse, on the contrary, is defined as a relationship between the parent and child characterized by harsh interactions (Glaser, 2002). Of note, the definition of emotional abuse does not contain the parents' motivation to harm the child, and it does not require physical contact. While both types of abusive acts are observable, emotional abuse rarely leads to immediate intervention and protection of the child. Part of the reason is that the definition and evidence of physical abuse rely on observable signs of harm to the child. For emotional abuse, however, the evidence of harm to the child is much subtler, although the ill treatment by parents is still recognizable (Glaser, 2002). One apparent consequence is delayed intervention efforts, and thus children are exposed to prolonged emotional abuse. Of course, physical abuse can also remain hidden, so that children's exposure is also long-term.

Guided by the life-span development perspective, individual development is a life-long process, which exhibits substantial variations depending on the sociocultural conditions (Baltes, 1987). Empirical studies show consistently that both physical and emotional abuse cause serious harm to the child's development. The negative outcomes of abuse can be general, as well as unique, based on the type of parental abuse. Some of these negative outcomes may extend well into adult life. For example, Briere and Runtz (1990) found that retrospective report of childhood physical abuse was associated with aggression to others, and emotional abuse was related to low self-esteem in adult women. In a community study of women survivors of childhood abuse, Mullen, Martin, Anderson, Romans, and Herbison (1996) reported the significant association between emotional abuse as a child and low self-esteem in adulthood. Further, the study found that individuals with a history of childhood emotional or physical abuse experienced marital breakdown more frequently later in adulthood. In a large population-based study, Springer, Sheridan, Kuo, and Carnes (2007) found that physical abuse as a child related to depression, anger, more physical symptoms, and severe ill health among adults.

The Daily Stress Process of Providing Assistance and Caregiver Well-being

Recent studies have used daily diaries to examine the association between caregiving activities and caregiver well-being (Koerner & Kenyon, 2007; Savla et al., 2008; Zarit, Kim, Femia, Almeida, & Klein, 2014). In contrast to the commonly utilized approach of asking if someone had been a caregiver or given assistance during some past period of time (e.g., 6 or 12 months), a daily approach could help sort out the immediate and lagged effects of giving help by more precise recollections of helping episodes. When people have encountered a stressor on a given day, they are likely to have negative feelings and to recall those feelings when interviewed on that day. Therefore, their reactions will be captured more accurately in a daily interview before they rationalize away those experiences. By comparing the within-person reactions to daily assistance on days when they provided versus did not provide care, it is possible to identify the immediate effects of assistance as well as the cumulative or carryover effects of caregiving from day to day. Additionally, this approach allows comparisons at the between-person level, making it possible to test the moderating effect of early relationship with parents on the within-person association between daily assistance and well-being.

Daily studies on caregiving that is moderate and intense typically show the detrimental effects of providing care on caregiver well-being. These studies support the stress process model of providing care (Aneshensel et al., 1995). In one of the first daily diary studies on caregiving, Koerner and Kenyon (2007) found significant within-person associations between care-related stressors and caregiver well-being; on days when caregivers having greater caregiving demands, they also

experienced more depressive symptoms, more physical symptoms, and felt greater burden (Koerner & Kenyon, 2007). Further, Smith and colleagues (2010) compared within-person associations between caregiving and well-being among mothers raising a child with autism spectrum disorder (ASD) and mothers raising children without disability. They found that daily caregiving was associated with lower positive affect, higher negative affect, and more fatigue only among mothers assisting children with ASD (Smith et al., 2010).

Studies on caregiving that is mild and less intense had mixed findings on ramifications of providing care. Savla and colleagues (2008) examined the within-person association between providing assistance to aging parents and daily mood among middle-aged adults. The authors found that on days when assistance was provided, adult children had higher distress. The negative association remained significant even after controlling for competing demands, such as assistance provided to individuals other than parents (Savla et al., 2008). Recent studies have also reported some health benefits related to providing care, known as the healthy caregiver hypothesis (Fredman et al., 2008). For example, Freedman, Cornman, and Carr (2014) found that for older women, caring for their spouses with a disability was associated with greater happiness on the following day. No associations, however, were found for older men caring for wives with a disability (Freedman et al., 2014). These studies, however, did not consider relationship history between the caregiver and the care receiver.

Linking Early Parental Abuse, Daily Assistance, and Well-being in Midlife

Both daily assistance and early abuse are stressors that can exert impact on health in midlife. Daily assistance is proximal, whereas early abuse seems more distal in the life course. Based on the notions of linked lives and transitions from the life-course framework (Pearlin, 2010; Pearlin, Menaghan, Lieberman, & Mullan, 2005), however, caregiving at midlife can be an important source of stressful change in the life course as well, affecting people who share close social relationships. Caregiving roots in early relationships with parents (Quinn, Clare, & Woods, 2009), and caregiving in midlife can involve confusions over transitions of multiple social roles such as being a caregiver, and an adult child. An undesired caregiving role can diminish the self-concepts, and a particularly intense parent-child relationship can relate to any caregiving being more difficult and stressful. Therefore, caregiving in midlife can be a potent avenue for daily emotional distress for people experienced early parental abuse.

