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Complex Households and the Distribution of Multiple Resources in Later Life: Findings from A National Survey

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Abstract

The availability of social and financial resources has profound implications for health and well-being in later life. Older adults often share resources with others who live with them, sometimes in households including relatives or friends. We examine differences in social support, social connections, money, and the household environment across types of living arrangements, develop hypotheses from two theoretical perspectives, one focusing on obligations toward kin, and one focused on social exchange within households, and test them using data from the National Social Life, Health, and Aging Project. We find that availability of resources is not consistently associated with the presence of grandchildren and other young relatives, but often differs with presence of other adults. These findings suggest that a single type of resource tells us little about the distribution of the resources of older adults, and call on us to examine multiple resources simultaneously.

Keywords

living arrangements; resources; social exchange theory; kinship obligation

Over the past few decades, U.S. society has undergone social and economic changes that have affected the living arrangements of older adults. Declines in mortality mean that more older adults than in the past survive to see their grandchildren grow up, perhaps increasing the likelihood of co-residence at some point in their shared lives (Bengtson, 2001; Luo et. al. 2012). The trend toward older ages for first marriage and the economic challenges stemming from the recent Great Recession have both played a significant role in the rise of multigenerational (from 12% in 1980 to 16% in 2008, Pew Research Center 2010) and shared households (from 17% in 2007 to 18.7% in 2010, Mykyta & Macartney 2012). These changes in older adults' living arrangements have significant implications for many aspects

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Supplemental Material

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of their lives, including intergenerational exchange (Hogan, Eggebeen & Clogg 1993), family solidarity (Silverstein, Gans, & Yang 2006), financial status (Angel & Tienda 1982), and health and well-being (Hughes & Waite 2002; Hughes et al. 2007; Russell 2009).

The numerous studies pointing to the importance of living arrangements for individuals' lives have not, however, examined the complex nature of household-based relationships, which include close/distant family relationships, expectations/obligations, and resources/demands. The current study examines the extent to which multiple resources –social connections, social support, housing resources, and financial means are unevenly distributed across living arrangements, with a focus on older adults in complex households, which we define as including members outside the nuclear family.

Resource sharing, particularly by means of co-residency, has been viewed from two distinct perspectives. The kinship role perspective, developed by Rossi and Rossi (1990) emphasizes social obligation as a motivation for co-residence. It suggests that those taking in distant members transfer resources by doing so. The social exchange perspective points to a negotiated give and take between residents, which results in compensation in resources. We develop hypotheses from these two perspectives and test them using data from the first wave of the National Social Life, Health and Aging Project (Waite, Laumann, Levinson, Lindau & O'Muircheartaigh, 2010).

The availability of resources has profound implications for our lives at all ages, but older adults are especially likely to face inadequate social, financial, and housing resources stemming from retirement, bereavement, or health declines. For example, older adults facing financial deficits may double up with others to form multigenerational or complex households (Mykyta & Macartney 2012). The older generation also may take in friends or relatives as a way of providing support to these people (Angel and Tienda, 1982; Kim & Waite, 2013). In addition to financial resources, older adults living in complex households may share social and housing resources. Crowded households have a higher chance of being untidy, unless all household members agree on sharing household tasks and do their parts. Furthermore, a large number of people in the household does not guarantee more support; these people may impose extra demands on older adults. In this case, the number of people in social networks is another important indicator of the presence of actual or potential resource providers. This study, therefore, focuses on the implications of complex households in late life for three broad types of resource domains – social, financial, and housing.

In the family literature, individuals outside the center of the kinship structure are often categorized as “others,” and include grandchildren, siblings, aunts/uncles, in-laws, nephews/nieces, cousins, more distant relatives and friends (Rossi & Rossi 1990). When they are household members these others have different implications for receipt of support and for provision of resources if they are adults than if they are children (Rossi and Rossi 1990). The first aim of this study, therefore, is to identify the types of *others* and their ages in various living arrangements in a nationally representative sample of older adults. Then we examine the association between complex living arrangements and the distribution of multiple resources, including social connections, social support/demands, housing resources, and financial means.

Background

Two Perspectives on Household Composition and Resource Distribution

As numerous studies noted, the types of resources an individual can expect from a specific household member result from the social behaviors that generally follow kinship structure. Thus, household members who are immediate family are generally expected to share almost all types of resources, while someone who is a friend is not (Fischer 1982; Rossi & Rossi 1990). Distant household members with ambiguous role relationships are less socially obligated to contribute all types of resources and have fewer claims on the resources of other members. Therefore resource sharing with distant kin and nonkin in the household may require extensive negotiation and could lead to misunderstanding and conflict. There are two potential perspectives that account for the role of co-resident *others* and the differences in the resource distribution across types of households: one focuses on obligations from the kinship role approach and the other on negotiation from the social exchange approach.

The Structure of Kinship Obligations: Normative Role Obligations—As norms of kinship obligation identify, there are limited amounts and types of resources that one is willing to provide to, or can expect from, peripheral relationships (e.g., Fischer, 1982; Litwak & Szelenyi, 1969; Rossi & Rossi 1990; Wellman & Wortely, 1990). Rossi and Rossi's (1990) empirical work on the structure of kinship obligations finds that the relationships that produce strong obligations to offer comfort and emotional support also carry a strong obligation to offer other types of support, such as financial assistance, sending gifts, and visiting. Thus, parents and children receive the highest level of felt obligation across all these dimensions, followed by grandchildren, siblings, grandparents, nieces/nephews, aunts/uncles, and cousins.¹ Friends evoke roughly the same level of obligation as do more distant kin such as niece/nephew, aunt/uncle, and cousin. Another important finding from this study is that it is at the bottom of the kinship hierarchy (friends, neighbors, aunt/uncle, niece/nephew, and cousin) where one finds the greatest variation across types of obligations such as emotional support or financial aid. Thus, individuals tend to feel a relatively high level of obligation to provide emotional support to friends but extremely low level of obligation to give financial assistance (Fischer 1982). So as one moves out toward more peripheral kin and nonkin, not only are the absolute levels of obligation lower than those toward primary relationships, but the types of resources that can be expected from these relationships become more limited.

