Stressors and Resources Among Adult Child Caregivers in the Presence or Absence of

Siblings

Hanamori F. Skoblow, PhD¹ and Megan Gilligan, PhD²

¹Center for Family Policy and Research, University of Missouri, Columbia, MO, USA

² Department of Human Development and Family Science, University of Missouri, Columbia,

MO, USA

Author Note

Hanamori F. Skoblow: skoblowh@missouri.edu; 10 https://orcid.org/0000-0003-1876-

8045

Megan Gilligan: mgilligan@missouri.edu; ¹ http://orcid.org/0000-0001-5321-5097

Address correspondence to: Hanamori F. Skoblow, PhD. Email: skoblowh@missouri.edu.

© The Author(s) 2025. Published by Oxford University Press on behalf of the Gerontological Society of America. All rights reserved. For commercial re-use, please contact reprints@oup.com for reprints and translation rights for reprints. All other permissions can be obtained through our RightsLink service via the Permissions link on the article page on our site—for further information please contact journals.permissions@oup.com.

Abstract

Background and Objectives: Recent attention has focused on understanding later-life caregiving networks, emphasizing how multiple adult children within the same family navigate parental care. However, families with one child are increasingly common, and we know little about how adult only children experience caregiving and whether their experiences differ from those with siblings. Therefore, this study assessed differences in caregiving experiences between adult child caregivers with and without siblings and whether associations between caregiving experiences and mental health (i.e., psychological well-being and distress) vary by sibling presence.

Research Design and Methods: We used cross-sectional data from 1,773 adult child caregivers (12% without siblings; $M_{age} = 56.75$ [9.23]) in the National Health and Aging Trends Study and National Study of Caregiving. We conducted *t*-tests and a series of multivariate regressions with interactions to test hypotheses.

Results: Adult only child caregivers reported more financial difficulty with care than respondents with siblings. The negative association between emotional difficulty of care and psychological well-being was stronger among adult children without siblings. Informal support was positively associated with psychological well-being only for adult children with siblings, although this may be accounted for by race and ethnicity.

Discussion and Implications: Findings suggest that adult only children may be at elevated risks of the financial difficulties and the emotional consequences of parental care provision. Further, informal support may be less protective for adult only children's well-being. Given the

increasing prevalence of single-child families, more research is needed to better understand and support adult only children caring for parents.

Keywords: caregiving, family, mental health, only children, caregiver burden

anus

Later-life family caregiving scholars have recently called for consideration of family caregiving networks versus focusing on individual caregivers (Freedman et al., 2024). In particular, research has documented that parental care provision is often navigated among multiple adult children within the same family (Szinovacz, & Davey, 2013; Tolkacheva et al., 2014). However, family care networks are evolving as family sizes decrease, both in the United States and globally (World Bank, 2022). Notably, the prevalence of U.S. families with only one child has risen in recent decades from 9.6% in 1976 to 19.0% in 2022 (U.S. Census Bureau, 2022), likely impacting the care dynamics and supports available within families. In the coming years, as these children and their parents age, there will be a substantial increase in the number of adult children caring for their parents without the possibility of sharing care with, or receiving support from, siblings. To date, research on only children has been primarily limited to childhood and adolescence with less attention devoted to how the presence of siblings relates to the life course transitions common in adulthood, including parents' increasing need for care. Given that caring for a parent is associated with heightened stress and poorer mental health (Pinquart & Sörensen, 2003), understanding how smaller family sizes shape caregiving will be increasingly important. Therefore, guided by Pearlin's caregiving stress process model (1990), the current study extends the family caregiving literature by 1) examining differences in care experiences and mental health among adult child caregivers with and without siblings, and 2) examining how the presence of siblings (i.e., no siblings vs. at least one sibling) shapes associations between care experiences and mental health.

Theoretical Framework

Guided by Pearlin's caregiving stress process model (1990), this study seeks to understand how the experiences of adult only child caregivers compare to adult child caregivers with siblings. The stress process model emphasizes the context of the caregiving network composition in the stress process during care provision. We consider a novel characteristic of adult children's parental caregiving networks: the presence or absence of siblings. We examine variation by sibling presence in parental caregiving stressors (i.e., frequency of care activities, financial, emotional, and physical difficulties) and resources (i.e., informal support). Further, we examine the associations between these stressors, resources, and mental health outcomes (i.e., psychological well-being and distress).

Saliency of Siblings in Parental Caregiving

Parental care is often divided among siblings, although there is substantial variation in care arrangements, support exchanges, and conflict between siblings (Tolkacheva et al., 2014). At their best, siblings can negotiate equitable care plans, support one another, and cope together through caregiving difficulties (Bagautdinova et al., 2023; Ngangana et al., 2016). Yet siblings often report uneven care responsibilities (Connidis & Kemp, 2008) and parent care is also linked with sibling tension (Suitor et al., 2014). Ultimately, siblings can serve as sources of comfort or strain as they care for parents, whether collaboratively or individually, as some siblings may not contribute or are perceived as not contributing to parental care (Connidis & Kemp, 2008; Ngangana et al., 2016). That is not to say that children provide care alone; caregiving often occurs within a constellation of care members including the other parent, spouse, and community members (Brewster et al., 2020). Nevertheless, having a sibling, even one who is disengaged

from caregiving efforts, offers the potential for family assistance that is unavailable to adult only child caregivers.