On the other hand, traumatic early abuse can also be proximal, because some people who experienced early parental abuse may feel worthless every day. In seminal studies on early family relationships and later assistance between adult children and their parents, Simos (1970, 1973) found that when contemporary problems between the dyad resembled earlier interactions, adult children

tended to express resentment with regard to the problems as well as the aging parent. This is not surprising because the early abusive patterns of interaction may be awakened in these daily assistance situations, eliciting old feelings of hostility and rejection (Hagestad, 1981).

Finally, although both daily assistance and early abuse are chronic stressors, their impact on daily well-being may interact and compound. A recent study by Kong and Moorman (2015) examined depression among a large sample of adult children caregivers for their parents. Some of the parents had been abusive, and others were not. The study found that among adult children who were providing care to a parent, those who had a history of parental abuse had greater depressive symptoms, especially for caregivers who used emotion-focused coping. None of the prior studies, however, have specifically examined the impact of both daily and life-course stressors (i.e., daily assistance to parents versus relationship history with parents) of varying severity and impact on caregiver well-being using the daily stress process model.

Other Factors Related to Daily Assistance Experience

Other factors besides relational history contribute to experiences of distress when children assist their parents. Women caregivers and adult-child caregivers tended to report negative experiences, whereas men and spouse caregivers were more likely to report positive experiences of caregiving (Lin, Fee, & Wu, 2012). Further, caregivers who are non-Hispanic White (Fredman et al., 2008), have lower education, and are employed tend to report more distress (Sörensen & Pinquart, 2005). Extent of care, such as tangible and emotional support, can also have an effect on adult children providers' well-being (Aneshensel et al., 1995). The current study considered adult children's average daily positive events, caregivers' age, gender, education, and total tangible and emotional support to parents as covariates.

The Current Study

The current study examined daily assistance to parents with disability and daily mood among the middle-aged adults in the context of parental abuse in childhood. The unique contribution of the current study is taking an intensive longitudinal approach to examine the impact of daily assistance on the fluctuation of daily affect across days among middle-aged adults who experienced parental abuse in childhood. Using this approach, both daily negative affect (NA) and positive affect (PA) were considered as outcomes. The intensity and cumulative effect of assistance on daily affect were modeled using the main and interaction effects of today's and yesterday's assistance to parents. According to the stress process model (Pearlin et al., 1981), a history of parental abuse and daily assistance to aging parents would each have an independent association with

greater daily distress for adult children. Further, parental abuse and daily assistance were expected to interact so that providing assistance would relate to greater distress for individuals who experienced parental abuse as children (Pearlin, 1989). Specifically, providing daily assistance will have immediate and lagged associations with ones' daily mood if the parent(s) were abusive. We proposed the following hypothesis:

Early parental abuse will moderate the association between daily assistance and daily well-being among middle-aged adults. That is, providing assistance to parents today and yesterday will relate to higher NA and lower PA today for individuals who experienced childhood abuse from parents.

Methods

Participants and Procedure

The current study used data from the national study of Midlife in the United States (MIDUS). The original MIDUS study (M1) began in 1995 and was the first national study focusing on the middle-aged using comprehensive assessments on the biopsychosocial processes of aging, using phone interviews, self-administered questionnaires, and daily diaries. In 2011, independent samples of adults were recruited to augment the existing MIDUS study, with a primary aim to examine the impact of economic recession on health. The MIDUS refresher study or MR is consistent with the original M1 in terms of the data collection protocols; MR included the main survey project, daily diaries, and other assessments on cognition and health. As data collection in other MR projects is still going on, participants in MR who had the main survey and daily diaries were completed and available for the current study.

The MR sample ($n = 2,152$) was recruited using random digit dialing of numbers with sex and age information about household composition. Respondents consisted of adults aged 25–75 sampled in two recruitment stages in 2011–2014. The main survey project consisted of participants who completed a phone interview (response rate was 55%) on sociodemographic and psychosocial functioning. A subset of these participants ($n = 1,414$) completed self-administered questionnaires (SAQ, response rate was 67%) on health, and additional psychosocial assessment. The daily diary project consisted of another subset of participants ($n = 782$, response rate was 60%) from the entire MR sample. Participants were interviewed daily for 8 consecutive days on daily experiences including stressful and positive events, daily assistance, and health and well-being. The sample for the current study consisted of 248 participants who provided information in SAQ on early relationship with parents, and daily diaries (a total of $N = 5,758$ valid days) on whether daily assistance was provided to parent(s) with disability. Sampling procedures were approved by the Institutional Review Boards at University of Wisconsin,

Madison for the main survey, and The Pennsylvania State University for the daily diary project. Participants received a small incentive for completing the main survey and daily study, respectively.

Measures

Daily affect

Daily affect was measured everyday using 27 items ($0 = \text{None of the time}$, $4 = \text{All the time}$) from the Nonspecific Psychological Distress Scale (Almeida & Kessler, 1998). Average scores were calculated from items measuring NA (14 items, $\alpha = .87$) and PA (13 items, $\alpha = .95$), respectively, with higher scores indicating having greater NA and PA on a given day. Both daily NA and PA were considered as outcomes.