This perspective points to the efficiency of resource sharing among immediate family members as well as the possibility of inefficiencies in complex households (e.g., Kim & Waite 2013; Roschelle, 1997; Rossi & Rossi, 1990). Other household members face weak obligations and unclear norms about types and amounts of resources they should provide to the household economy. Consequently, households that include others are more likely to experience resource deficits in multiple dimensions such as money, emotional support, and

¹There is some variation by rating task in which specific kinpersons follow parent and children in rank order positions: siblings and grandchildren in the case of providing emotional comfort, children-in-law and siblings in the case of providing financial aid or a gift, and grandchildren and parents-in-law in paying a visit to mark a special occasion. But these differences are typically only a difference of one or two positions in the ranking hierarchy (Rossi & Rossi, 1990).

household tasks compared to households that contain only immediate family members. This perspective suggests that older adults in complex households will have lower levels of all types of resources than those in households with only close relatives.

Social Exchange Approach: Negotiated Reciprocity—The second approach suggests the possibility of *others* as providers of resources. It is based on the understanding that others and older adults negotiate reciprocity, for example, one providing shelter and the other providing instrumental support. This negotiated reciprocity may occur because aging can bring basic challenges to resources in, for example, loss of social ties, or difficulty in managing household tasks, while at the same time some extended kin and friends of older adults may go through significant personal crises, such as the loss of a spouse or a job. Moving in with family or friends, even temporarily, may be a response to limited resources (Angel & Tienda, 1982; Kim & Waite, 2013). Glick and van Hook (2011) find that the equal contribution of income from other members is associated with greater stability of extended households, despite the fact that co-residence with siblings, extended kin, and friends is relatively unstable (Wilmoth, 2000). According to Angel and Tienda (1982), however, the income contributions of nonnuclear household members of white, spouse-only and female-headed households are trivial in both relative and absolute terms, suggesting that other members may provide nonmonetary assistance such as social support, domestic labor, or social connections. Their presence in the households also increases the flexibility of older adults' resource allocations. In such cases, older adults co-residing with distant kin or non-kin may share their financial resources, but may also have levels of social support or domestic labor that are comparable to those living with only a spouse. Direct negotiation may be more appealing among members on the periphery of the kinship structure where prescribed norms are weaker than in nuclear families. In this case, the arrangement may be motivated by costs and benefits rather than by normative obligations. To the extent that co-resident other members assume domestic roles, this might make it possible for older adults to reallocate time to work or to social connections outside the household. This perspective suggests that older adults in complex households will have about the same levels of some types of resources as those in households including only close relatives.

Research Questions and Hypotheses

Two questions must be answered to provide evidence on these two alternative perspectives: (1) who are the “others” in the household? And how does the composition of other adults differ from the composition of other dependent children? (2) Do deficits in some types of resources, such as social connections, social support, housing, and finances, appear to be compensated for by advantages in other types, as the resource negotiation perspective suggests? Or do we see resource deficits across multiple dimensions concentrated in a certain types of living arrangements, as the kinship obligation perspective suggests?

The composition of the household in which older adults live is linked to the availability of resources. In particular, we would argue that the types of other members of the household and older adults' relationship with them are an important part of this association. Our primary hypothesis is that the presence of distant kin and nonkin in the household is associated with overall demands on resources in multiple dimensions including social

connections, social support, housing resources, and finances, but the distribution of multiple resources within the household depends on the types of other members.

Others can be generally distinguished into two types: (1) grandchildren; and (2) adult extended kin and friends. If the others are grandchildren or young relatives such as nieces or nephews, the resource distribution may follow from the older adults' custodial obligation to provide primary care. As studies confirmed, dependent grandchildren tend to join a household in response to need, perhaps due to the inability of their parents to provide for them in a separate household (Hogan et al. 1993; Hughes et al. 2007). In this case, coresident grandchildren or young relatives may not only make a claim on the financial resources of older adults' households and reduce hours of paid employment (Minkler & Roe, 1996), but may also constrain socializing with friends and families (Pruchno, 1999), thereby affecting older adults' networking opportunities. In addition, grandchildren or young relatives are relatively unlikely to be included as social network members, especially when it comes to discussing important matters (e.g., Moore, 1990). The kin obligation perspective suggests that other children in the household will be associated with resource deficits in multiple dimensions.

Hypothesis 1 [the multiple resource deficits hypothesis]: Older adults in complex households with *young* relatives or non-relatives will have lower social, financial, and housing resources, compared to older adults living only with their spouse if married, or living alone if single.

We do not expect deficits on all dimensions in all types of complex households, as expected by the kinship obligation perspective, but this perspective predicts that we will see no advantages in households involved with young others compared to households with only a single adult or married couple.

