

Special Issue: Aging Alone? International Perspectives on Social Integration and Isolation

## Alternatives to Aging Alone?: “Kinlessness” and the Importance of Friends Across European Contexts

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### Abstract

**Objectives:** Increasing numbers of older adults cross-nationally are without children or partners in later life and therefore likely have greater reliance on nonkin (e.g., friends). This pattern may be particularly pronounced in country contexts that emphasize friendship. This article hypothesizes that those who lack kin (e.g., children, partners) and/or who live in countries with a stronger emphasis on friendship have more friends in their networks. Although these hypothesized patterns are consistent with interdisciplinary literatures, they have not been tested empirically and therefore remain overlooked in current “aging alone” narratives.

**Method:** This study combines individual-level data from the Survey of Health, Ageing, and Retirement in Europe (Wave 6) with nation-level data from the European Values Survey to estimate multilevel negative binomial models exploring number of friends among those aged more than 50 years who lack kin across 17 countries.

**Results:** Older adults who lack kin or whose kin are unavailable report more friends in their networks, particularly in countries with a higher percentage of people who believe that friends are “very important” in life.

**Discussion:** This article challenges dominating assumptions about “aging alone” that rely heavily on lack of family as an indicator of “alone.” Future studies of “kinlessness” should consider the extent to which friendship is correlated with lack of kin, particularly in more socioeconomically developed countries. Previous research on “aging alone” may have overestimated risk in more privileged countries that already emphasize friendship, but underestimated risk in family-centered countries where “kinlessness” and alternative sources of support are less common.

**Keywords:** Childless, Cross-national, Friendship, Kinlessness, Social networks, Unpartnered

Recent studies in demography, social gerontology, and family sociology increasingly reflect concerns about “kinlessness” and “aging alone” in response to the empirical realities of increased childlessness, declining rates of marriage, and increased life expectancy (Lesthaeghe, 2014; Margolis & Verdery, 2017; Verdery, Margolis, Zhou, Chai, & Rittirong, 2018). These patterns have inspired a range of subliterations aimed at conceptualizing and empirically documenting demographic risk factors (e.g., Margolis & Verdery, 2017; Verdery et al., 2018), alternative informal and formal social support (e.g., Grundy & Read, 2012),

and nonkin social network ties (e.g., Djundeva, Dykstra, & Fokkema, 2018; Miche, Huxhold, & Stevens, 2013). A smaller number of studies have considered the extent to which cultural correlates, such as reduced emphasis on family support and increased economic and social individualism, might further threaten support options for aging populations (e.g., Schnettler & Wöhler, 2016).

On the other hand, the same underlying social-cultural-economic forces that led to increased concerns of “kinlessness” have also yielded new forms of interaction and support options, such as a stronger cultural emphasis on

friendship (Höllinger & Haller, 1990; Mair, 2013a), age- and time-based declines in the association between lack of family and loneliness (Böger & Huxhold, 2018), and potentially an expanded role of friends in the support systems of aging adults (Djundeva et al., 2018; Schnettler & Wöhler, 2016). Yet, a cultural consideration of the role of friendship at the individual and contextual level has yet to be adequately incorporated into the current interdisciplinary “aging alone” narrative. This article aims to address this conceptual and empirical gap by providing a cross-national comparison of friendship patterns, particularly among childless and unpartnered older adults, to explore alternatives to aging alone.

### Demographic Realities of Lack of Kin

Industrialization and continued modernization have yielded specific demographic transitions toward declining fertility, increased longevity, and delays or declines in marriage across the globe, and particularly in the most economically developed countries (Lesthaeghe, 2014). As a result, older adults who lack kin are growing in numbers throughout the United States (Margolis & Verdery, 2017) and cross-nationally (Lesthaeghe, 2014; Verdery et al., 2018). In the United States, these individuals are at risk for lower support, have less wealth, and are in poorer health (Margolis & Verdery, 2017). Such trends paint a startling potential picture of unprecedented risk for social isolation, lack of instrumental and emotional support, and compromised physical and financial well-being as older adults “age alone” in the coming decades.

Yet, a small number of existing cross-national studies that analyze samples of multiple nations demonstrate marked variation in the potential negative effects of “kinlessness” for older adults (Verdery et al., 2018) and suggest that older adults may actively construct diverse networks of supportive ties as they age (Schwartz & Litwin, 2018) with network typology patterns that differ by country (Djundeva et al., 2018). On the basis of this preliminary evidence, substantially more research is needed to understand alternative (nonkin) sources of support as well as how and why social networks of “kinless” older adults vary by cross-national context.

### Activating Alternative Family Forms

Social networks are often diverse and shift throughout the life course along with life transitions and events (Wrzus, Hänel, Wagner, & Neyer, 2013). For example, individuals who enter into kinship via marriage, cohabitation, or parenthood experience a decline in their social network sizes but potentially an increase in quality as their networks become more kin-oriented (Kalmijn, 2003; Wrzus et al., 2013). Older adults with kin may become closer to family ties as they age and anticipate future care needs (Schwartz & Litwin, 2018). Social networks of “kinless” older adults,

however, are less understood, and the relationship between the presence of kin and availability of support is more complex than commonly assumed.