Daily assistance to parents

Daily assistance was measured everyday by asking participants whether they provided assistance to person(s) with disability ($1 = \text{Yes}$, and $0 = \text{No}$). If participants answered yes, questions were followed up with regard to whom they had given the disability assistance, and what type of disability that person had. The care recipient list included close family members such as parents (rather than “mother”, and/or “father” separately), spouses, and children, remote family members such as siblings, in-laws, or other relatives, and individuals in one's larger social network such as friends, neighbors, coworkers, bosses, and employees. For participants who endorsed providing assistance to someone with disability that day, they were also followed up on whether the disability was emotional, physical, a combination of the two, or other types. Both today's and yesterday's assistances were considered as predictors of today's NA and PA.

Early parental abuse

Childhood exposure to parental emotional and physical abuse was self-reported by participants retrospectively. It was considered as the moderator of the association between daily assistance and affect. The SAQ administered six questions regarding emotional, physical, or severe physical abuse by mother versus father, that might have happened in one's childhood while one was growing up. The frequency of past emotional abuse was measured with this item probing if one's mother/father: “Insulted you or swore at you; Sulked or refused to talk to you; Threatened to hit you; Did or said something to spite you; Stomped out of the room; Smashed or kicked something in anger”. Physical abuse was measured by the frequency one's mother/father: “Pushed, grabbed, or shoved you; Slapped you; Threw something at you”. Finally, severe physical abuse was measure by the frequency one's mother/father: “Kicked, bit, or hit you with a fist; Hit or tried to hit you with something; Beat you up; Choked you; Burned or scalded you”. These three questions were asked on a 4-category Likert scale indicating

frequency of abuse ranging from 1 = *Often*, 2 = *Sometimes*, 3 = *Rarely*, to 4 = *Never*, by mother and father, respectively. For the current study, the raw abuse scores were reverse coded on a scale ranging from 0 to 3 with 0 = *Never* and 3 = *Often*. A composite score on early parental abuse was computed by summing the reverse-coded raw abuse scores for each type of abuse by both parents. Thus, each participant had three composite scores regarding three types of parental abuse ranging from 0 to a maximum score of 6, with higher scores indicating greater frequency of abuse.

Covariates

Covariates that may have significant associations with caregiver well-being were controlled in the current study, based on prior caregiving research (Pinquart & Sörensen, 2003; Sörensen & Pinquart, 2005). They included sociodemographic characteristics such as participants’ age, gender (1 = *Male* and 0 = *Female*), self-reported average hours of unpaid assistance (for example, help around the house or transportation) and emotional support (for example, comforting, listening to problems, or giving advice) provided to parents in a month, and the average number of daily positive events across days (5 items from Daily Inventory of Stressful Events, see Sin, Graham, & Almeida, 2014 for details) calculated for each participant.

Analytical Strategy

Preliminary analyses were conducted to compare demographic characteristics and frequency of abuse from participants who did not provide ($n = 534$) versus provided ($n = 248$) daily assistance to people with disability. Then three multilevel models were fit in hierarchy to test the moderating effect of early parental abuse on the association between daily assistance and well-being among the middle-aged adults.

First, each type of physical, emotional, and severe physical abuse was tested separately for daily NA, and repeated for daily PA (Model 1). Second, the cumulative effect of providing assistance today and yesterday was modeled by their interaction along with the main effects of assistance on daily NA and PA, respectively (Model 2). To test the hypothesis on moderation, a full model was fit using early parental abuse and daily assistance today and yesterday as predictors for daily NA, and repeated for daily PA (Model 3), where all three main effects of today’s assistance, yesterday’s assistance, and parental abuse and the interactions between the main effects were tested for both daily NA and PA.

The level-1 equation in Model 3 for daily NA was specified as:

$$\begin{aligned}
 \text{Daily NA}_{di} = & \pi_{0i} + \pi_{1i} (\text{Assistance today}_{di}) \\
 & + \pi_{2i} (\text{Assistance yesterday}_{di}) \\
 & + \pi_{3i} (\text{Assistance today}_{di} \\
 & \times \text{Assistance yesterday}_{di}) \\
 & + \pi_{4i} \text{Daily PA}_{di} + \epsilon_{di}
 \end{aligned}
 \tag{1}$$

where daily NA was modeled as a function of the intercept, today’s and yesterday’s assistance and their interaction,

daily PA, and the within-person residual term. Level-2 equations in Model 3 modeled the effects of different types of early parental abuse, while controlling for caregiver characteristics including age, gender, average unpaid assistance and emotional support, and average positive events across days. Level-2 equations in Model 3 were specified as:

$$\begin{aligned}
 \pi_{0i} = & \beta_{00} + \beta_{01} (\text{Parental abuse}_i) \\
 & + \beta_{02} (\text{Age}_i) + \beta_{03} (\text{Gender}_i) \\
 & + \beta_{04} (\text{Average daily positive events}_i) \\
 & + \beta_{05} (\text{Baseline assistance to parents}_i) \\
 & + \beta_{06} (\text{Baseline emotional support to parents}_i) \\
 & + \nu_{0i} \\
 \pi_{1i} = & \beta_{10} + \beta_{11} (\text{Parental abuse}_i) \\
 \pi_{2i} = & \beta_{20} + \beta_{21} (\text{Parental abuse}_i) \\
 \pi_{3i} = & \beta_{30} + \beta_{31} (\text{Parental abuse}_i) \\
 \pi_{4i} = & \beta_{40}
 \end{aligned}$$

where β s are population-level parameters; the person-specific intercept, π_{0i} , from Equation (1) was modeled as functions of early parental abuse, while controlling for other caregiving characteristics; the person-specific linear slopes, π_{1i} , π_{2i} , and π_{3i} , were also modeled as a function of early parental abuse. ν_{0i} is between-person differences in the intercept with a variance, σ_{ν}^2 . Model 3 was fit for each type of parental abuse separately. All models controlled for daily PA which was within-person centered in the level-1 equation. Average daily positive events across days, the participant’s age and gender were controlled for at level 2, and they were grand-mean centered. Model 2 and 3 also controlled for the average hours of unpaid assistance and emotional support to parents in a month, which were also grand-mean centered. Model 3 was also fit using a similar approach, with daily PA as the outcome and covarying daily NA.

Additional analyses were conducted to examine whether the moderating effect of early parental abuse would still hold when the assistance was provided for other family members and individuals from outside the family. Because some categories of daily assistance recipients had small frequencies, two additional categories were coded based on the existing list of categories. Specifically, the other-family category was coded by combining sibling and other relatives (such as in-laws). The outside-family category was also coded by combining friends, neighbors, coworkers, bosses, and employees all together. Model 3 was then refit using daily assistance to a spouse (Model 3a), a child (Model 3b), other family members (Model 3c), and individuals from outside the family (Model 3d) along with parental abuse as predictors. Similarly, both the main effects and interactions between today’s and yesterday’s assistances were modeled for daily NA and PA.

Results

Preliminary findings on the group means and *t*-tests on demographic characteristics between caregivers and noncaregivers are presented in Table 1. Caregivers tended to be older, women, slightly less educated, having less annual income, and having fewer people living in the same household. They did not differ from noncaregivers significantly in number of living children, health conditions, living arrangements with aging parents, or average frequency of parental abuse.

Model 1 examined the effect of early parental abuse on individuals' daily well-being. Middle-aged adults who experienced early parental emotional abuse ($\beta = 0.022$, $p < .001$), or physical abuse ($\beta = 0.023$, $p < .001$), or severe physical abuse ($\beta = 0.022$, $p < .001$) had greater daily NA, controlling for covariates. The same set of predictors but using daily PA as outcome showed the opposite pattern of associations. Specifically, middle-aged adults who experienced early parental emotional abuse ($\beta = -0.07$, $p < .001$), or physical abuse ($\beta = -0.08$, $p < .001$), or severe physical abuse ($\beta = -0.05$, $p = .03$) had lower daily PA. Further, Model 2 examined the effects of daily assistance

on individuals' daily well-being. Providing assistance to aging parents today and yesterday did not have significant main or interaction effects on daily NA, or PA.

To test the hypothesis on the moderating effect of early parental abuse on the association between daily assistance and well-being, a full model was fit. Model 3 showed that the three-way interaction between assistance today and yesterday to parents, and early parental emotional abuse was significant for daily NA ($\beta = 0.58$, $p = .0004$), but was not significant for daily PA ($\beta = -0.24$, $p = .27$). No significant moderating effects were found for physical abuse or severe physical abuse. Figure 1 plotted the significant interactions based on Model 3. Parameter estimates from Model 3 are presented in Table 2.

Additional analyses further clarified whether the moderation effect of parental abuse was specific to the association between daily assistance to parents and one's well-being. Findings from Models 3a-d showed that early parental abuse did not moderate the associations between daily assistance to a spouse, a child, other remote family members, or individuals from outside the family. The moderating

Table 1. A Comparison of Participants Who Did Not Provide ($n = 534$) and Provided ($n = 248$) Daily Support to People With Disability

	Participants <i>Not</i> providing daily disability support ($n = 534$)		Participants providing daily disability support ($n = 248$)		T-test
	M (SD) or <i>Freq</i>	Range	M (SD) or <i>Freq</i>	Range	
Age	48.01 (12.77)	25–75	50.38 (11.87)	26–75	-4.29*
Female	53%	–	67%	–	-3.32*
Education, Highest level completed ^a	8.07 (2.45)	2–12	7.91 (2.29)	3–12	2.13*
Spouse education, Highest level completed ^a	7.95 (2.48)	1–12	7.61 (2.48)	3–12	1.78
Pre-tax income last year	53046.53	0–300K	43355.49	0–300K	2.53*
Marital status currently ^b	1.97 (1.50)	1–5	2.26 (1.62)	1–5	–
Married	67.15%	–	58.13%	–	–
Separated	1.74%	–	1.44%	–	–
Divorced	11.80%	–	16.40%	–	–
Widowed	5.27%	–	4.60%	–	–
Never married	14.04%	–	19.42%	–	–
Number of living children	2.01	0–11	2.14	0–11	-0.44
Total persons living in the household	2.88	1–13	2.80	1–13	2.37*
Physical health, self-evaluated	2.40	1–5	2.52	1–5	-1.32
Mental health, self-evaluated	2.25	1–5	2.37	1–5	-1.52
Health compared to others your age	2.24	1–5	2.35	1–5	-1.31
Lived with aging parents ^c	7%	–	10%	–	1.31
Parental emotional abuse ^d	1.67 (1.63)	0–6	1.88 (1.69)	0–6	-0.19
Parental physical abuse ^d	1.20 (1.49)	0–6	1.17 (1.45)	0–6	-1.21
Parental severe physical abuse ^d	0.56 (1.22)	0–6	0.58 (1.20)	0–6	-1.13