If the others are adult distant kin or non-kin, shared living arrangements can potentially provide economic benefits for all household members (Ahrentzen, 2003; Glick & van Hook, 2011). All parties may enjoy a better lifestyle, potentially improving or complementing insufficient resources of one type with the others (Rogers, 1996). This may be particularly true for single older adults. Siblings or friends living with single older adults provide economies of scale in living expenses (Chappell, 1991) that subsequently increase opportunities to invest in external connections, share household tasks, or provide companionship. In such cases, other adult members in the households may provide resources at least in some dimensions, supporting the resource compensation hypothesis from the social exchange approach. We therefore hypothesize:

Hypothesis 2 [the resource compensation hypothesis]: Older adults in complex households with other *adult* relatives or non-relatives will have a higher level of resources in at least some dimensions than those living only with their spouse if married, or living alone if single.

It should be noted that the resource compensation hypothesis from the social exchange perspective is not testing whether financial resources, for instance, are directly exchanged for domestic labor; rather its purpose is to examine whether households containing *others*

have resource deficits in some dimensions and advantages in others, although the dimensions on which we see benefits or deficits may vary across types of households.

We test these two hypotheses by comparing married people residing with their spouse only to married people residing with others, and single people living alone to those living with others. We distinguish households that include adult others from those that include young others, and households that include own children from those that do not. This allows us to begin to isolate differences associated with the presence of others from differences associated with larger or multigenerational households more generally. Accordingly, we have distinguished eleven living arrangements (see measurement section for the detail). Table 4 provides a summary of the expected distribution of resources across types of household and the test results, which will be discussed in detail in the results section.

We note that married couples tend to be advantaged on some of the dimensions that we consider here, with more financial resources (Waite & Gallagher, 2000), larger networks (Cornwell, 2011) and homes that are neater, cleaner, and in better repair (Cornwell, 2014). Married people have more potential sources of support in their spouse and more potential demands from their spouse (Kim & Waite, 2013). Thus, the resources of married couples might be less severely taxed by an additional adult or grandchild than the resources of single people.

Data and Methods

Data

We use data from the National Social Life, Health, and Aging Project (NSHAP), a nationally representative population-based study of community-residing older adults (Waite et al., 2010). The NSHAP sample was selected from a multistage area probability design screened by the Institute for Social Research for the Health and Retirement Study (HRS). NSHAP oversampled by age, gender, and race/ethnicity. From summer 2005 to spring 2006, NSHAP interviewed 3,005 individuals, ages 57–85, achieving a final weighted response rate of 75.5%. We excluded 114 cases due to item-level missing data on support ($n = 72$), demands ($n = 84$), race-ethnicity ($n = 12$), self-rated physical health ($n = 12$), network size ($n = 4$), and household disorder ($n = 13$). The analytic sample is 2,891.

Measures

Living Arrangements and Household Size—We construct measures of living arrangements and household size from questions about the respondent's social networks, which include household membership and detailed information on relationship to the respondent.ⁱⁱ We distinguish eleven living arrangements: (1) spouse only, (2) spouse and own children, (3) spouse and adult others; (4) spouse and young others; (5) spouse, own children, and adult others, (6) spouse, own children, and young others; (7) single alone, (8) single with own children; (9) single with adult others, (10) single with own children and

ⁱⁱThese include: Spouse; Ex-spouse; Romantic / Sexual partner; Parent; Parent in-law; Child; Step-child; Brothers or sisters; Other relative of yours; Other in-law; Friend; Neighbor; Co-worker or boss; Minister, priest, or other clergy; Psychiatrist, psychologist, counselor, or therapist; Caseworker / Social worker; Housekeeper / Home health care provider / Other (*Specify*).

adult others; (11) single with own children and young others. The category “single” includes those who are never married, widowed, or divorced and “spouse” includes co-resident partner. Households with ‘others’ are considered complex (seven of the eleven types of living arrangements) and those without ‘others’ not complex. We focus here on how complex households including ‘others’ are associated with resource distribution, because parent and children are expected to share almost all types of resources, while someone who belong to ‘others’ category (e.g., friends) is not (Rossi and Rossi 1990). Therefore our focus is not on living with young or adult children in the household but on whether there are young or adult *others* in the household. For instance, the category ‘spouse, own children, and young others’ includes adult children and young others (n=19), and young children and young others (n=30). Table 1 shows the distribution of respondents across these living arrangements.

Social Networks—Social connections are measured by social network size drawn from the egocentric network roster (Cornwell et al., 2008). NSHAP’s network roster obtains information about those persons, called alters, with whom a respondent “discussed important matters” within the past 12 months. Respondents could name up to five persons for whom age, gender, and the relationship to the respondent were obtained. Network size is a count of the number of network members named by the respondent.

Social Support and Demands—Our measure of social support assesses three sets of potential providers of support: spouse/partner, family, and friends. Respondents were asked how often they can open up to their spouse/partner if they need to talk about their worries, and how often they can rely on spouse/partner when they have a problem. These questions were repeated for family and friends. Demands were assessed by asking separately how often spouse/partner, family, and friends make too many demands on respondent. Respondents answered on a three-point scale from “Hardly ever (or never)”= 1 to “Often”= 3. We use the questions on family and on friends for those with no spouse/partner, and questions on spouse, on family, and on friends for those with both. We then average and standardize these measures to compare relative differences in support and demand scores across living arrangements.