There is reason to expect that adults without siblings are particularly likely to provide care for a parent and to experience heightened care stressors. Research shows that the more siblings individuals have, the less time they spend providing care (Bonsang, 2007). Without this possible diffusion of responsibility, adult only children–even those whose parents do not yet require care–expect to become parental caregivers and express concern about their ability to care for parents without sibling support (Gui & Koropeckyj-Cox, 2016; Roberts & Blanton, 2001). Social support promotes better physical health and psychological well-being in adult child caregivers (Bastawrous et al., 2025), even in cases of high care intensity (Xu et al., 2021). Moreover, when caregiving responsibilities are divided among a larger care network, adult children report less caregiver burden (Tolkacheva et al., 2011). It follows, then, that adult only children report higher caregiver burden than their counterparts with siblings (Zhan, 2002).

Nevertheless, few studies have investigated differences in parental care between caregivers with and without siblings. Extant evidence indicates that, compared with their counterparts with siblings, adult only children are more likely to become parental caregivers (Coward & Dwyer, 1990; Dwyer & Coward, 1991; Spitze & Logan, 1991) and relocate to be closer to their parents with care needs (Reyes & Shang, 2023). Contrasts in caregiving experiences by the presence of siblings become even more nuanced when considering links with gender. It is well-documented that women are more likely than men to provide care for a parent (e.g., Coward & Dwyer, 1990; Dwyer & Coward, 1991). However, analyzing data from over 32,000 British adults ages 38-63, Chanfreau and Goisis (2024) found that men without siblings were more likely to be parental caregivers than men with siblings, although women were still more likely to provide care, regardless of whether they had siblings. Once taking on the caregiver role, whether only child caregivers devote more time to parental care is unclear as some work suggests that they do (Spitze & Logan, 1991) yet other authors found no differences in care intensity by sibling presence (Chanfreau & Gosis, 2024). Taken together, it is plausible that the availability of siblings is an asset that may ease adult children's caregiving difficulties.

The Present Study

The aim of the present study was to examine differences in parental caregiving experiences and mental health between adult children with and without siblings. Although a handful of studies in the caregiving literature have accounted for the presence of siblings, we know of no work with U.S. samples in the past 30 years that focuses on this topic. Thus, to date, much remains unknown regarding the unique needs of this growing subpopulation of adult child caregivers. In this study, we drew data from a nationally representative sample of family caregivers to understand how links between caregiving experiences and adult children's mental health vary by sibling presence. Specifically, we tested the following hypotheses:

H1: Adult child caregivers with and without siblings will have significantly different levels of caregiving stressors and resources. Specifically, we expect only children to report more frequent care activities (*H1a*), more difficulty associated with care (*H1b*), and less informal support (*H1c*) than adult children with siblings.

H2: The presence of at least one sibling will moderate associations between mental health (psychological well-being and distress) and difficulties with care (H2a), as well as mental health and informal support (H2b).

Methods

Data

We drew data from the National Health and Aging Trends Study (NHATS) and National Study of Caregiving (NSOC). The NHATS is a panel survey of Medicare beneficiaries aged 65 and older. Periodically, NHATS respondents are asked to provide names of helpers ages 18+, who are eligible for participation in the paired caregiver study, NSOC. NSOC respondents who reported being the son or daughter of the linked NHATS respondent were eligible for inclusion in our study as adult child caregivers. We used NHATS respondents' reports of the number of children ever born to classify respondents as adult only children or adult children with at least one sibling. Due to the small number of adult only child caregivers, we pooled the 2011, 2015, and 2017 NSOC waves to create one cross-sectional sample.

At baseline, 3,460 adult children participated in the NSOC, including cases in which multiple siblings were nested within the same parent. To avoid data dependencies and make comparisons between only children and the most involved sibling, we retained the sibling who reported the most care in hours. First, we based this on NSOC respondents' reports (excluded 825). When siblings reported providing equal amounts of care, we used parents' reports of their children's care hours (excluded 101). When parents reported that their children reported the same amount of care, we retained one sibling at random (excluded 33). When children participated in multiple waves, we retained the most recent wave (excluded 513). Finally, we excluded respondents whose parents had died—because the respondents were no longer caregiving—or were permanently living in a nursing home—due to the distinct nature of care between institutional and community settings (Moon et al., 2017). We also excluded respondents with missing data on target variables. These final steps resulted in the exclusion of 119 and 96

respondents, respectively. Our final analytic sample consisted of N = 1,773 adult child caregivers (12% only children). Sample characteristics are shown in Table 1.

Measures

Outcomes

We operationalized mental health as psychological well-being and distress. In line with previous work (Nah et al., 2023), psychological well-being was measured with two items from the Ryff Scales of Psychological Well-Being (Ryff, 1989; Ryff et al., 1995): "In general, I feel confident and good about myself"; and "My life has meaning and purpose" (1 = disagree strongly, 4 = agree strongly). Evidence suggests that even single item assessments of subjective well-being can be valuable measures (VanderWeele et al., 2020). We averaged these items to create a scale in which higher scores represent better well-being ($\alpha = .65$).

Following past work (Nah et al., 2023), we assessed psychological distress using modified versions of the Patient Health Questionnaire and the Generalized Anxiety Disorder Scale (Kroenke et al., 2009). Respondents reported how frequently over the past month they had little interest in doing things, felt depressed, felt anxious or nervous, and been unable to stop worrying (1 = not at all, 4 = nearly every day; α = .78).

