

Race/Ethnicity and Marital Status in IADL Caregiver Networks

SHEILA FELD

RUTH E. DUNKLE

University of Michigan

TRACY SCHROEPFER

University of Wisconsin–Madison

Racial/ethnic variations in instrumental activities of daily living (IADL) caregiver network composition were examined in a nationally representative sample of elders, using task specificity and hierarchical compensatory theoretical perspectives. Logistic regressions tested network differences among White, Black, and Mexican American elders ($n = 531$ married, $n = 800$ unmarried). Findings concerning racial/ethnic differences were partially dependent on marital status, differentiation of spouses from other informal helpers among married elders, and which racial/ethnic groups were compared. Networks including formal caregivers did not differentiate married or unmarried Black from White elders but were more common among unmarried Mexican American elders than for comparable White and Black elders. Married Black elders with solely informal networks were more likely than comparable White elders to have informal helpers other than the spouse. Racial/ethnic similarities and differences in caregiver networks are discussed relative to their sociocultural context, including marital status, elder's and spouse's health, and financial resources.

Keywords: *caregiver networks; IADLs; race/ethnicity; marital status*

During the past decade, significant strides have been made in understanding important issues connected to caregiver networks of people of color. Yet, several issues remain unresolved about similarities and differences for minority and White elders in the use of formal help and

AUTHORS' NOTE: Partial support for this work was provided by National Institute of Aging (NIA) Grant T32-AG000117 to Ruth Dunkle and a Hartford Doctoral Fellowship in Geriatric Social Work awarded to Tracy Schroepfer. An earlier version of the article was presented at the 1999 annual scientific meeting of the Gerontological Society of America. We gratefully acknowledge the contributions of Mary Gallant, Gloria Gibson, Carolyn Lindgren, and Linda Wray

RESEARCH ON AGING, Vol. 26 No. 5, September 2004 531-558

DOI: 10.1177/0164027504266560

© 2004 Sage Publications

sources of informal care (spouse, relatives, and nonrelatives). First, despite racial/ethnic variations in marital status, there is limited research on whether racial/ethnic differences in caregiver networks vary for married and unmarried elders. A few studies have addressed this issue in relation to formal services (Miller et al. 1996; Mutchler and Bullers 1994; White-Means 2000). Only one located study investigated whether a spouse, when present, is as likely to be the only caregiver for different racial/ethnic groups (Stoller and Cutler 1992). Typically, spouses are not distinguished from other informal helpers in studies of formal and informal caregivers among minority and White elders (Mutchler and Bullers 1994; Norgard and Rodgers 1997). Second, research has focused mostly on African American and White elders. When Hispanic caregiver networks have been compared with those of White elders, subgroups (Puerto Rican, Cuban, and Mexican American) often are combined (Cantor, Brennan, and Sainz 1994; Wallace, Levy-Storms, and Ferguson 1995). Yet, Hispanic subgroups differ in ways that may affect caregiving (Angel and Angel 1997; Wallace, Campbell, and Chih-Yin 1994). Furthermore, studies comparing caregiver networks of Hispanic subgroups and African Americans are rare, despite significant cultural and historical factors differentiating these minority groups (Dilworth-Anderson and Burton 1999).

Furthermore, much research on race/ethnicity has not distinguished caregiver networks assisting with activities of daily living (ADLs) from those helping with instrumental activities of daily living (IADLs) (Miller et al. 1996; Mutchler and Bullers 1994; White-Means 2000). Yet, some studies show that the impact on network composition of race/ethnicity, and other characteristics, differs for these types of tasks (Lubben and Becerra 1987; Mui, Choi, and Monk 1998). Differences in factors influencing who provides ADL and IADL care are not surprising. Theoretical and empirical work indicates that these two internally reliable components describe functional needs (George and Fillenbaum 1985). The nature of caregiving tasks is an important determinant of who is best suited to give care

during the initial development of this project and the valuable comments received from Regula Herzog, Aloen Townsend, and anonymous reviewers on earlier versions of this article. Address correspondence to Sheila Feld, University of Michigan, School of Social Work, 1080 South University, Ann Arbor, MI 48109-1106; phone: (734) 763-5971; fax: (734) 763-3372; e-mail: sfeld@umich.edu.