Note: * $p < .05$.

^aHighest level of education completed was coded as 1 = *No school* and 12 = *Profession degrees such as Ph.D.*; ^bMarital status was coded as 1 = *Married* and 5 = *Never married*; ^cSAQ asked during the past 12 months, did respondents have their aging parents live with them as their place of residence (1 = *Yes*, and 0 = *No*)? Visiting overnight did not count as living with the respondent; ^dParental emotional, physical (severe) abuse were coded as the sum of frequency of emotional, (severe) physical abuse from both parents. Abuse score ranged from 0 = *Never* to 3 = *Often* for one parent.

effect of parental abuse was specific on the associations between daily assistance to the parents and one's well-being.

Discussion

This study is one of the first to explore how early parental abuse may moderate the association between daily

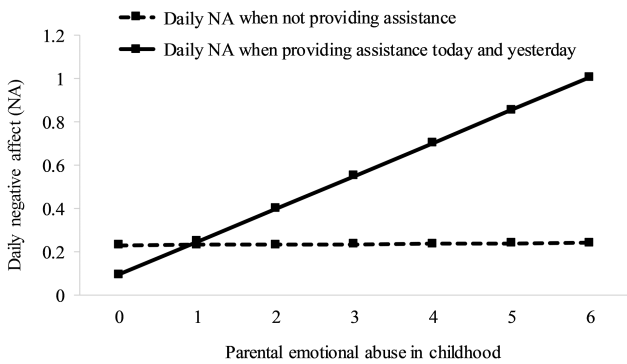


Figure 1. Model-predicted daily negative affect as a function of childhood emotional abuse from parents and daily assistance to aging parents.

assistance to parents and one's daily mood. Guided by the stress process model, and the life span and life-course frameworks (Baltes, 1987; Pearlin, 1989, 2005, 2010), we considered the proximal daily stressor of assistance and more distal life-course stressor of early parental abuse and their impact on daily well-being among a sample of middle-aged adults. The findings from the moderation analysis showed that daily assistance to aging parents was associated with greater NA among individuals who experienced emotional abuse by their parents as children. The moderating effect of early parental abuse was specific to providing assistance to aging parents, and not to other family members or friends.

The findings suggest that daily assistance do not have a uniform effect on well-being. Consistent with the life span and life-course perspectives, earlier experiences contribute to varying experiences of caregiving at midlife (Baltes, 1987; Pearlin, 2010). At the daily level, providing assistance today and yesterday did not have any immediate or cumulative effect on daily mood. However, poor early relationship history with parents can become a potential and potent moderator for stressful daily caregiving, even at fairly low levels of assistance, which was typical in the current sample.

Table 2. Moderating Effect of Emotional Abuse on the Association Between Daily Assistance to Parents With Disability on Daily NA and PA

Effect	Daily NA	Daily PA
	Estimate (SE)	Estimate (SE)
<i>Fixed effects</i>		
Intercept, β_{00}	0.828 (0.172)***	1.729 (0.349)***
Assistance today, β_{10}	0.788 (0.226)***	-0.065 (0.382)
Assistance yesterday, β_{20}	0.011 (0.275)	-0.387 (0.421)
Assistance today \times Assistance yesterday, β_{30}	-0.942 (0.376)*	0.767 (0.609)
Parental emotional abuse in childhood, β_{01}	0.008 (0.023)	0.029 (0.048)
Assistance today \times Parental emotional abuse, β_{11}	-0.417 (0.110)***	-0.091 (0.196)
Assistance yesterday \times Parental emotional abuse, β_{21}	-0.062 (0.111)	0.117 (0.168)
Assistance today \times Assistance yesterday \times Parental emotional abuse, β_{31}	0.583 (0.162)***	-0.236 (0.272)
Daily NA, β_{40}		-0.727 (0.086)***
Daily PA, β_{40}	-0.265 (0.031)***	
Baseline tangible support to parents (hr per month), β_{05}	-0.000 (0.000)	-0.001 (0.001)
Baseline emotional support to parents (hr per month), β_{06}	0.001 (0.001)	0.002 (0.002)
Average number of daily positive events, β_{04}	0.136 (0.043)**	0.181 (0.090)*
Respondent's sex, β_{03}	-0.032 (0.074)	0.032 (0.153)
Respondent's age, β_{02}	-0.001 (0.003)	0.016 (0.006)*
<i>Random effects</i>		
Intercept VAR	0.078 (0.017)***	0.388 (0.070)***
Residual VAR	0.050 (0.005)***	0.115 (0.011)***
-2 Log-likelihood	172.8	468.8
AIC, BIC	176.8, 182.0	472.8, 477.9

Note: Childhood emotional abuse was measured by retrospective self-report for mother and father (0 = never, 1 = rarely, 2 = sometime, 3 = often), respectively. The variable on parental emotional abuse in childhood was computed by summing the frequency of abuse scores by mother and father, which ranged from 0 to 6, with higher scores meaning more frequent emotional abuse.