Stressors

Stressors included the level of financial, emotional, and physical difficulty with care. These items allow for analysis of the multidimensional consequences of care as past work suggests that care may impact different domains in varied ways (Pinquart & Sörensen, 2003; Spillman et al., 2014). For each of these domains, respondents were asked whether they experienced any difficulty with care (1 = yes, 0 = no). If so, they reported how much difficulty (1 = *a little difficult*, 5 = very difficult). We recoded and combined these two items into a single scale ranging from 0 (*no difficulty*) to 5 (*very difficult*). Three separate items represent financial, emotional, and physical difficulty with care.

Additionally, respondents reported how frequently they help their parent with chores, shopping, personal care, getting around the home, and transportation $(1 = never, 5 = every \, day)$. We averaged these items to create a scale indicating *frequency of care activities* in which higher scores indicate more frequent help.

Resources

We measured informal support as whether respondents had friends or family to talk to about important things, help with daily activities, and/or help care for their parent (1 = yes, 0 = no). We summed these responses into a scale ranging from 0-3 with higher scores indicating more available support.

Covariates

We accounted for several variables that have been associated with family caregivers' mental health in past work (Kim et al., 2019; Pinquart & Sörensen, 2003; Sun & Francis, 2024). Covariates included respondents' gender (0 = male, 1 = female), age in years, education (1 = no schooling completed, 9 = masters, professional, or doctoral degree), coresidential status between the adult child respondent and the parent to whom they provide care (0 = do not coreside, 1 = coreside) and marital status of both children and parents (0 = unpartnered, 1 = partnered), as well as parent-child relationship quality and parents' cognitive status (described hereafter).

Parent-child relationship quality was measured using children's responses to the following items (Moon et al., 2017): (1) How much do you enjoy being with [parent]? (2) How

much does [parent] argue with you? (3) How much does [parent] appreciate what you do for [him/her]? (4) How often does [parent] get on your nerves? Responses ranged from 1 (*not at all*) to 4 (*a lot*). After reverse-coding items 1 and 4, we averaged all items into a scale in which higher scores represent better relationship quality ($\alpha = .70$).

We followed NHATS guidelines (Freedman et al., 2023; Kasper et al., 2013, 2015) to classify parents' cognitive status as *probable dementia*, *possible dementia*, or *no dementia* (reference group). Most parents completed the three-factor cognitive test battery consisting of memory (immediate and delayed word recall tests; 0-20 pointes); orientation (naming the current date, day, month, year, president, and vice president; 0-8 points), and executive function (clock drawing test; 0-5 points). Parents were considered impaired in each cognitive domain when they scored at or below 1.5 standard deviations from the mean of the overall NHATS sample, corresponding with raw scores of 2 or below for memory and orientation, and 1 or below for executive function. Impairment in 2-3 domains was considered probable dementia, and impairment in 1 domain was considered possible dementia.

When parents were unable to complete the cognitive battery, proxy respondents completed the AD8 Dementia Screening Interview (Galvin et al., 2005, 2006). Proxies reported whether they noticed a change in the parent's "thinking and memory," such as remembering the current date or appointments, in the last several years (2011 and 2015 waves) or since they have known one another (2017 wave). Responses (0 = no, 1 = yes) were summed into a scale indicating higher cognitive impairment. Scores at or higher than 2 were considered probable dementia. Finally, if parents or their proxy respondents reported that the parent had been diagnosed with dementia, they were classified as having probable dementia.

Analytic Strategy

To address H1, we tested group mean differences with independent samples *t*-tests. To test H2, we estimated a series of multivariate regressions with different models for each care difficulty X sibling presence interaction term. Descriptives and regressions were conducted in IBM SPSS Statistics Version 29. Significant interactions were probed and plotted using the *interactions* package in R 4.3.3 (Long, 2019).

Results

As shown in Table 1, adult only child caregivers were older, more educated, and more likely to coreside with their parent. The parents of adult only children were more likely to have a romantic partner and/or probable dementia, compared with adult child caregivers with siblings. Adult only children also reported lower levels of psychological well-being, higher psychological distress, and more financial difficulty with care. There were no statistically significant differences in gender, adult child's marital status, frequency of care activities, emotional or physical difficulty of care, parent-child relationship quality, or informal support. Cross-wave differences in target variables are presented in Supplementary Table 1. Bivariate correlations are shown in Table 2.

Table 3 presents the results of the multivariate regressions with psychological well-being. Sibling presence significantly moderated the association between the emotional difficulty of care and psychological well-being. Simple slopes tests revealed that these constructs were more strongly related for adult only children (b = -0.09, SE = 0.02, t(1,753) = -4.43, p < .001), compared with respondents with at least one sibling (b = -0.03, SE = 0.01, t(1,753) = -3.80, p < .001; see Figure 1). Additionally, the interaction between sibling presence and informal support

was related to psychological well-being. As illustrated in Figure 2, this link was statistically significant for adult children with at least one sibling (b = 0.06, SE = 0.01, t(1,753) = 4.25, p < .001) but not adult only children (b = -0.03, SE = 0.03, t(1,753) = -1.02, p = .31). Sibling presence did not moderate associations between psychological distress and care difficulties or informal support (p's range = .094–.485). Those results are displayed in Supplementary Table 2.

