

Family Ties and Older Adult Well-Being: Incorporating Social Networks and Proximity

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Abstract

Objectives: This paper examines the family ties of older adults in the United States and how they are associated with mental health and social activity. We compare older adults with 4 types of family ties: adults “close” to family in proximity and social network, “kinless” older adults without a partner or children, “distanced” adults who live far from close kin, and “disconnected” older adults who do not report kin in their social network or do not report a location for some kin.

Methods: Using pooled data from the National Health and Aging Trends Study 2015–2019 for older adults aged 70 and older ($N = 24,818$ person-waves), we examine how family ties are associated with mental health and social activity, and whether lacking family is tied to poor well-being because older adults’ needs are not being met.

Results: Kinless older adults and disconnected older adults have poorer outcomes (lower mental health scores and less social activity), compared to those close to their family. These findings suggest that both the presence and quality of the connection, as measured here via both location and social network, are critical for understanding which older adults are “at risk.” Older adults who were not geographically proximate to their close kin (i.e., distanced) were not disadvantaged relative to those close to their families. Unmet needs do not help explain these patterns.

Discussion: Our results highlight that family ties are important for older adults well-being, not just through their existence but also their quality and strength.

Keywords: Family structure, Kinless, Mental health, Social activity, Unmet needs

Background

Partners and adult children are important for older adults as they often serve as primary social ties (Thoits, 2011). These family members are particularly critical for shaping older adult health and mortality in the United States (Patterson et al., 2020; Russell et al., 2018) as families are the front-line caregivers for many older adults (Freedman & Wolff, 2020; Schulz & Eden, 2016), even for those who are institutionalized (Coe & Werner, 2022). Within the U.S. context, the “nuclear” family (i.e., spouse and children) is generally privileged over other family forms and other social ties (e.g., extended family members or friends), and most policy is crafted with the “nuclear” family form in mind (Russell et al., 2018). However, major demographic shifts in family composition have been occurring for older adults—having fewer children, later and lower rates of marriage, and increases in later-life divorce (Agree, 2018; Brown & Lin, 2012; Seltzer, 2019), leaving some older adults “kinless” or without a partner or children (Margolis & Verdery, 2017). Recent research has highlighted how kinless older adults are at higher risk of poorer physical and mental health, as well as loneliness and civic participation (Margolis et al., 2022).

Older adults without family available are described with various terms, including “kinless,” “aging alone,” “solo agers,” or “elder orphans.” These terms refer to different aspects of family ties, sometimes referring to lacking any partner or children, or sometimes those who live far away or do not have contact with family members (Carney et al., 2016; Margolis & Verdery, 2017; Roofeh et al., 2020). For instance, “elder orphans” are defined as older adults “aging alone with limited support” as a result of not being married, having no children, no siblings, or having children or siblings not in contact or not within 10 miles, and comprise 22% of the U.S. older adult population (Carney et al., 2016). Because physical distance and the level of engagement with kin are important aspects of family relationships and caregiving (Freedman & Wolff 2020), it is important to capture not just whether older adults *have* kin, but whether they are proximate and part of one’s life.

In this paper, we examine the family ties of older adults in the United States using a novel measurement scheme. We compare older adults with four types of family ties: adults “close” to family in proximity and social network, “kinless” older adults without a partner or children, “distanced” adults who live far from close kin, and “disconnected” older adults who either do not report location data for all kin or do not

report any kin in their social network. Using pooled data from the National Health and Aging Trends Study (NHATS; 2015–2019), we examine how family ties are associated with mental health and social activity, and whether lacking family is tied to well-being because older adults' needs are not being met.

Family Ties and Well-being

The family system serves as the ecological setting within which older adults are embedded, providing resources or costs to the individual family member depending on the family form and function (Bronfenbrenner, 1986; Fingerman & Bermann, 2000). However, the strength of these family ties and the importance of family for older adults well-being may vary depending on certain dimensional aspects of the ties. The Convoy Model can be used to frame family ties in relation to older adults well-being. This model sees social relationships, like family or friends, as a “convoy” that moves with the person over the life course, and these relationships vary by structure, closeness, quality, and function. Individuals are placed within concentric circles by levels of closeness, with the theory emphasizing that the quality of the tie may be just as, or even more important, than the quantity of ties (Anotonucci, Ajrouch, and Birditt, 2014; Fuller et al., 2020).