(Litwak 1985) and who actually provides aid (Lo Sasso and Johnson 2002). Providing IADL and ADL care appears to affect spouses' well-being somewhat differently, which could influence their willingness and ability to provide such care (Burton et al. 2003). The linkage of adequacy of ADL aid to institutionalization confirms the significance of identifying factors associated with receipt of ADL care (Lo Sasso and Johnson 2002). Factors influencing who helps with IADLs are also important. IADL tasks are essential to maintain independence in community-dwelling elders, require significant portions of their time each day, and such elders are more likely to need IADL than ADL aid (Willis 1995).

In addition, some studies of caregiver networks among racial/ethnic groups use nonrepresentative samples (Kemper 1992; Stommel, Given and Given 1998) and consider only a few critical influences on network composition (i.e., nature of the caregiving task, sociodemographic characteristics, need, network characteristics, and financial resources) (Lubben and Becerra 1987).

In this study, we address these issues using data from the nationally representative baseline sample of the Asset and Health Dynamics Among the Oldest Old (AHEAD) survey (Soldo et al. 1997). We examine the composition of caregiver networks (spouse, other informal, and formal) that help elderly married and unmarried Black, Mexican, and White Americans with their functional limitations.

*MARITAL STATUS AND THEORETICAL
PERSPECTIVES ON CAREGIVER NETWORKS*

The hierarchical compensatory and task-specific theoretical perspectives address who the caregivers are for community-dwelling elders. The hierarchical compensatory and related substitution models (Cantor 1979b; Cantor and Brennan 2000; Shanas 1979) highlight elders' preference for care from those in intimate personal over socially distant relationships. The task-specific model (Litwak 1985; Messeri, Silverstein, and Litwak 1993) stresses the match between the structure of the caregiving task (e.g., its requirements for proximal, highly motivated, or technically skilled helpers) and the structure of social groups such as marital dyads, children, or formal organizations. Both perspectives make similar predictions about the typical composition of caregiver networks for instrumental and personal care needs

(Messeri et al. 1993). They match the well-established finding that most of the ADL/IADL assistance community-dwelling elders receive is from informal rather than formal sources and that informal helpers are predominantly spouses and other kin (Spector et al. 2000).

An important difference in these perspectives concerns the circumstances under which those lower in the typical helper hierarchy are included in caregiver networks. In the hierarchical compensatory model, availability of preferred sources is critical. Helpers lower in the preference hierarchy are expected to be used only when more preferred sources are unavailable. An available spouse is expected to be likely to provide all needed care, although the distinctive role of the spouse has not been tested directly (Cantor 1979a; Cantor and Brennan 2000; Cantor et al. 1994). Absent a spouse, available children are more likely than other relatives or friends to provide care. Formal care is used only when informal help is not available. In the task-specific model, availability is one of several factors affecting the match between characteristics of the caregiving task and potential helpers. For example, a coresiding spouse may not be the sole helper if care needed exceeds time or energy resources of the spouse or requires specialized skills the spouse lacks. Similarly, formal help may substitute or supplement aid from proximate kin when the kin's resources do not meet task requirements (Messeri et al. 1993).

Prior research tends to support predictions from both perspectives that married elders often rely solely on their spouses for assistance with functional needs. Nevertheless, deviations from this pattern are more in keeping with the task-specific model; other helpers supplement spousal caregiving, and not all spouses are caregivers (Burton et al. 2003; Stoller and Cutler 1992). Similarly, the predominance of informal over formal help is consistent with both perspectives, but considerable evidence that formal care often is used along with informal care is more consistent with the task-specific model (Mui et al. 1998).

RACIAL/ETHNIC VARIATIONS IN CAREGIVER NETWORKS

Both theoretical perspectives suggest that similar basic principles, based on hierarchical preferences or matching, affect network composition in various racial/ethnic groups. They also recognize the impact on network composition of racial/ethnic variations in cultural values,

which could affect preferences of elders or proximity and commitment of social network members, and in social structures or resources, which could affect availability and match of the structure of social groups to tasks (Cantor et al. 1994; Litwak 1985). Other theorists stress that values about appropriate sources of elder care are not only tied to the traditional cultures of countries of origin but also are linked inextricably to current and historical social positions that affect need for care and resources (Angel and Angel 1997; Dilworth-Anderson, Williams, and Cooper 1999). Social location and minority/majority group status can influence potential informal and formal caregivers' availability and their social structures and resources. They also influence cultural norms and practices, health, access to health care, and social and economic resources, all of which form the sociocultural context for caregiving.