Sensitivity Analyses

To test the robustness of the findings, we conducted a series of post hoc sensitivity analyses. First, a small number of respondents (6%) reported stepsiblings, and we tested our analyses using only those who do not have stepsiblings (n = 1,659). The pattern of results was congruent with the original models. Second, because race and ethnicity have been associated with caregiving experiences and outcomes (Pinquart & Sörensen, 2005), we examined how social location contributes to the association between sibling presence and psychological outcomes. Although the NSOC I did not collect race and ethnicity data, we included these variables as covariates with the subsample of 1,170 respondents from Rounds II and III who responded to these items (White non-Hispanic, Black non-Hispanic, Other or multiracial non-Hispanic, or Hispanic). Most findings were consistent with the original models, but after accounting for race and ethnicity, the presence of siblings no longer moderated the association between informal support and psychological well-being (b = -.071, SE = .047, p = .132).

Finally, as it is well-established that gender shapes care, we re-analyzed our models using a categorical moderator differentiating across the presence and gender of siblings (no siblings, only sisters, only brothers, or sisters and brothers). There was no significant interaction between the new sibling structure variable and difficulty with care on psychological well-being (p's range = .099–.698), suggesting that the presence of siblings alone may be more important for the

impact of stressors on well-being than sibling presence and gender together. As in our original models, sibling structure moderated the impact of informal support on psychological well-being (b = .035, SE = .012, p = .003), such that the link was only significant for respondents with only brothers (b = .05, SE = .01, t(1,753) = 3.59, p < .001) or brothers and sisters (b = .08, SE = .02, t(1,753) = 4.67, p < .001). There was no significant link between informal support and psychological well-being among respondents with no siblings (b = -.02, SE = .03, t(1,753) = -0.84, p = .40) or only sisters (b = .01, SE = .02, t(1,753) = 0.72, p = .47). Sibling structure did not moderate any of the psychological distress models (p's range = .096-.249).

Discussion

The objective of this study was to assess differences in parental caregiving experiences and associations with mental health by sibling presence, inspired by modern demographic trends toward smaller family sizes. In line with Pearlin's stress process model (1990), we found that stressors (i.e., difficulty of parent care) and resources (i.e., informal support) were associated with adult child caregivers' psychological well-being. As expected, our results indicated that caregiving experiences vary by the presence of siblings.

We found that adult only children reported more financial difficulty with care, in partial support of H1b. Fertility is intertwined with social class in the United States, such that smaller family sizes are more common among parents with more education (although this gap may be narrowing; Smock & Schwartz, 2020), yet adult only children lack the possibility of pooling funds across siblings to pay for a parents' care. Furthermore, if only children do not live near their parent, the expense of traveling to care for a parent or pay for home and community-based services might result in a greater financial burden (Cagle & Munn, 2012).

Consistent with some past work (Chanfreau & Gosis, 2024), we did not find evidence of differences between adult child caregivers with and without siblings on frequency of care activities. Notably, when multiple children from the same family completed the NSOC, we selected the sibling who provided the most care. Thus, our results indicate that only children provided as much care as the sibling who helped the most; only children may provide more help than a randomly selected caregiver with siblings. Our results also showed no between-group differences in emotional or physical difficulty with care, or levels of informal support. To our knowledge, this is the first study to examine how having a sibling shapes these constructs.

Partially supporting H2, the emotional difficulty of care had a stronger impact on psychological well-being for adult only children than adult children with siblings. These findings suggest that adult children without siblings may be more susceptible to the mental health impacts related to the emotional demands of caring for their parent. Further, we found that the association between informal support and psychological well-being was significant only for respondents with siblings. Previous work suggests that social support is generally protective for caregivers (Leggett et al., 2021), yet the adult only children in our sample did not reap these benefits, despite reporting similar levels of informal support as respondents with siblings. Although we are unable to determine who provides informal support to respondents, clearly only children have fewer immediate family members to rely on. Perhaps siblings provide an important source of support in the context of caregiving because of their intimate knowledge of one another and their parents, whereas such long-standing ties may be less common among only children. Moreover, only children are particularly likely to view their parents as sources of support (Gondal, 2012), leaving fewer social network members to help them cope with parent care. When controlling for race and ethnicity in our sensitivity analysis with a subsample of respondents, this interaction

effect disappeared. This result may indicate that the meaning or impact of social support varies across racial and ethnic groups (Wong et al., 2014). Future work should investigate the role of race on adult children's care and possible differences by the presence of siblings, particularly given higher levels of familism in African American and Latinx families (Falzarano et al., 2022).

The lack of interaction between sibling presence and caregiving experiences on psychological distress suggests that siblings have the potential to promote positive mental health during parental care provision but are less influential in attenuating the negative psychological consequences. That said, given the dearth of research on this topic, these findings should be approached tentatively; more evidence from studies examining whether the presence of siblings shapes adult child caregivers' mental health over time alongside changes in parents' health will be particularly valuable.