The idea that the quality of the connection matters has been applied to demographic family research, whereby partnerships and relationships with children are seen on a continuum, versus concentric circles, based on various aspects of the tie. For example, the influence of a partner on adult well-being is shaped by the presence of the tie as well as whether they are co-residential (Ross, 1995). Similarly, parents with infrequent contact with and further distance from their adult children report lower life satisfaction than childless adults (Albertini & Arpino, 2018), suggesting that a weak family tie may be worse than having no tie. Following other studies that find that partnership and parenthood status cannot be understood independently (Kendig et al., 2007), we seek to understand the combination of the two statuses as well as in combination with distance and relationship quality, measured through location and social network ties.

We therefore examine three groups of older adults who may be at higher risk of poor health and social outcomes because of the absence of a tie, further distance, or lack of social connection. The first group to consider is older adults without a partner or any children, referred to as kinless (Margolis & Verdery, 2017). In the United States, one out of every 15 (6.6%) adults aged 55 and older lack a living spouse and biological children (Margolis & Verdery, 2017), and this population is estimated to increase over the next few decades (Verdery & Margolis, 2017). Childlessness among older adults can have both positive and negative outcomes for older adults' health (Quashie et al., 2021), including mental health (Quashie & Andrade, 2020), but the impact may depend on the combination of parental status with partnership status (Kendig et al., 2007; Patterson et al., 2020). For instance, in Canada, kinless older adults have on average worse mental health and higher levels of loneliness than those with kin (Margolis et al., 2022). In addition to mental health, family can have an impact on social participation in activities by either encouraging social activity or substituting for them (Dahan-Oliel et al., 2008; Zhang et al., 2023). Social participation is an important aspect of older adults' lives and can

affect their overall health and well-being, including cognition and mortality (Dahan-Oliel et al., 2008; Hamlin et al., 2022).

The second group we consider is comprised of older adults whose family members are not geographically proximate. Distance between family members is an important aspect to consider in understanding family ties and aging as it can affect the type of care received and contact (Choi et al., 2014, 2020, 2021; Schoeni et al., 2022), which in turn may affect health outcomes like mental health (Teo et al., 2015; Tosi & Grundy, 2019). Some care, including help with showering or eating, requires the family to be physically near the older adult (Freedman & Wolff, 2020) and the further older adults are from their adult children, the more likely older adults are to rely on other forms of support, like friends (Fihel et al., 2021).

The last group of older adults who may lack family ties is the group of disconnected older adults. This is the least commonly studied aspect of family ties in older adulthood. There are not many estimates, however, one survey finds that 10% of adults reported being estranged from a parent or child (Pillemer, 2022). Being disconnected from family may be important for older adults' well-being because disengagement with family members may lead to more needs being unmet than when no kin exist at all (Tennstedt et al., 1994). However, older adults with strained relationships may also have developed coping mechanisms or other strategies and expectations for their aging, for instance, relying more on friends (Fihel et al., 2021; Mair, 2019).

Family Ties and Unmet Needs for Care

Why might those without close family ties have lower levels of well-being in older adulthood? Family ties may shape well-being through providing care and help with the types of activities that become difficult for older adults as they age. The Unmet Needs Model is an applied behavioral model that has been used mainly in dementia research to examine how people with dementia develop agitated behavior stemming from the inability to take care of themselves and communicate their needs (Cohen-Mansfield et al., 2015). For instance, an occasional unmet need for help with laundry or shopping can lead to poorer mental health (Allen & Mor, 1997) and potentially restrict social activity. Unmet needs refer to when an older adult needs help with daily activities, such as getting dressed, but they do not receive the help needed to complete the task in question and then experience a negative consequence (Allen & Mor, 1997). In 2011, 15% of older adults reported at least one unmet related to self-care (e.g., bathing), mobility (e.g., getting in and out of bed), or household activities (e.g., laundry) in the past month (Freedman & Spillman, 2014).