Household Environment—Housing resources are measured by the home environment of each respondent, which was rated by the interviewer on seven dimensions: temperature, light, cleanness, tidiness, noise level, smell, and pleasantness of smell, with response categories ranging from 1 to 5. Ratings of cleanliness, tidiness, noise level, smell and smell pleasantness are averaged to create a scale with an alpha reliability score of 0.82. Higher values indicate greater levels of physical disorder in the interior of the home. For the purpose of measuring untidiness of the residential environment, we exclude temperature and light (for details of this measure see Cornwell, 2014).

Household Income to Needs—Household income is assessed through a global question, which generated 881 cases with missing data. Respondents who did not provide a numerical answer were asked to estimate income using an unfolding bracket methodology.ⁱⁱⁱ This greatly reduced the cases for which we have no income information to 273, for which

we imputed values using multiple imputations.^{iv} We follow definitions from the Current Population Survey^v for the calculation of income relative to needs, which divides household income by the number of people who depend on it (Haveman & Wolff, 2004).

Covariates—The respondent's age and a series of dummy variables of gender (1 = female), race/ethnicity (white as the reference group), college attendance (1 = at least some college; 0 = no college education), as well as self-rated physical health (1 = poor; 5 = excellent) measures are included in all models. Self-rated physical health is the respondent's subjective assessment (Idler & Kasl, 1995). Respondents were asked: "Would you say your health is excellent, very good, good, fair, or poor?"

Analytic Strategy

We estimate the association between living arrangements and resources using multiple regression. All analyses are done using Stata 13.0 MP. We begin by describing living arrangements of older adults, focusing on the composition of other members. Then we estimate models of social network size, support, demands, household disorder and income relative to needs. We estimate all models separately for older married adults (Table 2) and for single older adults (Table 3). All models are survey-adjusted and weighted to account for probability of selection and non-response (O'Muircheartaigh, Eckman & Smith, 2009).

Results

Table 1 shows the distribution of living arrangements of older adults age 57–85. In general, U.S. older adults in this age range either live with their spouse (48.5%) or live alone (27.6%). However, 11.0% of older adults live in a household that includes other members. Table 1 also shows that the average number of people in the households is about two and the average number of people in older adults' networks is 3.58. The mean scores for social support items are 2.73 and 2.84 indicating that most older adults "often" open up to or rely on their spouse, but these scores are lower for family and even lower for friends. On the other hand, older adults, on average, perceive the highest level of demands from their family members (1.35), followed by friends, with the lowest level from their spouses. The mean level of household income-relative-to-needs is about 4.35, which indicates that most older adults age 57–85 have decent financial resources. Older adults, on average, live in tidy, clean, quiet, households with no odor. However, Cornwell (2014) found that about 10.0% of respondents' living conditions were very messy, very dirty, or in serious disrepair, and in particular those who reside with someone not a child were more likely to live in disordered living conditions than those living with a partner only. Note that a large proportion of older adults live with a spouse only, live with a spouse and child(ren), or live alone, and these are the groups that tend to be advantaged in multiple resources. We know little about the

ⁱⁱⁱThe unfolding bracket questions were assessed through a method that is similar to HRS: for example, "Would you say the income of your household in [current year minus 1] was more than \$50,000 or less than \$50,000?"

^{iv}The income was imputed using the interval-censoring method of multiple imputations via the Stata 13.0 (Royston 2005). Income and assets are transformed on the log scale so that they are imputed under a log-normal distribution. Ten datasets were imputed, using information from the bracketing questions (interval-censored variable), age, gender, race and ethnicity, and education level.

^vFor the definition of income relative to needs ratio refer to <http://www.census.gov/population/www/cps/cpsdef.html>

resources available to the 11.0% who live with others. Who, then, are the “others” in these households?

Figure 1 presents the proportion of siblings, other relatives under age 18, other adult relatives, other in-laws, and friends for each household type. The very substantial majority (90% to 99%) are siblings, other relatives, other in-laws, and friends. Note that 45.1% of others living with married couples are under age 18, compared to 22.7% of those living with a single adult. More than three-quarters of the others living with a single person are other adult relatives or friends. This finding suggests that married couples are highly likely to be resource providers for young relatives, whereas singles are more likely to form households with equals. Another finding of note is that 23.4% of others living with single older adults and child(ren) are other in-laws so that these households consist of single people, mostly women (available by request), who live with their children, grandchildren and their children’s spouse or partner. Siblings comprise a small fraction of the others in all household types, except for singles living with others.

We proposed two hypotheses about the distributions of social, financial, and housing resources across types of complex households of older adults. We hypothesized that those living with *young others* would show multiple deficits and no compensating advantages as predicted by the kin obligations perspective, and those living with *adult others* would show both deficits and advantages, as predicted by the social exchange perspective. Table 2 presents results for married older adults, and Table 3 presents results for single older adults. Table 4 provides a summary of the expected distribution of social, financial, and housing resources across types of complex household of older adults and the tested results from Table 2 and 3.

Table 2 shows that for married older adults, co-residing with adults others is associated with lower income-relative-to-needs but higher social support than living only with a spouse, supporting the resource compensation hypothesis. Table 2 also shows that co-residing with young others is not associated with resource deficits in any dimensions for married older adults, rejecting the multiple resource deficits hypothesis. However, older adults living with young others show a marginally significant effect on smaller network size, which suggests that co-resident grandchildren or young relatives may constrain socializing with friends and families (Pruchno, 1999). Note that this coefficient is quite large, so the lack of statistical significance may result from the small sample size for this household type.