Limitations

First, this study was cross-sectional, which not only curtails our ability to draw causal conclusions but also obscures fluctuations in care intensity and division of responsibility between siblings. When multiple adult children fit our inclusion criteria, we selected the one who provided the most care, yet these roles may change over time (Szinovacz & Davey, 2013). Second, our measure of psychological distress assessed symptoms over the past month; a shorter assessment period may reveal different findings. Third, although we have focused on adult children, all individuals involved in care impact and are impacted by one another's care experiences (Lyons & Lee, 2020). Future dyadic work with reports from parents and children will be valuable in understanding how all parties perceive care, and whether these links vary by siblinghood. Fourth, stepsiblings, friends, other relatives or voluntary kin may provide substantial care, yet those ties are not captured here. Future work should also investigate the role

of only children's spouses. While these spouses might provide care in the absence of siblings, they might not experience the same rewards of caregiving that the children do (Pinquart & Sörensen, 2011). Fifth, although we accounted for coresidential status, we were unable to assess geographic distance between siblings. Future research on the distances between all family and care network members will be useful in understanding the impact of care on psychological outcomes. Finally, it is likely that sibling conflict, perception of equitable care responsibilities, and life course histories shape later-life caregiving (Connidis & Kemp, 2008; Dieker et al., 2024; Suitor et al., 2018). Future research with qualitative data will be well-suited for elucidating nuances in the complex experiences of siblinghood and parental care.

Implications and Conclusion

Notwithstanding these limitations, our work contributes to a greater understanding of the complexities of family caregiving. Not only are adult child caregivers without siblings a growing group in the United States and elsewhere, but their experiences may also be distinct from those of other adult child caregivers. Our study is one of very few that focuses on caregiving experiences by sibling presence and there is much to learn about how to best support those who care for a parent without siblings. Healthcare professionals, social workers, and policymakers should consider how siblings serve as a resource in informal family care and support those whose smaller family sizes preclude drawing from this resource.

Funding

Megan Gilligan acknowledges support from the National Institute on Aging (1K01AG061260-01A1).

Conflict of Interest

We have no conflict of interest to declare.

Data Availability

Data used in the current study are publicly available and can be downloaded at

www.nhats.org/researcher/nhats for the NHATS (parents' variables) and

www.nhats.org/researcher/nsoc (adult child caregivers' variables). This study was not

preregistered.

x cet

References

- Bagautdinova, D., Bylund, C. L., Kastrinos, A., Hampton, C. N., Vasquez, T. S., Weiss, E. S., Sae-Hau, M., & Fisher, C. L. (2023). Adult sibling-related experiences while caring for a parent diagnosed with a blood cancer. *Families, Systems, & Health, 41*(2), 140–148. <u>https://doi.org/10.1037/fsh0000748</u>
- Bastawrous, M., Gignac, M. A., Kapral, M. K., & Cameron, J. I. (2015). Factors that contribute to adult children caregivers' well-being: a scoping review. *Health & Social Care in the Community*, 23(5), 449–466. https://doi.org/10.1111/hsc.12144
- Cagle, J. G., & Munn, J. C. (2012). Long-distance caregiving: A systematic review of the literature. *Journal of Gerontological Social Work*, 55(8), 682–707. <u>https://doi.org/10.1080/01634372.2012.703763</u>
- Connidis, I. A., & Kemp, C. L. (2008). Negotiating actual and anticipated parental support: Multiple sibling voices in three-generation families. *Journal of Aging Studies*, 22(3), 229-238. <u>https://doi.org/10.1016/j.jaging.2007.06.002</u>
- Coward, R. T., & Dwyer, J. W. (1990). The association of gender, sibling network composition, and patterns of parent care by adult children. *Research on Aging*, *12*(2), 158–181. https://doi.org/10.1177/0164027590122002
- Dieker, J. L., Yun, S. W., Weber, K. L., & Qualls, S. (2024). Family conflict over illness beliefs and care strategies: Implications for burden in family caregivers. *Aging & Mental Health*, 28(3), 457–465. <u>https://doi.org/10.1080/13607863.2023.2282683</u>

- Dwyer, J. W., & Coward, R. T. (1991). A multivariate comparison of the involvement of adult sons versus daughters in the care of impaired parents. *Journal of Gerontology*, 46(5), S259–S269. https://doi.org/10.1093/geronj/46.5.S259
- Falzarano, F., Moxley, J., Pillemer, K., & Czaja, S. J. (2022). Family matters: Cross-cultural differences in familism and caregiving outcomes. *The Journals of Gerontology: Series B*, 77(7), 1269–1279. <u>https://doi.org/10.1093/geronb/gbab160</u>
- Freedman, V. A., Agree, E. M., Seltzer, J. A., Birditt, K. S., Fingerman, K. L., Friedman, E. M., Lin, I.-F., Margolis, R., Park, S. S., Patterson, S. E., Polenick, C. A., Reczek, R., Reyes, A. M., Truskinovsky, Y., Wiemers, E. E., Wu, H., Wolf, D. A., Wolff, J. L., & Zarit, S. H. (2024). The changing demography of late-life family caregiving: A research agenda to understand future care networks for an aging U.S. population. *The Gerontologist*, *64*(2), gnad036. <u>https://doi.org/10.1093/geront/gnad036</u>
- Freedman, V. A., Schrack, J. A., & Skehan, M. E. (2023). National Health and Aging Trends Study user guide: Rounds 1-12 final release. Johns Hopkins Bloomberg School of Public Health. <u>https://www.nhats.org/sites/default/files/2024-</u> 04/NHATS_User_Guide_R12_Final_Release_04092024.pdf
- Galvin, J. E., Roe, C. M., Powlishta, K. K., Coats, M. A., Muich, S. J., Grant, E., Miller, J. P., Storandt, M., & Morris, J. C. (2005). The AD8: A brief informant interview to detect dementia. *Neurology*, 65(4), 559-564.