We apply the Unmet Needs Model more broadly within the family systems framework and convoy model to understand a more universal experience of older adults not having their needs met and the potential implications for their well-being. For example, it could be that because adults living alone and those without a partner have higher levels of unmet needs than those with a partner or living with others (Desai et al., 2001; Dunatchik et al., 2019; Vlachantoni, 2019), the unmet needs shape the lower levels of mental health and social activity of older adults. No previous research has examined how family ties and their extent of connectedness are related to unmet needs and how those unmet needs, in turn, may influence well-being. We

hypothesize that outcomes are worse for older adults without any ties (kinless) or without strong ties to their families through geographic distance or lack of shared social networks (disconnected) relative to those who are physically and socially close to their family. Furthermore, we hypothesize that any negative consequences of ties to family may be due to greater unmet needs among those with weak family ties.

Data and Methods

We use the NHATS (2015–2019), an ongoing panel study that is representative of the U.S. Medicare population aged 65 and older funded by the National Institute on Aging (grant number U01AG032947; Freedman, Schrack, Skehan, et al., 2022). These data are ideal for our study because they include detailed questions on key older adult outcomes of interest including mental health and social activity, as well as information on family ties, unmet needs, and a range of covariates. Our analysis focuses on the population of adults aged 70 and older using a pooled sample from 2015 to 2019, following these adults through the most recent survey available in 2019 or until they leave the study or die. We follow NHATS guidelines, capturing older adults aged 70+ because the sample ages with each year in the data. We use pooled data because the size of the kinless population is known to be small and follow NHATS guidelines for weighting (Freedman, Hu, DeMatteis, et al., 2022).

Our analytic sample is comprised of 24,818 person-years (2015–2019). This includes older adults residing in the community, residential care, or a nursing home, who completed the interview by themselves. We exclude respondents who responded to the survey by proxy because proxy respondents were not asked the social network questions of interest in this study (Freedman, Schrack, Skehan, et al., 2022) and because proxy reports differ from self-reports for unmet needs (Brimblecombe et al., 2017; Curnow et al., 2021). We also excluded five respondents with missing marital status or their own location information, leaving us unable to capture family ties. Because we wanted to capture “disconnection” from family, we included respondents missing other information about their partner or children. The sample has almost complete information on control variables, with about 2% missing. We also include respondents missing information on control variables by coding a missing category and sum only affirmative responses for count variables; in exploratory analyses, we found that results are similar to listwise deletion.

Outcomes

Our outcomes measure mental health and social activity at each wave. *Mental health* is coded from four items used to measure anxiety and depression (the validated PHQ-4 comprised of the PHQ-2 and GAD-2) (Freedman, Schrack, Skehan, et al., 2022; Kroenke et al 2009; Lowe et al 2010). The survey questions ask whether the respondent had the following symptoms over the last month, including little interest/pleasure, feeling down/depressed/hopeless, feeling nervous/anxious/on edge, and unable to stop/control worry. Answer options were not at all, several days, more than half the days, nearly every day, scored as 0, 1, 2, and 3, respectively. We then reverse code these items and use a sum score (range 0–12; $\alpha = 0.74$) which we then standardize using a z score. This measure equates a higher score to better mental health.

Social Activity

Social activity is operationalized as whether or not the respondent participated in any of the four following social activities in the last month including visiting family and friends who do not co-reside with them, attending religious services, going to clubs or organized activities, and going out for enjoyment. We also standardize this measure by calculating z scores and conducting sensitivity analyses removing the item about visiting family/friends.

Family Ties

We examine older adults' family ties with four types at each wave (1) “kinless” older adults without a partner or children, (2) “distanced” adults who live far from close kin, (3) “disconnected” older adults, and (4) adults “close” to family in proximity and social network. There is little change in family type between waves. To code these groups, we use questions from different parts of the NHATS survey including reports of: partnership status, living children, the distance between the respondents' city and the relative's city of residence, and whether their partner or children are included in the respondent's social network.

Kinless older adults are not married or partnered, and report no living children (either biological or step-children), as defined in previous research (Margolis & Verdery, 2017; Margolis et al., 2022). *Distanced* older adults are those who are physically distant but include family in their core social network. These are respondents who may have a partner or children, but these family members do not reside in the same household or the same city as the older adult. *Distanced* respondents report at least one family tie in their social network.