For older adults living with a spouse, their own child(ren) and others, we expected that those living with adult others would experience resource compensation but those living with young others would experience multiple resource deficits. Table 2 shows that both hypotheses are rejected. For married couples, co-residing with child(ren) and adults others is associated with lower income-relative-to-needs and higher demands than living by themselves, rejecting the resource compensation hypothesis. For married couples, living with child(ren) and young others is associated with fewer demands than living by themselves, rejecting the multiple resource deficits hypothesis.

For single older adults, we expected that living with adult others was associated with resource compensation. In particular, 68.1 % of others living with single older adults are siblings, adult relatives, and friends (Figure 1) who are old enough to provide at least some types of resources, for instance, social support. Unlike our expectation, however, Table 3 shows that for single older adults, living with adult others is associated with higher demands and household disorder and lower income-relative-to-needs than living by themselves. We also expected that single older adults living with child(ren) and adults others would experience resource compensation, while those living with child(ren) and young other would experience multiple deficits. As we expected, for singles, living with child(ren) and adult others is associated with higher support and lower income-relative-to-needs, showing both advantages and disadvantages. For singles, living with child(ren) and young others is associated with smaller network size, lower support, and higher household disorder, supporting the multiple resource deficit hypothesis.

Note that whereas those living with adult others *in every instance* show deficits in income-relative-to-needs, those living with young others *never* do. In addition, households with young others show multiple disadvantages only if the older adult is single; married older adults with young others show no deficits on any dimension, except for the smaller network size among those living with spouse and young others, a marginally significant effect. Unlike our expectation, we find living with young others is not necessarily associated with the multiple deficits and living with adult others are not necessarily associated with the resource compensation.

We also suggested that married couples might find their resources adequate for other members, so that deficits might appear only in the households of single older adults. We find, however, that compared to households with a married couple only, married couples show deficits on multiple dimensions when they live only with their own children and when they lived with their own children and adult others. In fact, the only living arrangements in which married couples do *not* show deficits is living with own children and young others, most often grandchildren. These households show no deficits and lower demands than married-couple-only households.

The results from Table 2 and Table 3 are summarized in Table 4. Table 4 shows our results provide support for hypotheses about resource distribution for three of the seven types of complex households and lead us to reject hypotheses about the other four types. It is important to note, however, that older adults are facing multiple deficits of resources in some types of complex household but not in others. Table 2, Table 3, and Table 4 show that older adults in three types of household are particularly vulnerable to multiple resource deficits: 'spouse, own child(ren), adult others,' 'single, adult others,' 'single, own child(ren), young others.' Furthermore, the results show that the dimensions on which we see benefits or deficits vary across these three households.

Figure 2 illustrates the different types of resources available to these three households. The bars indicate predicted values of each type of resource from Table 2 and Table 3. For comparison, we calculate the predicted values of multiple resources for those in 'spouse, adult others' households who experience both deficits and advantages. As seen from Figure

1, most others in 'spouse, adult others' and 'spouse, child(ren), adult others' households are other adult relatives, other in-laws, and friends. The top panel of Figure 2 shows that income-relative-to-needs of married older adults in these two households is less than for those living with a spouse only. However, the distribution of resources on other dimensions looks quite different. While older adults living with spouse and adult others perceive they can open up to or rely on their spouse, family, and friends more than those living with a spouse only, older adults living with both child(ren) and adult others perceive more demands from their spouse, family, and friends than those living with a spouse only. Thus, older adults in 'spouse, adult others' household experience deficits in financial resources but advantages social resources from their co-residing relationships with other adult relative, in-laws, or friends, but those in 'spouse, child(ren), adult others' experience deficits on both financial and social resources. The bottom panel of Figure 2 shows that for singles, the multiple resource deficits occur in housing resources in addition to financial and social resources. In particular, compared to singles living by themselves, singles living with child(ren) and young others perceive lower levels of emotional support from family members and friends, are living in more disordered living conditions, and even more, have smaller social networks, which gives them fewer potential resource providers.

Discussion

The availability of resources, both emotional and instrumental, has profound implications for later life but tends to be differentially distributed across types of living arrangements. This research explores the relationship of *other members* of the households of older adults and systematically assesses the differences in available resources that are associated with types of living arrangements. We posited an underlying process in which other members of the household are less likely than members of the nuclear family to have the clear roles and role obligations that facilitate resource sharing, leading to more negotiation, conflict and inefficiency. We further hypothesized that, depending on age and the types of these other members, the distribution of resources is better explained by either the obligations one feels toward kin or the negotiations suggested by the social exchange perspective.

This study shows that older adults do not necessarily receive benefits from living in complex households. Compared to older adults in non-complex households, those in living in complex households often face deficits in income-relative-to-needs, often live in messy, noisy, cluttered households, and often face demands from others. However, these multiple resource deficits are not necessarily associated with the presence of young others as the kinship obligation perspective predicts, but are more often associated with the presence of adult others. Thus, we find multiple deficits compared to those in simple households for older adults in some types of complex households (married couples with own child(ren) and adult others; singles with adult others), while we find evidence of resource compensation in other types of complex households (married couples with adult others; singles with own child(ren) and adult others). In addition, we find that the presence of a spouse has significant implications for resource availability among those living with grandchildren or young relatives. Thus, we do not find resource deficits for married couples with young others or with own child(ren) and young others, but do find resource deficits for singles with own child(ren) and young others. These findings remind us that a single type of resource or

marital status tells us little about the distribution of the resources of older adults, and calls on us to examine simultaneously multiple resources across the types of living arrangements including other members.