https://doi.org/10.1212/01.wnl.0000172958.95282.2a

Galvin, J. E., Roe, C. M., Xiong, C., & Morris, J. C. (2006). Validity and reliability of the AD8 informant interview in dementia. *Neurology*, 67(11), 1942-1948.

https://doi.org/10.1212/01.wnl.0000247042.15547.eb

- Gondal, N. (2012). Who "fills in" for siblings and how? A multilevel analysis of personal network composition and its relationship to sibling size. *Sociological Forum*, 27(3), 732–755. <u>https://doi.org/10.1111/j.1573-7861.2012.01343.x</u>
- Gui, T., & Koropeckyj-Cox, T. (2016). "I am the only child of my parents:" Perspectives on future elder care for parents among Chinese only-children living overseas. *Journal of Cross-Cultural Gerontology*, 31(3), 255–275. <u>https://doi.org/10.1007/s10823-016-9295-z</u>
- Kasper, J. D., Freedman, V. A., & Spillman, B. (2013). Classification of persons by dementia status in the National Health and Aging Trends Study. Technical Paper #5. Johns
 Hopkins University School of Public Health.

https://www.nhats.org/researcher/nhats/methods-documentation?id=technical-papers

- Kasper, J. D., Freedman, V. A., Spillman, B., Skehan, M. E., & Hu, M. (2015). Addendum to classification of persons by dementia status in the National Health and Aging Trends Study for follow-up rounds. Johns Hopkins Bloomberg School of Public Health.
 https://www.nhats.org/researcher/nhats/methods-documentation?id=technical-papers
- Kim, G., Allen, R. S., Wang, S. Y., Park, S., Perkins, E. A., & Parmelee, P. (2019). The relation between multiple informal caregiving roles and subjective physical and mental health status among older adults: Do racial/ethnic differences exist? *The Gerontologist*, 59(3), 499–508. <u>https://doi.org/10.1093/geront/gnx196</u>

- Leggett, A. N., Meyer, O. L., Bugajski, B. C., & Polenick, C. A. (2020). Accentuate the positive: The association between informal and formal supports and caregiving gains. *Journal of Applied Gerontology*, 40(7), 763–771. https://doi.org/10.1177/0733464820914481
- Long, J. A. (2019). *interactions:* Comprehensive, user-friendly toolkit for probing interactions. R package version 1.1.0. <u>https://cran.r-project.org/package=interactions</u>
- Lyons, K. S., & Lee, C. S. (2018). The Theory of Dyadic Illness Management. *Journal of Family* Nursing, 24(1), 8–28. <u>https://doi.org/10.1177/1074840717745669</u>
- Moon, H., Rote, S., & Beaty, J. A. (2017). Caregiving setting and Baby Boomer caregiver stress processes: Findings from the National Study of Caregiving (NSOC). *Geriatric Nursing*, 38(1), 57-62. <u>https://doi.org/10.1016/j.gerinurse.2016.07.006</u>
- Nah, S., Martire, L. M., & Zhaoyang, R. (2022). Perceived gratitude, role overload, and mental health among spousal caregivers of older adults. *Journals of Gerontology, Series B: Psychological and Social Sciences*, 77(2), 295-299.

https://doi.org/10.1093/geronb/gbab086

- Ngangana, P. C., Davis, B. L., Burns, D. P., Mcgee, Z. T., & Montgomery, A. J. (2016). Intrafamily stressors among adult siblings sharing caregiving for parents. *Journal of Advanced Nursing*, 72(12), 3169–3181. <u>https://doi.org/10.1111/jan.13065</u>
- Pinquart, M., & Sörensen, S. (2003). Differences between caregivers and noncaregivers in psychological health and physical health: A meta-analysis. *Psychology and Aging*, 18(2), 250–267. <u>https://doi.org/10.1037/0882-7974.18.2.250</u>

- Pinquart, M., & Sörensen, S. (2005). Ethnic differences in stressors, resources, and psychological outcomes of family caregiving: A meta-analysis. *The Gerontologist*, 45(1), 90–106. https://doi.org/10.1093/geront/45.1.90
- Pinquart, M., & Sörensen, S. (2011). Spouses, adult children, and children-in-law as caregivers of older adults: A meta-analytic comparison. *Psychology and Aging*, 26(1), 1–14. <u>https://doi.org/10.1037/a0021863</u>
- Reyes, A. M., & Shang, Y. (2024). Geographic relocation in response to parents' health shocks: Who moves and how close? *Journal of Marriage and Family*, 86(1), 49–71. https://doi.org/10.1111/jomf.12939
- Roberts, L. C., & Blanton, P. W. (2001). "I always knew mom and dad loved me best": Experiences of only children. *The Journal of Individual Psychology*, *57*(2), 125–140.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069– 1081. <u>https://doi.org/10.1037/0022-3514.57.6.1069</u>
- Ryff, C. D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727. <u>https://doi.org/10.1037//0022-3514.69.4.719</u>
- Smock, P. J., & Schwartz, C. R. (2020). The demography of families: A review of patterns and change. *Journal of Marriage and Family*, 82(1), 9–34.