We use a novel measurement strategy to capture *Disconnected* older adults, including two groups. The first group of disconnected respondents do not include their partner or any children in their social network of those with whom they talk about important matters (can list up to five people). The second group of disconnected respondents includes those who do not report the location of at least one child or their partner. This is not very common, for example, among those with children, 8.3% are missing information on one child and 2.3% are missing information for more than one child. Among those who are partnered, only 0.5% are missing spouse location data. The main goal of this project is to utilize information and lack of information to understand family ties in a study not necessarily designed to study the intricacies of family structure.

Last, we examine adults who are “close” to their family. These respondents are close to relatives both in distance and in measures of one's social network. Table 1 shows our measures of Family Ties and Appendix Table 1 includes more detail about additional operationalization of family ties.

Mediator

The *unmet needs* measure captures whether respondents report negative consequences as a result of not having help with self-care, mobility, or household activities (Freedman & Spillman, 2014), measured at each wave. Respondents were asked “In the last month, did you ever go without [consequence] because it was too difficult to do by yourself/no one was there to help or do that for you?” Consequences included self-care (going without a shower/bath, not getting dressed,

Table 1. Family Ties of Older Adults (Aged 70+; 2015–2019)

Family ties	Description	Weighted percentage
Close	Has family nearby, family included in social network	58.0%
Kinless	Has no partner and no children	5.5%
Distanced	Has no family nearby, family included in social network	9.0%
Disconnected	Family not included in social network, no family nearby (5.0%)	27.4%
	Family not included in social network, has family nearby (11.4%)	
	Family not included in social network, family location missing (2.8%)	
	Family included in social network, family location missing (8.3%)	

Notes: National Health and Aging Trends Study (2015–2019), aged 70 and older. $N = 24,818$ person-waves. Weighted for survey design, repeated observations of individuals, and individual weights. Family ties are mutually exclusive.

going without eating, and wet or soil clothing), mobility (having to stay in bed, or inside, did not go somewhere wanted to), or household activities (going without clean laundry, groceries/personal items, a hot meal, handling bills/banking, missed medicines). This variable is coded as a binary variable, capturing whether the respondent had any unmet needs in the last month or not. We explore the different types of unmet needs in the sensitivity analyses.

Control Variables

We include controls for demographic characteristics (race/ethnicity, gender, and age), economic indicators (total income and educational attainment), health (chronic conditions and dementia classification), and whether the older adult resides in the community. All controls are measured at baseline in 2015 except age, health indicators, and residential location which are time-varying.

Race/ethnicity is captured with four mutually exclusive categories including non-Hispanic White, non-Hispanic Black, Hispanic, and non-Hispanic “other” race or missing information. If the respondent indicated more than one race, we used their primary identification. We cannot use more detailed categories because we rely on restricted data for distance and have limited sample sizes. We controlled for the respondents’ gender and the respondent’s age and an age-squared term to allow for nonlinear associations.

We logged total income (individual’s income if single, joint if partnered), using the income imputations provided by NHATS. We rely on the baseline (2015) measure as income is not asked every year and 2015 provides the most comprehensive assessment. Educational attainment is categorized as less than high school degree, high school degree, vocational degree/some college/associates, bachelor’s degree or higher, or missing.

We measure the number of chronic health conditions reported in each wave or “ever had” (heart attack, heart disease, high blood pressure, arthritis, osteoporosis, diabetes, lung disease, stroke, or cancer). Data for “ever having” a repeatable event (heart attack, stroke, and cancer) were pulled forward from Rounds 1 to 4 for older adults who have been in the study since 2011, whereas all other conditions have this information pulled forward automatically (Freedman, Schrack, Skehan, et al., 2022). We classify individuals as having probable dementia or not, based on reports of diagnosis, an informant dementia screen, and a series of tests measuring memory, orientation, and executive functioning using the coding scheme provided directly by NHATS (Kasper et al., 2013). We also control for where the older

adult resides, in the community versus residential care or nursing home.

Analytic Approach

We first show our measure of family ties for older adults in the United States (Table 1). Next, we examine descriptive statistics for our analytic sample by family ties. We test whether the outcomes, demographic, economic, and health characteristics differ for kinless, distanced, and disconnected older adults in comparison with older adults close to their families (Table 2). Table 3 shows results from multivariate OLS regressions to assess the relationship between family ties and mental health and social activity (2015–2019; Table 3, Model 1), controlling for all demographic, economic, and health controls. Last, we estimate regression models to test whether unmet needs mediate the relationship between family ties and mental and social well-being (Table 3, Model 2). All analyses are weighted, clustered for repeated observations, and adjusted for survey design (Freedman, Hu, DeMatteis et al., 2022).