“Others” and Resource Burdens

This study finds that older adults living with their spouse, child(ren) and adult others, singles living with adult others, and singles living with both child(ren) and young others are particularly vulnerable. Older adults in these households are in worse financial shape than those living alone or living with a spouse only. However, the types of other resources that impose extra burdens on these people vary across three households. We will discuss social, housing, and financial resource burdens respectively across these three vulnerable households.

Social Connections—Social networks size is an important indicator of the presence of actual or potential resource providers. On average, older adults’ social network size does not differ significantly across living arrangements, suggesting that co-resident other distant members do not impede networking opportunities. However, co-resident children or friends or other relatives are less likely than spouses to be included as network members (e.g., Moore 1990), although most are old enough to be a source of advice or help (Figure 1). This exclusion suggests that older Americans living with adult others have access to potential resource providers inside the household but tend to find these providers elsewhere.

Support and Demand—Social support, especially perceived emotional support, is important to well-being but the fact that the same support provider could be the source of demands (e.g., a spouse) may have particular implications among co-resident members. Although older adults in a household with other distant members perceive relatively high levels of demands and low levels of support, this disparity is particularly the case among singles in households that include adult others. This implies that adult others are old enough to provide some types of support but are making demands. A large percent of others living with single older adults and child(ren) are other in-laws (Figure 1). This implies that older single adults may receive support from their adult child but are more likely to take care of their grandchild(ren) and negotiate household resources with their son- or daughter-in-law.

Household Disorder and Tasks—Our residential disorder measure weighs the physical features of a household—such as cleanliness, tidiness, noise, and odor. As expected, crowded households have a higher chance of being untidy, but our results also indicate that a higher disorder score may result from less sharing of household tasks, therefore tying disorder to the type of household and composition of other distal household members. A clear sense of role performance and reciprocal obligation appear to be more critical than the number of people for the division of household labor. We found that although most others living with a single older adult are also adults, these households do not, on average, maintain a level of cleanliness comparable to that of singles living alone or singles with own child(ren). In addition, single older adults living alone have a higher disorder score than married couples living by themselves or with their own children (Supplementary Table A), but a lower score than households with adult others or with children and young others,

suggesting that an increase in household members without a clear sense of role obligations may increase the burden for older adults.

Financial Resources—We found that older adults with adult others showed lower financial well-being than married couples or singles living alone. This hierarchy of financial well-being according to household arrangement suggests that the doubling-up strategy for single older adults does not generally provide sufficient resources to overcome economic hardship. Adult other members may share household tasks or provide social support so that core family members can reallocate time to work to bring in added financial resources. For married couples with adult others, the perceived level of support exceeds that of married couple living by themselves but married couples in more complex households are in worse financial shape with higher perceived level of demands than those in “spouse only” households. Singles in complex households are not only in worse financial shape than singles living alone but also report more demands than support. Our results suggest that adult others tend to consume more financial resources than they contribute, on average, putting the older adults who living with them at risk of inadequate income or poverty.

Limitations

Our findings point to some of the pathways through which living arrangements may influence resource disparities. Although our findings have the advantage of clarifying the composition of other members and measuring resources and burdens across living arrangements, we cannot speak to the causal connections at work, especially in the association between financial and social resources. We are also unable to disentangle the causal processes through which some older adults become members of various types of households and the resources available to them. Furthermore, we have identified three vulnerable households with multiple deficits, but this does not exclude the possibility that resource compensation may occur if the duration of time over which co-residing with others is long enough. For instance, singles living with adult others may receive benefits if they spend more time together and negotiate their roles as reciprocal resource providers. This type of analysis requires longitudinal data. Lastly, although the data provide detailed reports from older adults on the support and demands they perceive from their spouse, family and friends, we do not know *which* family member or friend is supportive or demanding, and we know only generally about the amount of support or demands. We know little about the closeness of the older adult to members of the household and nothing about the forces that brought the household into being. Clearly these are topics to be addressed in the future.

Implications for Practice and Research

Older adults who live in certain types of households tend to face inadequate social, financial and housing resources, including advice and help, income, and sharing of household tasks. Many of these older adults live with dependent and vulnerable others who rely on them for assistance and support, often grandchildren or other young relatives. The types of resources that impose burdens on older adults vary across the households. In many cases, however, those who live with them seem on the face of things to have the potential to contribute more than they do, at least on some of these dimensions. Understanding and improving the functioning of these households could pay substantial dividends in the well-being of older

adults and those who live with them. From the public policy standpoint, findings from this study may be particularly beneficial in developing intervention programs. By identifying the types of co-residing others, social service practitioners could predict different types of resources needed according to the types of complex households, and could develop targeted programs that could alleviate specific resource burdens facing older adults. For instance, singles living with others would benefit if they received additional emotional rewards from their relatively large social network outside the households, whereas married couples with others often need help to reduce financial and task-sharing burdens from a custodial relationship with grandchildren that imposes an extra burden on older adults who have already raised their own children (Goodman & Silverstein 2002; Hughes et al. 2007).

The other major finding of this study is that scarcities in various types of resources are highly concentrated on living arrangements involving other members. This finding implies that other members are moving into the household without sufficient resources to cover their own costs, and are not contributing other types of resources that might compensate for those they are consuming. Considering that the average size of respondents' social network does not differ significantly across living arrangements, one key task here is to find ways to assist older adults to effectively realize emotional and instrumental support from their already-existing potential resource providers.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Figure 1.

Proportion of Sibling, Other Relative, Other In-law, and Friend in Households

a. Spouse and child(ren) are excluded when calculating proportions of other relatives and in-laws in “single, child(ren) others,” “spouse, others,” and “spouse, child(ren), others” in order to allow direct comparison with “single, others.”