Social support is typically provided by the closest inner circle of family members, but variation exists across individuals and the life course (Antonucci, Fiori, Birditt, & Jackey, 2010; Böger & Huxhold, 2018). Although having children (particularly daughters) provides the strongest advantage for available support in old age, larger numbers of children are not necessarily more beneficial (Baranowska-Rataj & Abramowska-Kmon, 2019; Grundy & Read, 2012). Compared to those with at least one child, older adults without children are more likely to receive instrumental and emotional support from people outside of their household (Albertini & Mencarini, 2014; Deindl & Brandt, 2017; Penning & Wu, 2014; Rubinstein, Alexander, Goodman, & Luborsky, 1991) such as friends or neighbors (Barker, 2002; Deindl & Brandt, 2017; Grundy & Read, 2012; Nocon & Pearson, 2000). Childless older adults receive less informal support overall (Grundy & Read, 2012). Although the support deficit between older adults with and without children is not always large, it occurs more frequently for types of support most strongly related to health, such as instrumental support (Albertini & Mencarini, 2014). Individuals who are married also experience distinct support advantages (Koropeckyj-Cox, 1998). Childless and unpartnered older adults with strong friend networks may still experience disadvantages because friend availability is less likely to translate into actual exchanges of support compared to family availability (Nocon & Pearson, 2000; Wu & Pollard, 1998). However, receipt of emotional support from friends may be more effective than family support in reducing loneliness, particularly after the death of a partner (Utz, Swenson, Caserta, Lund, & deVries, 2014).

Family ties (or lack thereof) may also intersect to create unique outcomes for older adults wherein being both childless and unpartnered may yield the highest risk for negative outcomes. Yet, the relationship between lack of kin and well-being is complex. Childless and unpartnered older adults’ experiences are “not uniformly positive, neutral, or negative” (Albertini & Mencarini, 2014). Childless individuals develop a diverse network of individuals across the life course to suit their needs (Allen & Wiles, 2013), and diverse social networks may be more important in protecting against loneliness than income, education, and age-related health limitations (Zebhauser et al., 2015). Further, having a child or spouse does not guarantee receipt of support or better well-being. For example, German childless older adults have more friends and extended kin support compared to older adults who have children but whose children do not live nearby (Schnettler & Wöhler, 2016). In addition, negative family interactions may harm well-being more than positive family interactions enhance it, whereas friend interactions tend to be less potent in terms of both positive and negative effects (Lee & Szinovacz, 2016). Therefore, it cannot be assumed that “kinless” older adults are unsupported or have low-quality support.

Despite these empirical trends, the process of activating alternative (non-family) forms of support remains undertheorized in gerontological literatures. Socio-emotional selectivity theory, however, offers a foundation for conceptualizing nonfamily support (Carstensen, 1992) by positing that older adults cultivate smaller but higher quality networks as they age. Similar to this process, older adults without kin or whose kin are unavailable (e.g., live alone, geographically distant, estranged) more actively construct networks and interactions with friends or fictive kin (e.g., Djundeva et al., 2018, Torres, 2018; Voorpostel, 2013). Although cultivating nonkin ties is a practical strategy for those who lack family, this process may also be motivated by additional individual and cultural-contextual influences. For example, older adults who are “kinless” by choice may also prioritize family less overall, as might those who are unable to rely on family, or those from contexts where family is less emphasized. Yet, these individual and contextual processes of friendship cultivation are undertheorized and largely absent from current discussions concerning growing populations who are assumed to be “aging alone” based solely on their family structure.

### Cross-Cultural Importance of Family (and Friends?)

In addition to a tendency to conflate lack of kin with “aging alone,” it is commonly assumed that more individualistic societies with a weaker emphasis on the family tend to promote loneliness, particularly among older adults. But, this hypothesis is not supported empirically (Dykstra, 2009). In Europe, for example, older adults in countries with higher individualism and less familism (e.g., Denmark, Netherlands, Sweden, Switzerland, Germany, and France) report less loneliness, particularly compared to older adults in more family-centered regions such as Eastern and Southern Europe (e.g., Czech Republic, Portugal, Greece, Italy, and Spain) (Dykstra, 2009; Hansen & Slagsvold, 2016; Mair, 2013a, 2013b; Reher, 1998). It is also possible that people are at lower risk for isolation when they do not expect strong family support (Hansen & Slagsvold, 2016). For example, having children may be more important for well-being in countries with a stronger emphasis on the family (Baranowska-Rataj & Abramowska-Kmon, 2019; Grundy, van den Broek, & Keenan, 2017). These trends may be increasing over time in more individualistic countries. A recent study of Germans aged 40 years and older found that the association between lack of a partner and loneliness was weaker for younger cohorts, suggesting a growing satisfaction with singlehood that corresponds to societal shifts such as declining rates of marriage and greater individualism (Böger & Huxhold, 2018). As Litwin (2010) describes in his comparison of older adults’ networks in non-Mediterranean (less family-centered) countries versus Mediterranean (family-centered)

countries, “the social networks of older people should be seen within their unique regional milieu and in relation to the values and social norms that prevail in different sets of societies” (p. 607).

Because demographic, sociological, political, and economic literatures are all informed by a similar cocktail of complexly correlated macrolevel trends in society (e.g., industrialization, economic development, increased life expectancy, increased childlessness, decreased marriage, increased individualism, and decreased cultural emphasis on family in highly industrialized countries; Inglehart & Baker 2000), it is extremely difficult and perhaps fruitless to attempt to conceptually disentangle economic, cultural, and demographic mechanisms. Indeed, Inglehart and Baker (2000) find that a range of cultural beliefs, including belief that friends are important in life, are collectively correlated with economic development, although these shifts are path dependent and vary by national cultural, social, and economic histories. Yet, if “familism” is commonly accepted, conceptualized, and operationalized as a cultural emphasis on the role of family that is known to be more prevalent in traditional societies, it is possible that “importance of friendship” is an emerging cultural value in individualistic, economically privileged societies (Mair 2013a). Although the idea that friendship can be culturally emphasized is undertheorized in cross-national and socio-gerontological literature, placing enhanced value on friendship is documented in sociological literatures of marginalized and kin-disrupted groups through the concepts of “friends as family” and “fictive kin” (Nelson, 2013). Therefore, it is reasonable to hypothesize that in countries where familism has declined and individualism has increased, cultural emphasis on friends may also increase as it becomes more normative and more practical to rely on less traditional (i.e., less familistic) sources of support, especially among increasing numbers of people who are “kinless.” Although this hypothesis has yet to be conceptually or empirically tested, a recent study found that older adults living alone in Northern and Western Europe had more “friend-oriented” networks compared to Southern and Eastern Europe (Djundeva et al., 2018). For these reasons, a cross-national exploration of friend ties and beliefs about friendship among older adults without available kin is warranted.