https://doi.org/10.1111/jomf.12612

- Spillman, B. C., Wolff, J. L., Freedman, V. A., & Kasper, J. D. (2014, March 31). *Informal caregiving for older Americans: An analysis of the 2011 National Survey of Caregiving.*U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, Office of Disability, Aging and Long-Term Care Policy.
 <u>https://aspe.hhs.gov/reports/informal-caregiving-older-americans-analysis-2011-national-study-caregiving</u>
- Spitze, G., & Logan, J. R. (1991). Sibling structure and intergenerational relations. *Journal of Marriage and the Family*, 53(4), 871. <u>https://doi.org/10.2307/352994</u>
- Suitor, J. J., Gilligan, M., Johnson, K., Pillemer, K. (2014). Caregiving, perceptions of maternal favoritism, and tension among siblings. *The Gerontologist*, 54(4), 580–588. <u>https://doi.org/10.1093/geront/gnt065</u>
- Suitor, J. J., Gilligan, M., Rurka, M., Con, G., Peng, S., & Pillemer, K. (2018). Conflict with mothers and siblings during caregiving: Differential costs for Black and White adult children. *The Journals of Gerontology: Series B*, 73(7), e86–e97.

https://doi.org/10.1093/geronb/gbx149

Sun, R. & Francis, L. E. (2024). Quality of relationships and caregiver burden: A longitudinal study of caregivers for advanced cancer patients. *The Journals of Gerontology, Series B: Psychological and Social Sciences, 79*(2), gbad165,

https://doi.org/10.1093/geronb/gbad165

Szinovacz, M. E., & Davey, A. (2013). Prevalence and predictors of change in adult-child primary caregivers. *The International Journal of Aging and Human Development*, 76(3), 227–249. <u>https://doi.org/10.2190/AG.76.3.d</u>

- Tolkacheva, N., Van Groenou, M. B., De Boer, A., & van Tilburg, T. (2011). The impact of informal care-giving networks on adult children's care-giver burden. *Ageing and Society*, 31(1), 34–51. https://doi.org/10.1017/S0144686X10000711
- Tolkacheva, N., van Groenou, M. B., & van Tilburg, T. (2014). Sibling similarities and sharing the care of older parents. *Journal of Family Issues*, *35*(3), 312–330. https://doi.org/10.1177/0192513x12470619
- U.S. Census Bureau. (2024). Historical table 2: Distribution of women age 40-50 by number of children ever born and marital status: selected years, 1970-2022. <u>https://www.census.gov/data/tables/time-series/demo/fertility/his-cps.html</u>
- VanderWeele, T. J., Trudel-Fitzgerald, C., Allin, P., Farrelly, C., Fletcher, G., Frederick, D. E.,
 Hall, J., Helliwell, J. F., Kim, E. S., Lauinger, W. A., Lee, M. T., Lyubomirsky, S.,
 Margolis, S., McNeely, E., Messer, N., Tay, L., Viswanath, V., Węziak-Białowolska, D.,
 & Kubzansky, L. D. (2020). Current recommendations on the selection of measures for
 well-being. *Preventive Medicine*, *13*, 106004.

https://doi.org/10.1016/j.ypmed.2020.106004

- Wong, S. T., Wu, A., Gregorich, S., & Pérez-Stable, E. J. (2014). What type of social support influences self-reported physical and mental health among older women? *Journal of Aging and Health*, 26(4), 663–678. <u>https://doi.org/10.1177/0898264314527478</u>
- World Bank. (2022). Fertility rate, total (births per woman).

https://data.worldbank.org/indicator/SP.DYN.TFRT.IN

Xu, L., Liu, Y., He, H., Fields, N. L., Ivey, D. L., & Kan, C. (2021). Caregiving intensity and caregiver burden among caregivers of people with dementia: The moderating roles of

social support. Archives of Gerontology and Geriatrics, 94, 104334.

https://doi.org/10.1016/j.archger.2020.104334

Zhan, H. J. (2002). Chinese Caregiving Burden and the Future Burden of Elder Care in Life-Course Perspective. The International Journal of Aging and Human Development, 54(4),