Figure 2.

Predicted Values of Resources across Households

*: Indicates statistically different from the reference groups at 0.05 level.

Table 1

Summary Statistics for Living Arrangement, Covariates, and Dependent Variables (N = 2,891)

	Mean or Proportion ^a	Standard Deviation	n
<i>Living Arrangement (Unweighted)</i>			
Spouse	0.485	-	1,402
Spouse, own child(ren)	0.889	-	257
Spouse, adult others	0.016	-	45
Spouse, young others ^b	0.011	-	33
Spouse, own child(ren), adult others	0.009	-	27
Spouse, own child(ren), young others ^{b, c}	0.017	-	50
Single	0.276	-	798
Single, own child(ren) ^d	0.041	-	117
Single, adult others ^e	0.033	-	94
Single, own child(ren), adult others	0.011	-	32
Single, own child(ren), young others ^f	0.012	-	36
Household Size	2.06	.97	2,891
<i>Social Network Characteristics</i>			
Social network size {range = 0–5 or more}	3.58	1.56	2,891
<i>Social Support</i>			
	.04	.97	2,891
How often can you ... {1 = "hardly ever (or never)," 2 = "some of the time," 3 = "often"}			
Open up to your spouse or partner?	2.73	.52	2,012
Rely on your spouse or partner?	2.84	.43	2,007
Open up to members of your family?	2.30	.73	2,815
Rely on members of your family?	2.59	.64	2,793
Open up to friends?	2.03	.73	2,704
Rely on friends?	2.32	.69	2,680
<i>Demands</i>			
	.00	.98	2,891
How often do ... {0 = No one, 1 = "hardly ever (or never)," 2 = "some of the time," 3 = "often"}			
spouse or partner make too many demands on you?	1.08	.88	3,003
members of your family make too many demands on you?	1.35	.61	2,812
friends make too many demands on you?	1.13	.37	2,700
<i>Financial Resources</i>			
Income-to-Needs Ratio (Income imputed)	4.35	-	
<i>Residential Disorder</i>			
	-0.08	.70	2,891
cleanness {1= clean; 5= dirty}	1.74	1.06	2,879
tidiness {1= neat and tidy; 5= messy}	1.83	1.14	2,881
noise level {1= quiet; 5= noisy}	1.47	.81	2,891
smell {1= no smell; 5= strong smell}	1.34	.85	2,885
if smell > 1: pleasantness of smell {1= pleasant; 5= unpleasant}	2.93	0	550
<i>Demographics</i>			
Age	68.0	7.63	2,891

	Mean or Proportion ^a	Standard Deviation	n
Attended college { 1 = at least some college; 0 = no college attendance }	.51	.50	2,891
Female	.51	.50	2,891
Race/Ethnic Group			
Black	.10	.30	2,891
Hispanic, non-black	.07	.25	2,891
Asian and others	.02	.16	2,891
Self-rated Physical Health	3.28	1.10	2,891

^aSurvey-adjusted and weighted to account for the probability of selection, with post-stratification adjustments for non-response.

^bAge of other relatives/non-relative are 18 or under.

^cThis category includes adult children and young others (n=19), young children and young others (n=30), young child and adult others (n=1).

^dOnly 3% (4 out of 117) of the children are age 18 or under.

^eAbout 19% (18 out of 94 cases) are age 18 or under. In supplementary analysis, we divided others who are 18 or under and 19 and above, but the results show no differences.

^fThis category includes adult children and young others (n=18), young children and young others (n=18).

There were no households with young children and adults others.

Table 2
Resources of Households with an Older Adult with a Co-resident Spouse or Partner (n = 1,814)^a

	Network Size	Support	Demand	Household Disorder	log Income Relative to Needs
<i>Living Arrangement</i>					
<i>Spouse only (reference)</i>					
Spouse, own child(ren)	-0.21 [†] (0.11)	0.01 (0.06)	-0.10 (0.11)	0.10 [*] (0.05)	-0.29 ^{***} (0.07)
Spouse, adult others	0.02 (0.21)	0.22 [*] (0.11)	0.01 (0.12)	0.12 (0.13)	-0.36 ^{**} (0.13)
Spouse, young others ^b	-0.57 [†] (0.32)	-0.31 (0.19)	-0.27 (0.22)	0.24 (0.21)	-0.14 (0.18)
Spouse, own child(ren), adult others	-0.30 (0.32)	-0.01 (0.10)	0.56 ^{***} (0.15)	0.18 (0.13)	-0.74 ^{***} (0.17)
Spouse, own child(ren), young others ^{b,c}	-0.22 (0.42)	0.25 (0.17)	-0.86 ^{***} (0.20)	0.23 (0.21)	-0.06 (0.22)
Age	-0.01 (0.01)	-0.02 ^{***} (0.00)	-0.01 ^{***} (0.00)	-0.01 [*] (0.00)	-0.02 ^{***} (0.00)
Female	0.57 ^{***} (0.08)	0.33 ^{***} (0.04)	-0.01 (0.05)	-0.02 (0.04)	-0.15 ^{**} (0.04)
Attend College	0.38 ^{***} (0.09)	-0.03 (0.04)	0.00 (0.05)	-0.11 ^{**} (0.04)	0.63 ^{***} (0.05)
Black	-0.41 ^{**} (0.15)	-0.15 [*] (0.08)	0.41 ^{**} (0.12)	0.21 ^{**} (0.07)	-0.33 ^{**} (0.10)
Hispanic, non-black	-0.66 ^{***} (0.16)	-0.18 [†] (0.10)	0.07 (0.14)	0.01 (0.10)	-0.38 ^{**} (0.12)
Asian and others	-0.29 (0.22)	0.18 [†] (0.10)	0.36 [†] (0.20)	0.17 (0.15)	-0.13 (0.12)
Self-rated Physical Health	0.07 [†]	0.05 ^{**}	-0.04	-0.07 ^{***}	0.09 ^{***}