### Research Aim and Hypotheses

To my knowledge, no previous study exists that documents cross-national patterns in friendship ties and the cultural “value” placed on friendship among childless and unpartnered older adults. Therefore, this article seeks to bridge demographic, socio-gerontological, and family sociological literatures on older adults’ social support networks while incorporating a culturally comparative perspective about the role of friends at an individual and contextual level. Specifically, I explore alternatives to “aging alone” by examining number of friends in the social networks of older adults

who lack children or partners in their social network across countries that vary in cultural “value” placed on friends (e.g., national percent that agree friends are “very important in life”), with particular emphasis on intersections between family network availability and country context (e.g., number of friends among those lacking kin by country context).

I hypothesize that older adults who lack children or partner ties have more friend ties in their social networks (H1), that older adults in countries with a stronger emphasis on friends have more friends in their networks (H2), and that social networks and national norms about friendship interact, wherein older adults who lack children/partner ties and live in countries with a stronger emphasis on friends will have the greatest number of friends in their networks (H3). Exploring and documenting these individual and contextual friendship patterns addresses a missing piece of the current narrative of “kinless” older adults, challenges dominating assumptions about “aging alone” that are based solely on measures of family structure, and provides needed nuance to social gerontological discussions of risk and resilience among modern aging populations by incorporating the concept of activating alternatives to aging alone.

## Method

### Data

This study analyzes data from the most recent wave (Wave 6, 2015) of the Survey of Health, Ageing, and Retirement in Europe (SHARE), a cross-national panel study of middle-aged and older adults (aged 50+) from the European Union (Börsch-Supan et al., 2013; Börsch-Supan, 2018). Survey items in SHARE are designed to assess older adults’ economic, physical, mental, and social well-being over time. Two recent waves of data (Wave 4, 2011 and Wave 6, 2015) include a social network module, which gathers data on respondents’ closest seven individuals with whom he/she discusses “important matters,” including the relationship to the social network member (family, friend, etc.; Litwin, Stoeckel, Roll, Shiovitz-Ezra, & Kotte, 2013). This study focuses on Wave 6 data (2015), as it is the most recent social network data with the largest number of countries ( $N = 17$ ); Austria, Belgium, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Greece, Italy, Luxembourg, Poland, Portugal, Slovenia, Sweden, Switzerland, and Spain). In addition, this study links individual-level SHARE data to aggregated nation-level data from the European Values Survey (EVS 2011) and the World Bank (2015).

## Measures

### Dependent Variable

The outcome measure for this analysis is the number of friends in an older adults’ social network, which was drawn from the SHARE social network name generator. Respondents were asked to name up to six individuals

with whom they “discussed important matters and one additional person of choice” (Litwin et al., 2013; Litwin & Stoeckel, 2016). In this sample, number of friends ranged from 0 to 7 with a large majority (70%) listing zero friends.

### Independent Variables

Individual-level independent variables include a combination of variables to capture potential availability of family support (family structure) as well as whether or not a respondent lists key family members as members of his/her social network (social network structure). Family structure includes indicators of whether or not a respondent has a child and whether or not the respondent has a partner. For respondents who have at least one child and/or who have a partner, two additional measures of social network structure assess whether or not a respondent’s child or a respondent’s partner is also listed as one of the seven key social network members. This analysis also includes one aggregate nation-level predictor measure from the European Values Survey (EVS), the percent of individuals in a country who believe that friends are “very important” in life (Mair 2013a), which ranges from nearly 27% to 65% across the 17 countries in the sample.

### Control Variables

Control variables include a range of additional measures on respondents’ overall social network, sociodemographic characteristics, economic resources, and well-being. To adjust for overall network characteristics, the first covariate is a scale of the overall connectedness of an individual’s social network (ranging from 0 to 4, combining information about proximity, contact, and closeness to all ties; Litwin & Stoeckel, 2016). Additional sociodemographic and health covariates that are known to be associated with older adults’ social engagement, social networks, and/or ability to remain socially active (Adams, Leibbrandt, & Moon, 2010) include age (years, ranging from 50 to 103), sex (1 = female), employed (1 = full time), and education (International Standard Classification of Education, ISCED-7 scale, ranging from 0 to 6), household income (divided by 10,000, ranging from 0 to 252), number of depressive symptoms (ranging from 0 to 12, harmonized European scale of depression, EURO-D), IADL difficulty (1 = has difficulty with one or more instrumental activities of daily living), and self-rated health (ranging from 0 to 4, with higher values indicating better health). Measures for employment, education, income, and health were derived from generated imputations provided by SHARE. Two additional aggregate nation-level variables are used in sensitivity analysis because of their correlation with beliefs about friendship (Mair, 2013a; see also Inglehart & Baker, 2000), including percent of individuals in a country who state that family is “very important” in life (EVS 2011) and gross domestic product (GDP) per capita for each country in 2015 (World Bank, 2015).



## Analysis

Analysis includes descriptive, bivariate, and multivariate analysis. Descriptive statistics were examined for all variables in the analysis for the total sample and by subsamples by structure of family and network (Table 1). Bivariate analysis examined descriptive patterns of trends in number of friends across countries ( $x$ -axis is arranged left to right from countries with lowest average number of friends to highest average number of friends) by various national characteristics (Figure 1A) and family/network structures (Figure 1B).