VAR = variance; AIC = Akaike information criterion; BIC = Bayesian information criterion.

* $p < .05$. ** $p < .01$. *** $p < .001$.

A Life-Span Perspective to Study Daily Caregiving and Well-being

Guided by the life-span developmental perspective, individual development is a life-long process, which exhibits substantial variations depending on the sociocultural conditions in a given historical period and context (Baltes, 1987). The impact of relationship history with parents, however, has been poorly understood for the middle-aged caregivers for their aging parents based on prior studies. Pearlin (1989, 2010) emphasized the importance of structural contexts of individual's lives when examining the stress process. Specifically, variables providing such information should not be treated only as statistical controls and tested for their main effects; they need to be examined for their impact on specific domains of the stress process. Daily caregiving to aging parents in midlife is one of those life experiences that roots in the context of early relationship history with parents. The dynamics of daily caregiving experiences is not likely to be fully captured without reference to one's early lives with parents. This study has therefore made a unique contribution by specifically examining the compounding impact of both daily and life-course stressors in the stress process.

The findings suggest that among mid-aged caregivers who experienced child abuse by parents, they may be more vulnerable than resilient to the negative impact of providing daily assistance to their aging parents. One pathway linking abusive experiences in childhood and compromised well-being in adulthood may be through poor social relationships (Myers, 2000). Prior studies show that childhood maltreatment is associated with avoidance of social interactions (Trickett & McBride-Chang, 1995), poor social problem-solving and disturbed peer relationships (Trickett & McBride-Chang, 1995), and poor marital quality and breakdown (Mullen et al., 1996). A history of early parental abuse thus may predispose middle-aged adults to maladaptation when providing assistance to the actual abusive parent or parent figure. More specifically, early trauma may deplete some protective resources, because caregivers who experienced early abuse may be less capable in initiating and maintaining social support, and more likely to have poor self-concept, and to feel constantly worthless. Therefore, the process of stress proliferation (Aneshensel et al., 1995) may have impinged more on caregivers who experienced early abuse.

Caregiving in Mid-life is a Varying Experience

The findings suggest that daily assistance on its own may not have any immediate and lagged effects on daily distress, which add to the caregiving literature with regard to providing less intensive type of daily assistance (Savla et al., 2008; Zarit et al., 2014). However, daily assistance to parents may open up opportunities for unwanted stressor exposures among middle-aged adults who experienced early parental abuse, especially emotional abuse. It is possible that emotional-abusive parents in one's early years keep abusing their adult offspring emotionally, and such abusive

behaviors sustained over years (Kong & Moorman, 2015). This scenario is less likely, however, the case for early physical abuse. Frequent emotional abuse from parents in early years of life, in the absence of physical abuse, relates to lower psychological well-being and higher negative affect in adulthood (Greenfield & Marks, 2010). On the other hand, relationship closeness with the care recipient can be an important caregiving resource (Fauth et al., 2012), and both precaregiving and current relationship tend to have a positive impact on caregiver well-being (Quinn et al., 2009).

Indeed, interpersonal functioning is a powerful mechanism for compromised well-being among adults who are victims of child abuse. Adults with a history of child maltreatment tended to have difficulties in maintaining intimate relationships (Whisman, 2006), which could translate into poor interpersonal skills in dealing with abusive parents and use of negative coping methods when facing care-related stressors (Kong & Moorman, 2015). It is also important to note that a history of emotional abuse is associated with the use of avoidant coping or internalizing problems, which could lead to compromised well-being of abused adults (Doyle, 2001). However, past relationship with parents may not directly relate to the well-being of adult children who cope positively (Fingerman, 1995). Poor interpersonal functioning may also make it more difficult to obtain important resources such as social support to manage the daily stress while providing care, which in turn could relate to negative caregiving outcomes.

Further, the findings also suggested that experiencing more daily positive events related to greater daily PA, which was consistent with prior studies on positive events as buffering resources in the stress process (e.g., Sin, Graham, & Almeida, 2015). However, having more positive events also related to greater daily NA. This finding and the mechanism need to be explored further in future studies.

Limitations

This study has limitations. First, childhood abuse based on retrospective self-reports was the only available measure on early abuse in the MIDUS study. Besides the self-reported frequency of parental abuse, information on exact timing or onset of abuse, or duration of abuse was not available. Although retrospective reports are widely utilized, they have potential recall errors or confounds. For example, caregivers' current emotional state may affect their recollections of early parental abuse. Additionally, the three parental abuse variables that were constructed based on the raw scores had some skewness. The fact that emotional abuse was the type of abuse that showed significant results may also be driven by the fact that it was the most normally distributed variable on parental abuse among all three. Although the current study did not show any significant findings on effects of physical abuse, it does not mean this type of abuse is less harmful than emotional abuse.