267-290. https://doi.org/10.2190/GYRF-84VC-JKCK-W0MU

x cer

Table 1

Participant Demographics and Differences by Sibling Structure

_		<i>M</i> (<i>SD</i>) or %	_		
Variable	Total	Only child	Child caregiver	t or γ^2	d, 95% CIs or
	(N-1.773)	caregiver	with siblings	νorχ	Cramér's V
	(17 - 1,775)	(n = 204)	(n = 1,569)		
Age	56.75 (9.23)	58.30 (10.47)	56.55 (9.04)	-2.29, p = .023	19 [34,04]
Gender (women)	69.60%	67.56%	69.85%	0.42, p = .519	.02
Education (beyond high school) ^a	68.20%	78.92%	66.79%	12.24, p < .001	.08
Child's marital status (partnered)	53.98%	51.96%	54.24%	0.38, <i>p</i> = .539	.02
Psychological well-being	3.60 (0.53)	3.42 (0.63)	3.62 (0.51)	4.41 , <i>p</i> < .001	.38 [.24, .53]
Psychological distress	1.55 (0.63)	1.64 (0.71)	1.53 (0.62)	-2.07, p = .040	17 [32,03]
Frequency of care activities	2.87 (0.95)	3.00 (0.99)	2.86 (0.94)	-1.85, p = .064	14 [28, .01]
Coreside (yes)	36.83%	50.98%	34.99%	19.84 , <i>p</i> < .001	.11
Parent's marital status (partnered)	24.14%	15.76%	25.24%	8.81, p = .003	.07
Parental dementia					
Probable dementia	39.88%	47.06%	38.94%	4.96, p = .026	.05
Possible dementia	14.04%	13.73%	14.09%	0.19, <i>p</i> = .889	.00
No dementia	46.08%	39.21%	46.97%	4.37 , <i>p</i> = .037	.05
Financial difficulty of care	0.64 (1.35)	0.90 (1.53)	0.60 (1.33)	-2.63, p = .009	22 [36,07]
Emotional difficulty of care	1.53 (1.76)	1.63 (1.84)	1.52 (1.75)	-0.85, p = .397	06 [21, .08]
Physical difficulty of care	0.73 (1.45)	0.91 (1.58)	0.71 (1.44)	-1.75, p = .081	14 [29, .01]
Parent-child relationship quality	3.34 (0.58)	3.29 (0.57)	3.35 (0.58)	1.42, p = .155	.11 [04, .25]
Informal support	2.24 (0.91)	2.17 (1.00)	2.25 (0.90)	1.06, <i>p</i> = .289	.09 [06, .23]

Tables

Note. ^a Education beyond high school includes at least some college or vocational, technical, business or trade school certificate or diploma.

Table 2

Bivariate Correlations of Caregiving and Outcome Variables

Variable	1.	2.	3.	4.	5.	6.	7.
1. Psychological well-being							
2. Psychological distress	42***						
3. Frequency of care activities	06*	.15***					
4. Parent-child relationship quality	.21***	.27***	08***				
5. Informal support	.15***	.14***	12***	.14***			
6. Emotional difficulty of care	22***	.34***	.10***	50***	10***		
7. Financial difficulty of care	13***	.23***	.21***	22***	16***	.35***	
8. Physical difficulty of care	13***	.29***	.19***	23***	05*	.42***	.29***

SCI

p < .05; **p < .01; ***p < .001.

JSCIP

Table 3

	Emo	tional diff	ïculty	Financial difficulty		Physical difficulty			Informal support			
	b	SE	р	b	SE	р	b	SE	р	b	SE	р
Intercept	3.048	.124	<.001	3.117	.128	< .001	3.102	.129	< .001	3.230	.126	<.001
Age	.001	.001	.511	.001	.001	.470	.001	.001	.475	.001	.001	.451
Gender ^a	.035	.026	.179	.035	.026	.176	.035	.026	.183	.032	.026	.224
Education	.018	.006	.003	.018	.006	.004	.018	.006	.003	.018	.006	.004
Child's marital status ^b	.053	.026	.039	.051	.026	.046	.050	.026	.050	.050	.026	.052
Frequency of care activities	.017	.015	.252	.016	.015	.285	.016	.015	.275	.016	.015	.270
Coreside ^c	032	.029	.271	031	.029	.294	030	.029	.311	028	.029	.336
Parent's marital status ^b	.031	.028	.273	.032	.028	.266	.032	.028	.263	.029	.028	.309
Parental dementia ^d												
Probable dementia	.020	.027	.454	.022	.027	.394	.022	.027	.416	.020	.027	.450
Possible dementia	.008	.036	.832	.009	.036	.804	.008	.036	.821	.007	.036	.837
Parent-child relationship quality	.099	.024	<.001	.095	.024	<.001	.095	.024	<.001	.095	.024	<.001
Informal support	.047	.013	<.001	.048	.013	<.001	.047	.013	<.001	.061	.014	<.001
Emotional difficulty	034	.009	<.001	040	.009	<.001	040	.009	<.001	040	.009	<.001
Financial difficulty	002	.010	.834	001	.010	.925	004	.010	.669	004	.010	.657
Physical difficulty	023	.009	.010	024	.009	.009	020	.010	.041	024	.009	.009
Presence of siblings ^e	146	.037	<.001	159	.037	<.001	147	.037	<.001	157	.037	<.001
Interaction with sibling structure	052	.020	.009	024	.024	.332	031	.023	.188	096	.037	.009
R^2		.103			.100			.100			.103	

Associations of Caregiving Experiences and Psychological Well-being by Presence of Siblings



^a Reference = men. ^b Reference = unpartnered. ^c Reference = live separately. ^d Reference = no dementia. ^e Reference = 1+ sibling.

Figures

Figure 1

Association Between Emotional Difficulty of Care and Psychological Well-being by Presence of Siblings

Note. The plot displays the negative association between emotional difficulty of care (centered) and psychological well-being for adult only child caregivers (solid line) and adult caregivers with at least one sibling (dashed line). Both associations are statistically significant; the link is steeper for caregivers without siblings.

Figure 2

Association Between Informal Support and Psychological Well-being by Presence of Siblings Note. The plot displays the association between informal support (centered) and psychological well-being for adult only child caregivers (solid line) and adult caregivers with at least one sibling (dashed line). The association is only statistically significant and positive among respondents with 1+ sibling.



Downloaded from https://academic.oup.com/gerontologist/advance-article/doi/10.1093/geront/gnaf006/7991338 by University of Missouri-Columbia user on 06 February 2025