Because the data set includes individuals nested within countries and the dependent variable is a count measure with a high proportion of “0” values, multivariate analyses were conducted using multilevel regression with negative binomial regression (PROC GLIMMIX in SAS) and means-centered predictors. Multilevel modeling accounts for shared variance within countries and allows for more accurate estimation of standard errors and coefficients (Raudenbush & Bryk, 2002) whereas use of negative binomial models are a better fit than Poisson modeling when the variance is greater than the mean (Allison, 2012). Additional sensitivity tests (PROC COUNTREG in SAS) determined that “plain” negative binomial models are a better fit to these data than zero-inflated negative binomial models (Erdman, Jackson, & Sinko, 2008). All models were also tested as three-level models to estimate shared variance within households (e.g., for partners who are both included as respondents), but results were consistent with the two-level models and therefore the simpler versions of the models are presented in the tables. All models (main effect and interaction models) were further replicated using national percent who believe family is “very” important and national GDP per capita as nation-level predictors of number of friends. Results of these models are briefly summarized and are available on request.

The first set of models include associations between all variables and number of friends for the total sample, as well as split samples by family structure (Table 2). The second set of models explore seven two-way interactions between family structure, social network structure, and national context (Table 3). For the full sample, this includes three interactions that account for childless and unpartnered older adults (has child  $\times$  has partner, has child  $\times$  national context, has partner  $\times$  national context). Four additional interactions were tested among those who have children or who have partners but do not list them in their network (for those with children: child not listed in network  $\times$  has partner and child not listed in network  $\times$  national context; for those with partners: partner not listed in network  $\times$  has child and partner not listed in network  $\times$  national context). All seven interactions are displayed in Table 3 and the six that were statistically significant are further illustrated in Figure 2.

## Results

### Descriptive and Bivariate

On average, number of friends in an older adults’ network varies by family structure and network structure (Table 1). Older adults without children and without a partner report a greater number of friends in their network compared to those with children and with a partner. Number of friends is also elevated among the 36% of parents who do not list that child in their network and especially among the 13% of partnered respondents who do not list that partner in their network.

Figure 1 includes key variables from multiple data sources, aggregated to the nation-level and arranged along the  $x$ -axis in order of increasing average number of friends per country (left is lowest average, right is highest average). Figure 1A displays patterns of number of friends among older adults in SHARE by various national characteristics derived from EVS and World Bank. Number of friends (SHARE, black solid line) shows a pattern of correlation with the hypothesized national cultural context variable—percent of a country that believes friends are “very” important in life (EVS, black dashed line). Because many nation-level variables are highly correlated and difficult to disentangle, two additional national context measures are examined. National GDP per capita (World Bank, gray dotted line) appears to be partially correlated with older adults’ number of friends and national percent who believe friends are “very important.” National percent who believe family is “very important” (EVS, gray solid line) remains high across countries with little variation. Figure 1B examines family and network structures across countries. Percent of older adults in SHARE who are childless (black solid line), unpartnered (gray solid line), who have a child not listed in network (black dotted line), and who have a partner not listed in network (gray dotted line) increase slightly from left to right as national average number of friends in SHARE increases.

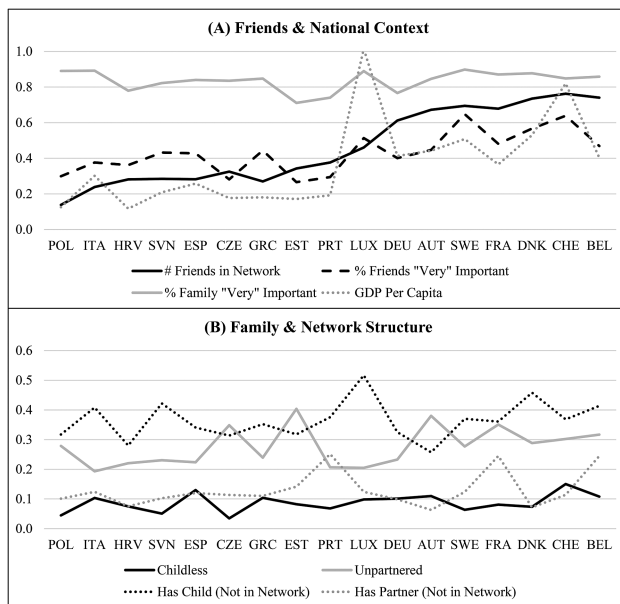
### Multivariate

Multivariate analysis examined number of friends in a network as a function of family network structure and national percent who believe friends are “very” important in life (Table 2). Overall, measures that indicate a lack of kin ties by structure or availability (e.g., not having a child, not having a partner, having a child but not listing that child in network, and having a partner but not listing that partner in network) are all statistically significantly associated with a higher number of friends listed in one’s social network. Although the average number of friends in a network is less than one for all groups because of the high rate of zero friends in networks (Table 1), having a child or a partner lowers one’s expected number of friends by about 40% ( $=100[\exp(-0.5) - 1]$ ) compared to older adults who do not have a child or a partner, net of all covariates.