Examination of this context for care suggests that minority elders might be less likely than are White elders with similar functional limitations to use community-based formal services, thereby possibly increasing demands for informal caregiving. Suggested barriers to use of formal services by minority elders include financial constraints, limited geographic availability, discrimination by service providers, a history of insensitive or poor quality services, and cultural values (Mui et al. 1998). The hierarchical and task-specific models suggest that availability barriers could decrease reliance on formal help. The hierarchical model also points to the influence of barriers on minority elders' preferences. The task-specific model highlights the relevance of such barriers to the match between the commitment and skills of formal helpers and minority elders' needs.

The sociocultural context for care among minority and White elders also suggests that there is a greater diversity of available and acceptable informal helpers for minority than for White elders (Dilworth-Anderson and Burton 1999), which may foster reliance on informal rather than formal helpers (Angel and Angel 1997). The racial/ethnic context for caregiving may also reflect the communal/collectivist orientations to mutual aid (Piercy 1998; Pyke and Bengtson 1996) and extended family structures said to characterize African American and Mexican American families (Dilworth-Anderson and Burton 1999). This could reduce sole reliance on spousal caregiving among minority compared with White elders. Some evidence indicates that communal caregiving is quite common among

African American families (Dilworth-Anderson et al. 1999), perhaps more so than in White families (Stommel et al. 1998), and that a wider set of individuals is included in caregiver networks of Black than White Americans (Dilworth-Anderson and Burton 1999), although none of these studies focused on married elders and spousal caregiving. The familism of Mexican Americans is said to involve high levels of attachment and a collectivist orientation to reciprocal aid among members of extended families (Aranda and Knight 1997). Thus, there are various reasons for suspecting that spouses in minority families may be less likely than are those in White families to be solo caregivers.

The preponderance of studies based on multivariate analyses of representative local or national samples of community-dwelling elders, however, has not supported these expectations about differences in the caregiver networks of Black and White elders. These studies have not typically found that Black elders are less likely to use formal care or are more likely to rely on informal caregivers than comparable White elders (Miller et al. 1996; Mutchler and Bullers 1994; Netzer et al. 1997; Norgard and Rodgers 1997; Peek, Coward, and Peek 2000; Tennstedt, Chang, and Delgado 1998; White-Means 2000), although there are some exceptions (Wallace et al. 1998; Wolinsky and Johnson 1991). Most of these studies combined ADL and IADL help and did not consider the impact of marital status on this conclusion. Three studies found no race differences in the use of formal care by either married or unmarried elders (Miller et al. 1996; Mutchler and Bullers 1994; White-Means 2000). In a sample restricted to elders living only with their spouses, Stoller and Cutler (1992) did not find race differences in sole reliance on spousal caregivers for help with ADLs or with IADLs, nor did Black and White elders differ in whether their non-spousal caregivers for either type of assistance included any formal helpers. Similarly, Pezzin and Schone's (1999) study of unmarried Black and White elderly parents receiving ADL/IADL care did not find racial differences in care from children or formal sources. However, a synthesis of data from several convenience samples found that Black primary caregivers providing IADL and household care were more likely to have supplemental caregivers than were White ones, but did not find race differences in ADL care (Stommel et al. 1998).

There is a dearth of evidence comparing caregiver networks of representative samples of Mexican American elders with those of Black or White elders. The one such identified multivariate study was limited to Medicaid recipients in California and controlled only marital status and age (Lubben and Becerra 1987). For certain IADL tasks, Mexican American elders were less likely to get any formal help and were more likely to receive any informal help than were comparable White elders; differences were not found for other IADL tasks or ADL tasks.

Important methodological limitations and variations limit the robustness of the accumulating evidence for considerable racial/ethnic similarities in caregiver network composition. Most studies combine ADL and IADL assistance. Studies of married elders often combine spousal with other informal helpers. Sampling inclusion criteria often differ (e.g., all elders, only those with functional limitations, only married elders in two-person households, or only unmarried elders with adult children). Definitions frequently vary for what constitutes formal help (e.g., specific service programs or paid help with specific tasks) and informal help (e.g., all unpaid helpers, only kin, or only children).