Second, the scope of daily assistance examined in this study may not represent the entire spectrum of caregiving experiences. Research shows that various forms of

caregiving experience such as daily assistance to spouses, and caring for minor children with developmental diseases may have similar but distinctive impact on caregiver well-being. Moreover, daily assistance as measured by yes and no on a given day in the current study cannot differentiate the more intensive type of caregiving such as seen in the case of dementia from the less intensive type of assistance. Third, the information on which parent was the primary care recipient was not available, even if the information on whether mother or father was abusive in the past was available. Therefore, the study could not examine whether caring for an abusive mother versus father has similar or different ramifications on daily mood for mid-aged adult offspring.

In conclusion, we will have a better understanding on the within-person stress process of providing daily assistance to aging parents if we incorporate information on early relationship history with parents. Although findings from the current study need to be interpreted with caution, they provided the valuable first evidence that early parental abuse, such as emotional abuse, may make daily assistance more stressful for some middle-aged caregivers than others. These findings could contribute to expanding the existing caregiving literature, as well as better alignment of interventions to promote well-being among the more vulnerable middle-aged caregivers.

Supplementary Material

Supplementary material is available at *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences* online.

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Conflict of Interest

None reported.

References

- Almeida, D. M., & Kessler, R. C. (1998). Everyday stressors and gender differences in daily distress. *Journal of Personality and Social Psychology, 75*(3), 670–680. doi:10.1037/0022-3514.75.3.670
- Aneshensel, C. S., Pearlin, L. I., Mullan, J. T., Zarit, S. H., & Whitlatch, C. J. (1995). *Profiles in caregiving: The unexpected career*. San Diego, CA: Academic Press.
- Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. *Developmental Psychology, 23*, 611–626. doi:10.1037/0012-1649.23.5.611
- Briere, J., & Runtz, M. (1990). Differential adult symptomatology associated with three types of child abuse histories. *Child Abuse & Neglect, 14*, 357–364. doi:10.1016/0145-2134(90)90007-G
- Cicirelli, V. G. (1993). Attachment and obligation as daughters' motives for caregiving behavior and subsequent effect on subjective burden. *Psychology and Aging, 8*, 144–155. doi:10.1037/0882-7974.8.2.144
- Doyle, C. (2001). Surviving and coping with emotional abuse in childhood. *Clinical Child Psychology and Psychiatry, 6*, 387–402. doi:10.1177/1359104501006003008
- Fauth, E., Hess, K., Piercy, K., Norton, M., Corcoran, C., Rabins, P., . . . Tschanz, J. (2012). Caregivers' relationship closeness with the person with dementia predicts both positive and negative outcomes for caregivers' physical health and psychological well-being. *Aging & Mental Health, 16*(6), 699–711. doi:10.1080/13607863.2012.678482
- Fingerman, K. L. (1995). Aging mothers' and their adult daughters' perceptions of conflict behaviors. *Psychology and Aging, 10*, 639–649. doi:10.1037/0882-7974.10.4.639
- Fingerman, K. L., Hay, E. L., Kamp Dush, C. M., Cichy, K. E., & Hosterman, S. J. (2007). Parents' and offspring's perceptions of change and continuity when parents experience the transition to old age. *Advances in Life Course Research, 12*, 275–306. doi:10.1016/S1040-2608(07)12010-4
- Fredman, L., Cauley, J. A., Satterfield, S., Eleanor, S., Melinda, S. S., Ayonayon, H. N., & Harris, T. B. (2008). Caregiving, mortality, and mobility decline: The health, aging, and body composition (Health ABC) study. *Archives of Internal Medicine, 168*(19), 2154–2162. doi:10.1001/archinte.168.19.2154
- Freedman, V. A., Cornman, J. C., & Carr, D. (2014). Is spousal caregiving associated with enhanced well-being? New evidence from the panel study of income dynamics. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences, 69*, 861–869. doi:10.1093/geronb/gbu004
- Glaser, D. (2002). Emotional abuse and neglect (psychological maltreatment): A conceptual framework. *Child Abuse & Neglect, 26*, 697–714. doi:10.1016/S0145-2134(02)00342-3
- Greenfield, E. A., & Marks, N. F. (2010). Identifying experiences of physical and psychological violence in childhood that jeopardize mental health in adulthood. *Child Abuse & Neglect, 34*, 161–171. doi:10.1016/j.chiabu.2009.08.012
- Hagestad, G. O. (1981). Problems and promises in the social psychology of intergenerational relations. In R. Fogel, E. Hatfield, S. Kiesler, J. March, & E. Shanas (Eds.), *Aging, stability and change in the family*. New York, NY: Academic Press.
- Koerner, S. S., & Kenyon, D. B. (2007). Understanding "good days" and "bad days": Emotional and physical reactivity among caregivers for elder relatives. *Family Relations, 56*, 1–11. doi:10.1111/j.1741-3729.2007.00435.x
- Kong, J., & Moorman, S. M. (2015). Caring for my abuser: Childhood maltreatment and caregiver depression. *The Gerontologist, 55*, 656–666. doi:10.1093/geront/gnt136
- Lin, I. F., Fee, H. R., & Wu, H. S. (2012). Negative and positive caregiving experiences: A closer look at the intersection of gender and relationships. *Family Relations, 61*, 343–358. doi:10.1111/j.1741-3729.2011.00692.x
- Mullen, P. E., Martin, J. L., Anderson, J. C., Romans, S. E., & Herbison, G. P. (1996). The long-term impact of the physical, emotional, and sexual abuse of children: A community study. *Child Abuse & Neglect, 20*, 7–21. doi:10.1016/0145-2134(95)00112-3