**Table 1.** Descriptive Statistics of Individual Variables by Family Network Structure

Dependent variable	Total		No partner		Has children		Has partner		Has child (not in network)		Has partner (not in network)	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
No. Friends in Network	0.473	(0.878)	0.732	(1.059)	0.664	(1.004)	0.447	(0.854)	0.397	(0.811)	0.575	(0.987)
Family network structure					( <i>n</i> = 4,768)		( <i>n</i> = 48,479)		( <i>n</i> = 37,304)		( <i>n</i> = 17,371)	
Has child	0.910	(0.286)			0.831	(0.374)			0.942	(0.234)		
Has partner	0.717	(0.450)	0.468	(0.499)			0.742	(0.438)			0.833	(0.373)
Child not in network <sup>a</sup>	0.360	(0.480)			0.232	(0.422)	0.360	(0.480)	0.405	(0.491)		
Partner not in network <sup>a</sup>	0.129	(0.335)	0.093	(0.290)			0.131	(0.338)	0.129	(0.335)	0.134	(0.340)
Covariates												
Social connectedness	1.047	(0.807)	0.797	(0.777)	1.018	(0.757)	1.072	(0.806)	1.059	(0.826)	0.586	(0.732)
Age	68.022	(9.540)	67.734	(10.087)	70.910	(10.397)	68.050	(9.484)	66.883	(8.927)	66.291	(8.970)
Female	0.565	(0.496)	0.538	(0.499)	0.716	(0.451)	0.568	(0.495)	0.506	(0.500)	0.464	(0.499)
Employed	0.232	(0.422)	0.245	(0.430)	0.185	(0.388)	0.230	(0.421)	0.250	(0.433)	0.281	(0.450)
Education	2.805	(1.535)	2.874	(1.567)	2.668	(1.544)	2.799	(1.532)	2.860	(1.529)	2.912	(1.529)
Household income	3.002	(4.367)	3.041	(6.690)	2.006	(2.949)	2.998	(4.067)	3.394	(4.755)	3.402	(4.394)
Depressive symptoms	2.418	(2.251)	2.453	(2.281)	2.853	(2.383)	2.415	(2.248)	2.247	(2.173)	2.305	(2.214)
IADL difficulty (1+)	0.168	(0.374)	0.179	(0.383)	0.249	(0.433)	0.167	(0.373)	0.136	(0.343)	0.131	(0.338)
Self-rated health	1.839	(1.053)	1.843	(1.048)	1.677	(1.059)	1.837	(1.054)	1.901	(1.044)	1.918	(1.067)

Note: <sup>a</sup>Sample sizes are slightly smaller within these groups (e.g., under “no children” column, respondents in “partner not in network” cell contain only respondents who also have a partner); table displays unweighted results.



**Figure 1.** Number of friends, family network structure, and national context. Countries arranged in order of increasing average number of friends in network from left (low) to right (high).

Older adults who have a child or partner but do not list them in their network also have a substantially higher expected number of friends compared to those who list that family tie in their network. At the nation-level, every 1% increase in national percent who say friends are very important is predicted to be associated with a 2% increase ( $=100[\exp(0.02) - 1]$ ) in older adults' number of friends. In terms of covariates, respondents who have more friends in their networks also generally report greater social connectedness, and are more likely to be younger, female, not employed full-time, more educated, with more depressive symptoms, lower likelihood of having one or more IADL, and have better self-reported health.

Table 3 displays the results of interaction terms that explore intersections between multiple types of missing or unavailable kin (e.g., childless and unpartnered, unpartnered and child not listed in network, childless and partner not listed in network) as well as “kinlessness” or lack of available kin within national context (e.g., childless, unpartnered, child not in network, and parent not in network each by national percent who believe friends are very important). Of the seven interaction terms examined, all but one (has child  $\times$  has partner, which examines childless and unpartnered) are statistically significant and all interactions with national context are statistically significant. Figure 2 displays these patterns graphically (groups lacking kin indicated by solid black line, shading at 95% confidence intervals) and illustrates the magnitude of the associations with individual family network structure measures and national context.

Figure 2A and B examine family network structure net of national context. Older adults who lack a child or

partner have a higher likelihood of having more friends in their networks ( $x$ -axis) and this pattern is particularly pronounced if he/she also has a child or partner who is not listed in their network. Unpartnered older adults who have a child that is not listed in their network (Figure 2A) and childless older adults who have a partner that is not listed in their network (Figure 2B) have a significantly higher likelihood of reporting more friends in their network. In sum, older adults who lack only one of the two key family ties examined, but do not list the other family tie in their network have a substantially higher likelihood of reporting more friends in their network.

Figure 2C–F examines family network structure by national context. Overall, number of friends increases slightly among all groups as national percent who believe friends are “very” important increases, and these associations are slightly stronger (i.e., slightly steeper slopes, solid black line) when an older adult has a family member who is not listed in the network (Figure 2E and F). However, those who do not have a child or partner and live in nations with extremely high percentages of people who say friends are “very” important (Figure 2C and D) are statistically indistinguishable from those with family according to 95% confidence intervals. In other words, older adults who live in nations with an extremely high percentage who believe friends are “very” important have a greater likelihood of having more friends regardless of family structure.

Finally, in multivariate sensitivity tests using alternative nation-level predictors (results available on request), percent of those who believe family is “very important” was not statistically significantly associated with number of friends. Higher national GDP per capita was statistically significantly associated with higher numbers of friends, but GDP models had slightly poorer model fit than models using national percent who believe friends are “very important.”

## Discussion

Although previous research documents the potential risks faced by older adults who lack kin (e.g., childless, unpartnered), as well as some of the alternative sources of support potentially used (e.g., extended kin, friends), the role of friendship in the lives of “kinless” older adults and the potential cultural value placed on friendship cross-nationally are undertheorized and understudied in gerontological, sociological, and demographic research. Family structure (e.g., being a parent or married/partnered) is commonly used as an indicator of older adults' potential sources of support, but this approach ignores friendship and other ties. Older adults currently assumed to be “aging alone” may be cultivating networks of friends as a potential source of support, particularly in more socioeconomically advantaged countries where there is a decreasing emphasis on marriage and children, and a stronger emphasis on the importance of friends in one's life. Further, having a child or