Results

Table 1 shows the prevalence of family ties among older adults. Almost six in ten older adults (58.0%) are close to their family in the sense of being nearby and having at least one member in their social network. Kinless older adults, with no partner or children, comprise 5.5% of the sample. Another 9.0% are distanced from their family—having family in their social network, but not geographically proximate. Over one-quarter of older adults are disconnected (27.4%). These are respondents who do not include their relatives in their social network, whether they live far away (5.0%), live close by (11.4%), or have missing location information (2.8%), and also include those who have family in their networks but are missing location information (8.3%).

Table 2 shows the sample characteristics of respondents with different family ties. Older adults across family types generally report “normal” mental health, here measured with a range of 10–12 (Kroenke et al., 2009). For our first outcome, kinless and disconnected older adults report lower mental health scores than those who are close to family ($p < .05$). For our second outcome, although all groups of older adults report relatively high levels of social activity, kinless and disconnected older adults are less socially active than respondents who are close to their families ($p < .05$).

There are some differences in the demographic and economic characteristics of older adults with different family

Table 2. Weighted Descriptive Statistics, for Full Sample and by Family Ties, 2015–2019 (Mean or Percentage)

Characteristics	Full sample	Close	Kinless	Distanced	Disconnected
Unweighted sample size	24,818	13,854	1,456	2,495	7,013
Proportion of sample	—	58.0	5.5	9.0	27.4
Outcomes					
Positive mental health (#; 0–12)	10.4	10.5	10.1*	10.4	10.0*
Socially active (%; 0–100)	96.2	97.3	90.6*	97.5	94.7*
Other characteristics					
Unmet needs	14.4	12.8	17.1*	17.9*	15.9*
Self-care	5.2	4.5	7.4*	6.5*	5.9*
Mobility	7.8	7.3	7.2	9.1*	8.5*
Household tasks	6.7	5.2	10.8*	8.4*	8.4*
Race/ethnicity (%)					
Non-Hispanic White	79.4	83.6	75.3*	86.7	68.8*
Non-Hispanic Black	7.8	5.7	11.6*	5.9	12.1*
Hispanic	6.7	5.4	6.2	2.9*	10.9*
“Other”/missing	6.1	5.3	6.9	4.5	8.2*
Female (%)	56.4	51.1	57.3	73.5*	61.8*
Mean age	77.7	77.4	77.8	80.5*	77.2
Mean family income in 2015 (\$)	67,610	80,024	37,172*	45,113*	54,911*
Education (%)					
Less than High School	15.6	14.1	17.2	9.5*	20.7*
High School Degree	25.5	25.9	19.4	26.8	25.3
Vocational/Some College/Associate’s Degree	27.5	27.2	23.0	33.5	27.1
Bachelor’s Degree or Higher	29.1	30.7	37.3	29.2	24.2
Missing	2.2	2.1	3.0	1.0	2.8*
Mean number of chronic Conditions	2.7	2.6	2.5	2.8*	2.7
Probable dementia (%)	6.9	6.3	7.3	7.3	7.9
Resides in the community	94.2	96.2	85.9*	83.9*	95.1

Notes: National Health and Aging Trends Study (2015–2019), aged 70 and older. $N = 24,818$ person-waves. Weighted for survey design, repeated observations of individuals, and individual weights. Family ties are mutually exclusive.

* $p < .05$, significantly different from “close” older adults.

ties. Compared to close older adults, kinless older adults are more racially and ethnically diverse and have much lower household income. Distanced older adults are more likely to be women and economically disadvantaged than those who are close to their families. Disconnected older adults are racially and ethnically diverse, more likely to be female, and have lower education and wealth than those close to their families.