	Network Size	Support	Demand	Household Disorder	log Income Relative to Needs
Constant	(0.04) 3.64***	(0.02) 0.84**	(0.02) 0.97***	(0.02) 0.47*	(0.02) 2.08***
F test	(0.46)	(0.27)	(0.26)	(0.22)	(0.23)
df	13.89*** (12, 39)	10.85*** (12, 40)	3.90*** (12, 41)	6.04*** (12, 42)	

Standard errors in parentheses

*** p<0.001,

** p<0.01,

* p<0.05,

† p<0.1

^a Survey-adjusted and weighted to account for the probability of selection, with post-stratification adjustments for non-response.

^b Age of co-resident other relatives/non-relative are 18 or under.

^c This category includes adult children and young others (n=19), young children and young others (n=30), young child and adult others (n=1).

Table 4

Resources of Households with a Single Older Adults (n = 1,077)^a

	Network Size	Support	Demand	Household Disorder	log Income Relative to Needs
<i>Living Arrangement</i> <i>Single, live alone(reference)</i>					
Single, own child(ren) ^b	-0.06 (0.18)	0.18 (0.15)	0.24 (0.17)	0.17 (0.10)	-0.08 (0.10)
Single, adult others ^c	0.19 (0.20)	-0.17 (0.14)	0.40 ^{**} (0.13)	0.20 [*] (0.09)	-0.30 ^{**} (0.09)
Single, own child(ren), adult others	0.51 (0.32)	0.54 [*] (0.22)	0.36 [†] (0.21)	-0.01 (0.19)	-0.59 ^{**} (0.21)
Single, own child(ren), young others ^d	-0.96 [*] (0.36)	-0.90 ^{**} (0.27)	0.28 (0.24)	0.48 [*] (0.19)	-0.13 (0.22)
Age	-0.01 (0.01)	-0.02 [*] (0.01)	-0.02 ^{***} (0.00)	-0.01 ^{**} (0.00)	-0.01 [*] (0.00)
Female	0.56 ^{***} (0.12)	0.41 ^{***} (0.08)	0.09 (0.09)	-0.17 [*] (0.07)	-0.20 ^{**} (0.06)
Attend College	0.44 ^{**} (0.15)	0.13 (0.10)	0.11 (0.09)	-0.04 (0.06)	0.56 ^{***} (0.08)
Black	-0.31 [*] (0.15)	-0.06 (0.12)	0.20 [†] (0.11)	0.06 (0.07)	-0.25 ^{**} (0.07)
Hispanic, non-black	-0.60 ^{**} (0.21)	-0.37 [*] (0.15)	-0.20 (0.14)	0.04 (0.13)	-0.24 [†] (0.12)
Asian and others	-0.14 (0.34)	-0.21 (0.26)	0.17 (0.25)	0.07 (0.12)	-0.05 (0.19)
Self-rated Physical Health	0.11 [†] (0.06)	0.10 ^{**} (0.04)	-0.07 (0.04)	-0.10 ^{***} (0.02)	0.11 ^{***} (0.03)
Constant	3.50 ^{***}	0.30	1.07 ^{**}	1.22 ^{***}	1.17 ^{***}

	Network Size	Support	Demand	Household Disorder	log Income Relative to Needs
	(0.67)	(0.51)	(0.36)	(0.25)	(0.31)
F test	6.46***	6.75***	8.91***	7.52***	
df	(11, 40)	(11, 41)	(11, 42)	(11, 43)	

Standard errors in parentheses

*** p<0.001,
** p<0.01,
* p<0.05,
 $\hat{\tau}$ p<0.1

^aSurvey-adjusted and weighted to account for the probability of selection, with post-stratification adjustments for non-response.

^cAbout 19% (18 out of 94 cases) are age 18 or under.

In supplementary analysis, we divided others who are 18 or under and 19 and above, but the results show no differences.

^dThis category includes adult children and young others (n=21), young children and young others (n=21). There was no case for young children and adults others.

Table 4

Expected Distribution of Multiple Resources and the Test Results by Types of Others in Older Adults' Households

	Expected Distribution	Test Results	Actual Distribution
<i>Spouse only (reference)</i>			
Spouse, own child(ren)	-	-	Multiple deficits
Spouse, adult others	Compensation	Accept	Compensation
Spouse, young others ^b	Multiple deficits	Reject	No deficits
Spouse, own child(ren), adult others	Compensation	Reject	Multiple deficits
Spouse, own child(ren), young others ^{b,c}	Multiple deficits	Reject	Compensation
<i>Single, live alone(reference)</i>			
Single, own child(ren) ^b	-	-	No deficits
Single, adult others ^c	Compensation	Reject	Multiple deficits
Single, own child(ren), adult others	Compensation	Accept	Compensation
Single, own child(ren), young others ^d	Multiple deficits	Accept	Multiple deficits

Note: Because this study focused on co-resident others and the resource distribution, we do not present hypotheses about 'spouse, own child(ren)' and single households.

However, we included in the analysis for the comparisons.