**Table 2.** Multilevel Negative Binomial Regression Models Predicting Number of Friends in Network

	Total (N = 53,247)	No children (n = 4,768)	No partner (n = 15,060)	Has child (n = 48,260)	Has partner (n = 37,304)
Intercept	-0.329 (0.062)**	-0.234 (0.049)**	-0.282 (0.054)**	-1.402 (0.055)**	-1.188 (0.068)**
Family network structure					
Has child	-0.534 (0.022)**				
Has partner	-0.557 (0.016)**				
Child not in network		-0.547 (0.038)**			
Partner not in network					
National context					
% Friends "Very" important	0.021 (0.005)**	0.013 (0.004)**	0.019 (0.004)**	0.018 (0.005)**	0.024 (0.005)**
Covariates					
Social connectedness	0.857 (0.009)**	0.801 (0.022)**	0.694 (0.014)**	1.096 (0.009)**	1.066 (0.012)**
Age	-0.012 (0.001)**	-0.005 (0.002)*	-0.017 (0.001)**	-0.004 (0.001)**	-0.013 (0.001)**
Female	0.147 (0.015)**	0.116 (0.036)**	0.175 (0.025)**	0.232 (0.016)**	-0.023 (0.020)
Employed	-0.119 (0.020)**	-0.176 (0.047)**	-0.166 (0.031)**	-0.135 (0.021)**	-0.065 (0.026)*
Education	0.128 (0.005)**	0.097 (0.013)**	0.135 (0.008)**	0.112 (0.005)**	0.135 (0.007)**
Household income	0.000 (0.002)	-0.002 (0.003)	-0.021 (0.004)**	-0.003 (0.002)	0.004 (0.002)**
Depressive symptoms	0.036 (0.004)**	0.006 (0.009)	0.023 (0.005)**	0.030 (0.004)**	0.025 (0.005)**
IADL difficulty (1+)	-0.152 (0.022)**	-0.041 (0.052)	-0.165 (0.031)**	-0.166 (0.023)**	-0.098 (0.031)**
Self-rated health	0.038 (0.008)**	0.042 (0.020)*	0.043 (0.012)**	0.030 (0.009)**	0.040 (0.011)**
Random effects					
L1: Dispersion parameter	0.286 (0.014)	0.026 (0.022)	0.105 (0.017)	0.144 (0.012)	0.286 (0.019)
L2: Intercept	0.054 (0.021)	0.018 (0.010)	0.034 (0.014)	0.043 (0.017)	0.052 (0.021)
Model fit statistics					
-2 res log pseudo-likelihood	220244	16286.0	54233.0	196445.5	161622.9
Generalized chi-square	53533.02	4206.9	14936.3	41243.5	31674.1

Note: Unstandardized coefficients with standard errors in parentheses.  
 \* $p \leq 0.05$ , \*\* $p \leq 0.01$ , \*\*\* $p \leq 0.001$ .



**Table 3.** Multilevel Negative Binomial Regression Models With Interactions Predicting Number of Friends in Network

	Total (N = 53,247)	Has children (n = 48,260)	Has partner (n = 37,304)
Intercept	-0.291 (0.063)***	-1.392 (0.055)***	-1.158 (0.069)***
Family network structure			
Has child	-0.568 (0.028)***		-0.612 (0.041)***
Has partner	-0.613 (0.042)***	-0.665 (0.021)***	
Child not in network		1.190 (0.027)***	
Partner not in network			1.123 (0.092)***
National context			
% Friends "Very" Important	0.014 (0.005)*	0.021 (0.005)***	0.027 (0.005)***
Covariates			
Social connectedness	0.857 (0.009)***	1.098 (0.009)***	1.065 (0.012)***
Age	-0.012 (0.001)***	-0.004 (0.001)***	-0.013 (0.001)***
Female	0.146 (0.015)***	0.231 (0.016)***	-0.023 (0.020)
Employed	-0.119 (0.020)***	-0.133 (0.021)***	-0.064 (0.026)*
Education	0.128 (0.005)***	0.112 (0.005)***	0.135 (0.007)***
Household income	0.000 (0.002)	-0.003 (0.002)	0.004 (0.002)*
Depressive symptoms	0.036 (0.004)***	0.030 (0.004)***	0.025 (0.005)***
IADL difficulty (1+)	-0.154 (0.022)***	-0.165 (0.023)***	-0.099 (0.031)***
Self-rated health	0.038 (0.008)***	0.030 (0.008)***	0.039 (0.011)***
Interactions			
Has child × has partner	0.048 (0.045)		
Has child × % friends "Very" important	0.005 (0.002)*		
Has partner × % friends "Very" important	0.006 (0.001)***		
Has partner × child not in network		0.078 (0.032)*	
Child not in network × % friends "Very" important		-0.007 (0.001)***	
Has child × spouse not in network			0.214 (0.094)*
Spouse not in network × % friends "Very" important			-0.011 (0.002)***
Random effects			
L1: Dispersion parameter	0.284 (0.014)	0.142 (0.012)	0.9405 (0.007)
L2: Intercept	0.054 (0.021)	0.042 (0.017)	0.0479 (0.019)
Model fit statistics			
-2 res log pseudo-likelihood	220430.1	196560.9	218751.9
Generalized chi-square	53598.8	41269.8	10619.2

Note: Unstandardized coefficients with standard errors in parentheses.