The next part of our analysis examines whether there are differences in mental health and social activity by family ties when controlling for the demographic, economic, health, and residential location characteristics of older adults (Table 3, Model 1). Do family ties predict older adults’ mental health? After adjusting for demographic, economic, health, and residential characteristics, we find that both kinless and disconnected older adults have lower mental health scores than older adults who are close to their families by 0.13 standard deviations (SD ; $p < .05$ and $p < .001$, respectively). Our results do not show statistically significant differences in mental health between close and distanced older adults.

Our results highlight some interesting differences in social activity by older adults’ family ties (Table 3, Model 1). Relative to older adults who are close to their families, kinless older adults have much lower social participation ($-0.28 SD$), and disconnected older adults have lower social activity

($-0.07 SD$). There are no differences between those who were close with their relatives and those who were distanced.

The last part of our analysis examines the unmet needs of older adults, capturing the consequences on respondents’ lives when they do not receive the help they need with personal care, mobility, and household tasks. Table 2 shows that 14.4% of older adults aged 70 and older had unmet needs in the last month. Moreover, we see significant differences family ties. Kinless (17.1%), distanced (17.9%), and disconnected (15.9%) older adults are all much more likely than close (12.8%) older adults to report unmet needs ($p < .05$). Are the higher levels of unmet needs of older adults who are kinless, distanced, or disconnected responsible for some of the differences in mental health and social activity that we saw in Table 3, Model 1? We can look to a test of this in Model 2 of Table 3. Here, we find that including unmet needs as an independent variable in the model improved model fit, and unmet needs are associated with the outcomes, yet unmet needs do not help explain the association between family ties and mental health or social activity.

Sensitivity Analysis

We examined five sets of additional analyses to test the sensitivity of our results to various decisions. First,

Table 3. Weighted OLS Models for Standardized Outcomes (2015–2019)

Characteristics	Mental health Model 1	Mental health Model 2	Socially active Model 1	Socially active Model 2
Family ties (close)				
Kinless	-0.126*	-0.113*	-0.283***	-0.279***
Distanced	-0.001	0.005	0.008	0.010
Disconnected	-0.132***	-0.128***	-0.074***	-0.073***
Older adult characteristics				
Race/ethnicity (White, non-Hispanic)				
Black, non-Hispanic	-0.001	0.019	-0.053	-0.047
Hispanic	-0.077	-0.053	-0.219**	-0.212**
Other/missing	0.038	0.053	-0.053	-0.049
Female	-0.123***	-0.105***	0.103***	0.109***
Age	0.071*	0.020	0.020	0.005
Age squared	-0.000*	-0.000	-0.000	-0.000
Family income (logged \$)	0.070***	0.051***	0.059***	0.054***
Education (less than High School ^a)				
High School Degree	0.166***	0.143***	0.139***	0.132***
Vocational/some College/Associate's Degree	0.240***	0.223***	0.207***	0.202***
Bachelor's Degree or Higher	0.301***	0.295***	0.224***	0.222***
Number of chronic conditions	-0.130***	-0.094***	-0.018**	-0.007
Probable dementia	-0.347***	-0.217***	-0.227***	-0.188***
Resides in the community	0.098*	0.052	0.030	0.016
Year	0.000	0.002	-0.010	-0.010
Unmet needs		-0.788***		-0.233***
Constant	-3.430*	-1.219	-1.453	-0.798

Notes: National Health and Aging Trends Study (2015–2019), aged 70 and older. *N* = 24,818 person-waves. Weighted for survey design, repeated observations of individuals, and individual weights. Family ties are mutually exclusive.

^aCoefficient for missing on education not shown.

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

Appendix Table 1 shows more detail about family tie location and presence of kin in older adults' social networks. Next, Appendix Table 2 shows how older adults with different family ties vary in their unmet needs and three subcategories of unmet needs when adjusting for demographic, economic, health, and residential characteristics. Of the three types of unmet needs (self-care, mobility, and household help), we find that compared to older adults close to family, those who are kinless, distanced, or disconnected are all more likely to report unmet needs for household help, but do not differ for self-care and mobility. Household unmet care needs may incorporate activities that cannot be completed due to health or functioning but can also include general household division of labor tasks (e.g., one person always cooks). We encourage future research to tease these types apart more.