- Myers, D. G. (2000). The funds, friends, and faith of happy people. *The American Psychologist*, *55*, 56–67. doi:10.1037/0003-066X.55.1.56
- Pearlin, L. I. (1989). The sociological study of stress. *Journal of Health and Social Behavior*, *30*, 241–256.
- Pearlin, L. I. (2010). The life course and the stress process: Some conceptual comparisons. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *65B*, 207–215. doi:10.1093/geronb/gbp106
- Pearlin, L. I., Lieberman, M. A., Menaghan, E. G., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior*, *22*, 337–356. doi:10.2307/2136676
- Pearlin, L. I., Schieman, S., Fazio, E. M., & Meersman, S. C. (2005). Stress, health, and the life course: Some conceptual perspectives. *Journal of Health and Social Behavior*, *46*, 205–219. doi:10.1177/002214650504600206
- Pinquart, M., & Sörensen, S. (2003). Associations of stressors and uplifts of caregiving with caregiver burden and depressive mood: A meta-analysis. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *58*, P112–P128. doi:10.1093/geronb/58.2.P112
- Quinn, C., Clare, L., & Woods, B. (2009). The impact of the quality of relationship on the experiences and wellbeing of caregivers of people with dementia: A systematic review. *Aging & Mental Health*, *13*, 143–154. doi:10.1080/13607860802459799
- Savla, J., Almeida, D. M., Davey, A., & Zarit, S. H. (2008). Routine assistance to parents: Effects on daily mood and other stressors. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *63*, S154–S161. doi:10.1093/geronb/63.3.S154
- Simos, B. G. (1970). Relations of adults with aging parents. *The Gerontologist*, *10*, 135–139. doi:10.1093/geront/10.2.135
- Simos, B. G. (1973). Adult children and their aging parents. *Social Work*, *18*, 78–85. doi:10.1093/sw/18.3.78
- Simpson, T. L., & Miller, W. R. (2002). Concomitance between childhood sexual and physical abuse and substance use problems. A review. *Clinical Psychology Review*, *22*, 27–77. doi:10.1016/S0272-7358(00)00088-X
- Sin, N. L., Graham-Engeland, J. E., & Almeida, D. M. (2015). Daily positive events and inflammation: Findings from the National Study of Daily Experiences. *Brain, Behavior, and Immunity*, *43*, 130–138. doi:10.1016/j.bbi.2014.07.015
- Smith, L. E., Hong, J., Seltzer, M. M., Greenberg, J. S., Almeida, D. M., & Bishop, S. L. (2010). Daily experiences among mothers of adolescents and adults with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, *40*, 167–178. doi:10.1007/s10803-009-0844-y
- Sörensen, S., & Pinquart, M. (2005). Racial and ethnic differences in the relationship of caregiving stressors, resources, and sociodemographic variables to caregiver depression and perceived physical health. *Aging & Mental Health*, *9*, 482–495. doi:10.1080/13607860500142796
- Springer, K. W., Sheridan, J., Kuo, D., & Carnes, M. (2007). Long-term physical and mental health consequences of childhood physical abuse: Results from a large population-based sample of men and women. *Child Abuse & Neglect*, *31*, 517–530. doi:10.1016/j.chiabu.2007.01.003
- Trickett, P. K., & McBride-Chang, C. (1995). The Developmental impact of different forms of child abuse and neglect. *Developmental Review*, *15*, 311–337. doi:10.1006/drev.1995.1012
- Whisman, M. A. (2006). Childhood trauma and marital outcomes in adulthood. *Personal Relationships*, *13*, 375–386. doi:10.1111/j.1475-6811.2006.00124.x
- Whitbeck, L. B., Simons, R. L., & Conger, R. D. (1991). The effects of early family relationships on contemporary relationships and assistance patterns between adult children and their parents. *Journal of Gerontology*, *46*, S330–S337. doi:10.1093/geronj/46.6.S330
- Zarit, S. H., Kim, K., Femia, E. E., Almeida, D. M., & Klein, L. C. (2014). The effects of adult day services on family caregivers' daily stress, affect, and health: Outcomes from the Daily Stress and Health (DaSH) study. *The Gerontologist*, *54*, 570–579. doi:10.1093/geront/gnt045