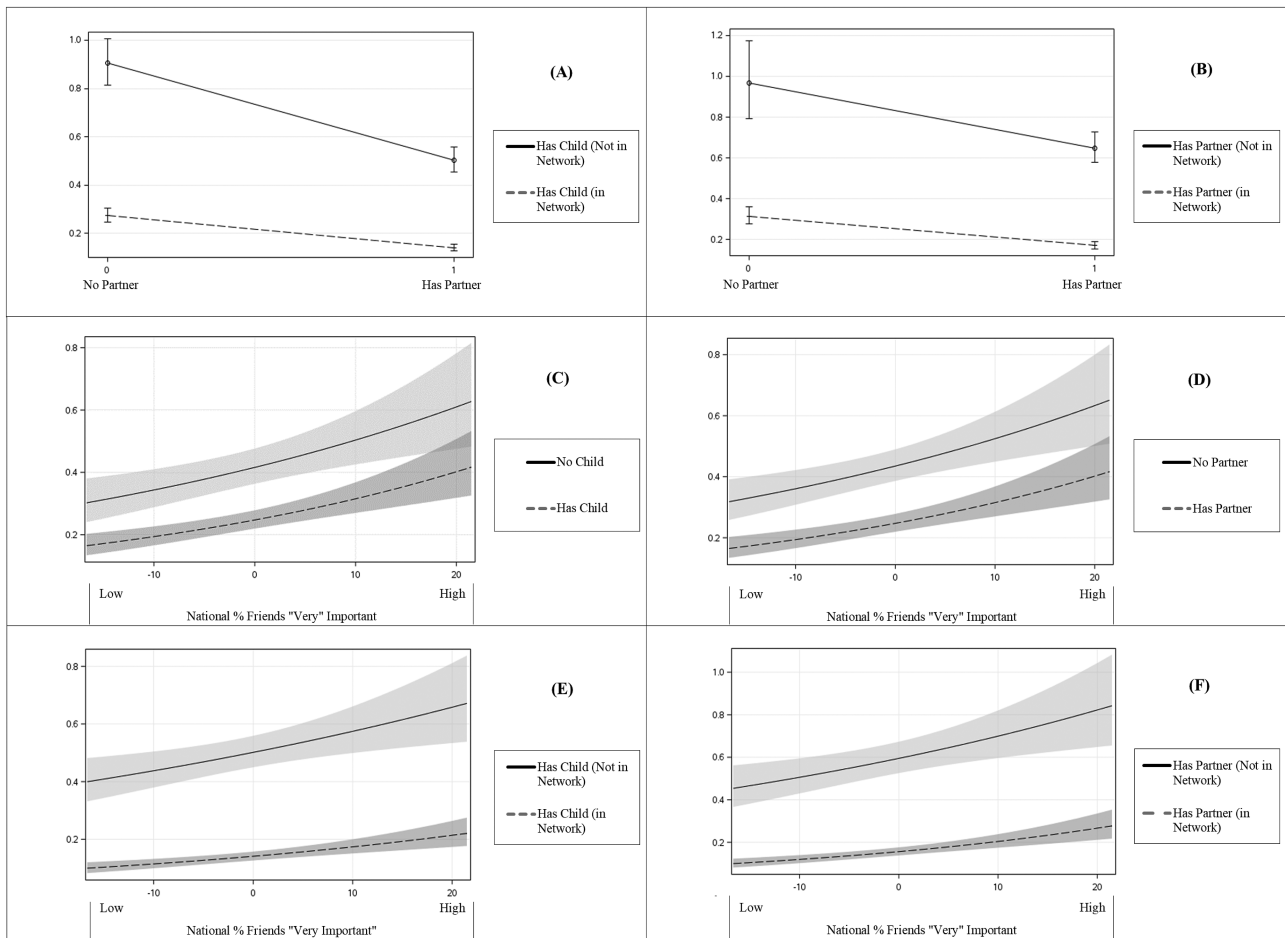
\* $p \leq 0.05$ , \*\* $p \leq 0.01$ , \*\*\* $p \leq 0.001$ .

a partner does not guarantee that the family member will be in your close network. Older adults who are typically assumed to be "kin-full" based solely on family structure may not actually be supported by their family, and/or may be cultivating alternative nonkin sources of support regardless of family structure. This article sought to supplement existing discussions about "aging alone" with an in-depth analysis of friendship (e.g., number of friends, national beliefs about importance of friends), particularly among older adults who lack kin or whose kin are not a core feature of their social network.

### Those Who Lack Family Have More Friends

Consistent with the first hypothesis and previous literature reporting that older adults without children or without partners rely more heavily on friends as a (potential) source of support in later life (Allen and Wiles, 2013), this analysis

finds that older adults who lack kin or whose kin are not a part of their core network report having more friends in their network compared to those with family. Although listing a friend in your network may simply be a common choice when lacking a family tie and presence of a friend tie does not necessarily translate into emotional and instrumental support received (one "additional" person could also be listed who was not a "confidant"), childless and unpartnered older adults are not necessarily "aging alone" in this sample and actually score higher on the summary score of social connectedness (Table 2). More theorization and research are needed to elucidate the process through which unpartnered and childless older adults acquire networks with more friends. This process may be passive or active, and any combination of these across the life course, as older adults find themselves in networks that serve as alternatives to "aging alone." Further, childless and unpartnered older adults are a diverse group who are "kinless" for a variety of reasons (e.g., childless by choice



**Figure 2.** Number of friends in network (y-axis) by interactions of family network structure and national context. Continuous predictor variables are centered; whiskers and shading present 95% confidence intervals.

versus by circumstance, unpartnered willingly or unwillingly through divorce or having never married, and unpartnered through widowhood). Older adults' agency in their family and nonfamily network structure is linked to satisfaction and well-being and should be prioritized in future research focusing on friendship among "kinless" older adults.