Third, we examined different family ties coding schemes (Appendix Table 3). Model 1 is motivated by research that finds that the greater the geographic distance between an older adult and their adult children, the lower the likelihood that the child is in the parent's social network (Schafer and Sun, 2022). We examined whether older adults who are both distanced and disconnected are doubly disadvantaged. Appendix Table 3 Model 1 shows that those who are both distanced and disconnected have levels of mental health and social activity very similar to the disconnected group of which they are a part, and are not a distinct, doubly disadvantaged group.

The second model in Appendix Table 3 examined whether our outcomes vary within the disconnected group. We find that all the categories of disconnected older adults have negative coefficients for the outcomes relative to the "close" group, even with some variation in sample size, magnitude, and statistical significance, and because these subcategories of disconnected older adults are fairly similar, we keep them grouped together in the main text.

Model 3 in Appendix Table 3 examined family type by marital status, separating those who are divorced/separated/never married (labeled "divorced" for brevity), widowed, or partnered. We find that divorced kinless, but not widowed kinless, have worse mental health compared to partnered close older adults and all three types of disconnected (divorced, widowed, and partnered) have worse mental health than partnered close older adults; there is no marital status difference among the close group for mental health. We find similar results for social activity.

Fourth, we reanalyze our data including only older adults who reside in the community and exclude those who live in a residential facility or nursing home (an especially high-risk group; Chyr et al., 2020; Plick et al., 2021). Appendix Table 4 shows comparable results to those in the main text.

Last, we test alternative specifications of our main outcomes. Appendix Table 5 (left) estimates an ordinal logit for mental health; with a reverse coded ordinal scale (severe 0–3; moderate 4–6; mild 7–9; and normal 10–12). The right panel presents an alternative measure of social activity whereby we

remove visiting family/friends. Both sets of results are comparable to those in the main text.

Discussion

Older adults' family relationships vary greatly depending on whether they have certain ties, whether their kin are nearby, and whether they are socially connected to those kin. In this paper, we examined a novel measurement schema to categorize older adults' family ties and how family ties are associated with older adults' mental health and social activity in the United States. Our results highlight that it is not just the existence of family ties that matters for older adult outcomes, but also the quality and strength of family ties (Albertini & Arpino, 2018; Anotonucci, Ajrouch, and Birditt, 2014; Fuller et al., 2020).

Our findings highlight that "kinless" older adults, with no partner or children, aged 70 and older have worse mental health and are less socially active than older adults who are close to their family. This accords with recent research from Canada finding that kinless older adults have higher rates of loneliness and lower rates of civic participation than similar people with at least some close kin (Margolis et al., 2022). Although childless individuals do not necessarily have lower social participation than parents, and unpartnered older adults are more likely to participate in informal activities (like phone calls) than formal activities (like clubs), the combination of being childless and without a partner is especially influential on social activity (Ang, 2019; Hank & Wagner, 2013), as we find here. Social activity is an important part of older adult health (Cudjoe et al., 2020), and kinless older adults may work to foster other social ties to stay involved in later life (Ang, 2019).

Relative to the burgeoning literature on kinless older adults (Margolis & Verdery, 2017; Plick et al., 2021; Verdery & Margolis, 2017), we know much less about "disconnected" older adults. Similar to their kinless counterparts, older adults disconnected from their close kin are also significantly less socially active and have lower levels of mental health, even after adjusting for older adult characteristics. This highlights that the *quality* of the connection, as measured here via both location and social network, is critical for understanding which older adults are "at risk" as much as the presence of the tie (Anotonucci, Ajrouch, and Birditt, 2014; Fuller et al., 2020). Future research could further tease apart important differences in social networks and the location of various family and friend ties, as having more kin may not necessarily be better as families may in turn make demands on the older adult (Hyun-soo Kim, 2016).

Depressive symptoms follow a U-shape pattern across the life course (Sinkewicz et al., 2022), and a lack of ties (kinlessness) or a lack of quality ties (disconnection) may accelerate an increase in these negative mental health symptoms. We found that older adults disconnected from kin have similarly disadvantaged mental health to those who are kinless (Table 2), but are less disadvantaged in regards to social activity. Future research should continue to tease apart the varied influences of family ties on different aspects of older adults well-being and social integration.