### Having Family Does Not Ensure Family Support

Also consistent with the first hypothesis, older adults who have family but whose family is not available (e.g., not listed in their core network) report greater numbers of friends in their networks and this pattern is particularly pronounced if they also lack another family tie (i.e., childless and partnered). Overall, 36% of older adults with children and 13% of those with partners do not list these ties in their core network of confidants, and 40% of those who do not list their spouse in their network also do not list their child in their network (Table 1). It is particularly striking to find this among children and spouses, as these are the family members most likely to provide support (Grundy & Read, 2012). Failure to list a family member in your core network does not necessarily mean the family member does

not or would not provide support—it is possible and likely that as respondents age and experience health declines, children in particular become more integral to older adults' networks (Margolis & Verdery, 2017). Even if that is the case, this pattern provides a distinct challenge to common assumptions that family availability translates into support and underscores the need to expand our conceptualization of potential sources of support. Friends have the potential to be an important source of support for all older adults, not just those who lack kin or whose kin are unavailable. Gerontologists should continue to investigate the types of actual support (if any) provided by confidant network members to determine to what degree network membership is indicative of support options.

### Friendship as a Cultural Value Associated With Economic Development?

Consistent with the second and third hypotheses, older adults in countries with a higher percent of individuals reporting that friends are "very" important in life also report more friends in their networks and this pattern is particularly pronounced for those who lack kin or whose kin is

not listed in their network. In addition, because economic development tends to be associated with less traditional cultural values (Inglehart & Baker, 2000; e.g., importance of friends, Mair, 2013a), it is not surprising that higher GDP in a country is also associated with more friends. Considering associations between national emphasis on friends, number of friends, and economic development, the most likely scenario is that a stronger emphasis on friends is part of the package of “economic development,” in addition to individualism, nontraditional family forms, and other changes with modernity. Investment in friendship is a very practical shift for economically developed countries where family reliance is weaker and economic resources for cultivating friendships (e.g., social spaces, social activities) may be greater (Dykstra 2009; Litwin, 2010; Mair 2013a). Therefore, the measure used in this analysis (aggregate proportion of individuals aged 18+ in the EVS who think that “friends are very important in life”) may, at minimum, represent a cultural temperature gauge of practical opportunity, although it remains to be seen to what degree “friendism” is an actual cultural norm in economically developed countries. Regardless, the results of this analysis demonstrate that in contexts where friendship is more highly valued (for a range of complex social–cultural–economic reasons), older adults have more friends—especially if they lack family ties. It is also more culturally normative/acceptable in these contexts to be childless, to be unpartnered, and to cultivate a network with more friends. Future studies on “aging alone” should more deeply consider potential cultural variation in social network preferences, but should also be mindful that family availability is a much stronger predictor of number of friends than national context.

### Over- and Underestimating “Aging Alone” Risk and Resilience Cross-Nationally

Relatedly, results from this study suggest that current narratives about “aging alone” may be overestimating risk in some contexts and underestimating it in others by not adequately incorporate a cultural lens. Although child-centered and marriage-centered family models still dominate across all cultural contexts, being childless or unpartnered is less isolating of an experience in economically developed countries where nontraditional family forms are on the rise, and increasingly through voluntary processes (i.e., by choice rather than circumstance). Therefore, “kinless” older adults in economically developed countries will not only have access to more financial resources as they age, they will also have the company of rising numbers of older people in similar situations with which they can build friendship networks.

On the other hand, current studies may underestimate risks faced by older adults who lack children or partners and who also reside in countries with fewer economic resources and a weaker emphasis on friends (e.g., in this sample, Southern and Eastern Europe). These countries have stronger family orientations (Mair 2013a) and less

wealth to support older adults who are without family. Existing public pension systems are likely insufficient to counteract the potential isolation faced by older adults who lack family in cultural contexts where nonfamily structures are particularly rare. Therefore, the most pressing area of research for “aging alone” is childless and unpartnered older adults in less economically developed and more family-dominated contexts, which includes underrepresented global regions (e.g., Eastern Europe, Latin America and the Caribbean, Asia, Africa, the Mideast) as well as underrepresented populations within countries (e.g., immigrant populations from countries with traditional views on family and support in older ages). Discussions on “aging alone” should prioritize studies that examine social networks and support options for “kinless” older adults in these contexts.

### Limitations and Conclusions

Despite the strengths of this analysis, it contains a number of important limitations. First, this is a cross-sectional analysis and does not empirically address changes in family forms or cultural patterns of family and friends over time. Second, this study is restricted to countries in the European Union and therefore perpetuates a lack of representation in research among global regions such as Africa, Asia, Latin America, and the Caribbean, which are experiencing rapidly aging populations (National Institute on Aging, 2007). Gerontologists, sociologists, and demographers should continue to extend these concepts to additional regions to evaluate their utility more globally. Third, this is an exceptionally large sample size that contains enhanced risk of committing Type I errors by using standard *p*-value cutoffs (Greenland et al., 2016). The results contained a high number of “statistically significant” associations that may be inflated because of the power of the sample and therefore require caution in interpretation. Fourth, the sample contains a sizable proportion of “middle-aged” (aged 50+) adults who are relatively healthy. It is unknown if the patterns observed would be replicated among subsamples experiencing specific health limitations or conditions. Fifth, this study relies on a single-item measures of national context, which may not capture what they are intended to capture. For example, “family importance” is high across countries and does not demonstrate the standard variability we know to exist in “familism” cross-nationally (perhaps reflecting social desirability response bias). Finally, this analysis does not assess important conceptual considerations such as the meaning of what constitutes a “friend,” especially cross-nationally, or potential variation in the observed processes by gender and unobserved characteristics. Future studies should continue to investigate these dynamics as they relate to friendship patterns.

Despite these limitations, this study provides needed nuance to the narrative on “aging alone” by conceptually and empirically bridging the gap across demographic, social gerontological, and family sociology literatures to examine individual and contextual friendship patterns among older adults who lack

key family ties. It is my hope that future studies on “aging alone” will incorporate a cultural lens and a broader conceptualization of support options to more accurately assess risk and resilience among older adults cross-nationally.

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## Conflict of Interest

None reported.

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