The last group we examined was "distanced" adults or those who are not geographically proximate to their close kin. Our analysis estimated that nine percent of older adults were in this group and that they are not disadvantaged relative to

those close to their families on any of our outcomes in either bivariate or multivariate models. We note that our measure of distance is imperfect. The NHATS records city and state, and therefore our proximity measure is defined as being in the same household or the same city. This is limited in that some cities are quite large and others much smaller, leading to some measurement errors. Future research should try to capture other measures of distance, for instance, being within 10 min, which is important for intergenerational help (Schoeni et al., 2022), or whether distanced older adults may be different than their counterparts in terms of health.

We tested whether the importance of family ties for older adults' well-being was mediated through unmet needs. We hypothesized that one way in which family support or the lack of support worked to shape mental health and social activity was through unmet needs and the stress that can come from not getting necessary help with self-care, mobility, and household tasks. We found that the levels of unmet needs varied significantly by the type of family ties, that family ties are associated with different types of unmet needs, and that unmet needs strongly predicted the two outcomes. However, overall unmet needs did not mediate the relationship between family ties and well-being. It may be that older adults meet their care needs in other ways such as adaptive equipment, reliance on nonfamily members, or through paid care (Freedman & Wolff, 2020). In addition, family ties and relationship quality may directly affect an older adult's outcomes, regardless of caregiving patterns and unmet needs. Although we do not find support for the Unmet Needs Model at the population level, this framework can still be important for understanding individual-level frustration and behavior among older adults, and more work can be done to test this for the broad population of older adults, for instance examining changes in health, unmet needs, families and health over time.

This study has several limitations. Our measures of family ties focused on partners and children, but not extended kin, chosen family, friends, or neighbors, who may be important actors in older adults' lives (Anderson & Flatt, 2018; Cross et al., 2018; Mair, 2019; Taylor et al., 2013). Although adults are more likely to expect support from both family and friends as they age (Verdery & Campbell, 2019), older adults without children and without access to support from children may rely on relatives and nonfamily members more (Fihel et al., 2021; Lowers et al., 2022; Mair, 2019). Friends may be especially important in later life with the onset of health issues or care needs (Huxhold et al., 2014; Latham-Mintus, 2019). Furthermore, the quality of ties to others, including friends, and their interaction with available family members, maybe just as important to older adults' well-being as family ties alone (Antonucci et al., 2014; Zhang et al., 2023). Another limitation of our study is that we cannot control for selection into family types. Both early and later-life circumstances may influence an older adult's family forms and outcomes (Kamiya et al., 2013). In addition, older adults who have low levels of social activity and worse mental health to begin with may be more likely to attrit from the study. The use of survey design weights partially addresses this issue, yet we cannot fully control this type of selection.

Other limitations of the data include issues around measurement. First, at the time of this study, the NHATS data were limited to providing only city and state for partners and adult children. Although this is a rough measure of

distance, it provides important insights into family ties. Our use of missing location data to signal disconnection with family is a novel way of understanding family ties in studies that do not focus on and subsequently do not measure these factors. For instance, as noted in the measures section, a majority of respondents are only missing information for one child but have a location listed for the others. However, we acknowledge that older adults may not fill in location information for many reasons. Second, the NHATS data do not include a direct relationship quality measure to capture each family tie, nor a measure of the frequency of contact on the phone or during special holidays, so we developed our novel measurement schema using the social network data. Last, we excluded proxy respondents because there was no social network data available, and this may have excluded respondents with particularly tenuous ties to their families. However, NHATS recently began asking about social networks from proxy respondents, so future research will be able to examine differences by family ties for older adults irrespective of proxy status. Although we address several alternative measures of family ties in the sensitivity analyses (see [Appendix Table 3](#)), future research should continue to analyze different combinations of family ties, as well as individual-level changes by family type and their influence on well-being.

Despite limitations, this analysis highlights the great variety of family ties that older adults in the United States have and whether and how they matter for older adults well-being. As families continue to evolve, researchers should strive to capture the size and shape of family networks, as well as the level of connection that older adults have with those kin. Social support and caregiving are always going to be necessary for aging well, and where older adults get that support and how it shapes their lives are important to understand.

Supplementary Material

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

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Conflict of Interest

None.

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Author Contributions

S. E. Patterson and R. Margolis planned the study; S. E. Patterson performed the statistical analyses; and S. E. Patterson and R. Margolis wrote and edited the paper.

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