Prior research has also varied in what factors besides race/ethnicity are controlled. Nevertheless, several important influences on caregiver network composition have been found. Influences include the elder's extent and type of functional limitations; gender, age, and education of the elder; the family network's size, proximity, and composition; and the amount and sources of financial resources (Katz, Kabeto, and Langa 2000; Miller et al. 1996; Norgard and Rodgers 1997; Peek et al. 2000; Pezzin and Schone 1999; White-Means 2000). Studies testing the effects of these factors on network composition for married and unmarried elders typically find they are important in both. Gender, however, may only be relevant for married elders (Mutchler and Bullers 1994). These influences on network composition often reflect racial/ethnic variations in the sociocultural context for caregiving that might affect elders' preferences for caregivers, caregiver availability, or the match between characteristics of caregivers and caregiving tasks, issues raised in Cantor's (1979b) and Litwak's (1985) theoretical perspectives. Spouses' health influences married elders' caregiver network composition (Katz et al. 2000), but its impact does not appear to have been controlled in studies of racial/ethnic network differences.

THE PRESENT STUDY

We investigated racial/ethnic differences in the inclusion of formal and informal helpers in caregiver networks among representative samples of 531 married and 800 unmarried elders receiving assistance with IADL needs. We differentiated spousal, other informal, and formal helpers among the married and formal and informal helpers among the unmarried Black, Mexican American, and White elders. Sociodemographic factors, need for help, family availability, spousal impairment, and financial resources were taken into account. Although it would have been desirable to study racial/ethnic differences in both ADL and IADL caregiver networks, the low numbers of Black and Mexican American elders receiving ADL assistance precluded doing this in the present study.¹

Specifically, we addressed two questions about differences in the IADL caregiver networks of elderly African Americans, Mexican Americans, and White Americans.

1. Are there racial/ethnic variations in the extent to which elders with a coresident spouse/partner rely solely on their spouses, use other informal sources of aid, or use any formal help to assist with IADL tasks?
2. Are there racial/ethnic variations in the extent to which unmarried elders rely solely on informal sources of aid, or use any formal help to assist with IADL tasks?

*Method**SAMPLE*

The data were from the first wave of the AHEAD survey, conducted in 1993-1994 (see Soldo et al. 1997 for sampling design details). This survey had a complex multistage design. It yielded a nationally representative sample of more than 8,000 community-dwelling elders, aged 70 and older at the time of the initial interview, and their spouses or partners.

The study was based on two subsamples: married respondents (those living with a spouse or partner) and unmarried respondents (anyone not currently living with a spouse or partner), among whom

84% to 89% were widowed in each racial/ethnic group. Only persons self-identifying as non-Hispanic White, non-Hispanic Black or non-Hispanic African American, or as Mexican American or Chicano were included. Additional inclusion criteria were age 70 and older, had a limitation in one or more of four IADLS, and received help with one or more IADL limitations at least once a week. The IADL tasks were preparing a hot meal, shopping for groceries, making a telephone call, and taking medications. Questions about each IADL in the AHEAD interview enabled us to identify limitations by reports of not being able to perform a task without help or of not doing a task for health reasons. Elders who performed a task without help were not asked if they had difficulty with the task, preventing identification of elders who may have needed help but did not receive it. Data on payment to helpers were obtained only from those getting help at least weekly, necessitating restriction of analyses to those elders.²

The final subsamples resulted from the sample selection criteria and deletion of influential outliers identified by regression diagnostic procedures. They included 531 married³ (404 Whites, 83 Blacks, and 44 Mexican Americans) and 800 unmarried (585 Whites, 168 Blacks, and 47 Mexican Americans) elders. We included Mexican Americans despite their small numbers because of the lack of prior research using appropriate multivariate controls and representative samples that has compared their caregiver networks with those of White or Black Americans. We view any observed differences between networks of Mexican Americans and other racial/ethnic groups as primarily useful for providing valuable directions for future research, while recognizing that the absence of differences may result from power limitations related to sample size.

DEPENDENT VARIABLE

The caregiver network variable was based on replies to two questions: (1) Who helps the most with the set of four IADL tasks? and (2) Who else helps most often? We categorized replies to reflect predictions from the hierarchical compensatory and task-specific models of the predominance of informal over formal caregivers and the hierarchical compensatory model's assumptions about the distinctive role of spouses and the use of formal helpers in the absence of informal

sources. For all help recipients, we differentiated networks with any formal helper from those with only informal helpers. For the married, spouses and other informal helpers were further differentiated yielding three types of networks: *any formal*, denoting at least one paid or organizational helper, regardless of the presence or type of any second helper (e.g., another formal helper, spouse/partner, unpaid helper other than spouse/partner); *spouse only*, indicating only the coresident spouse/partner provided help; and *informal*, indicating at least one unpaid helper other than the spouse/partner (although the spouse/partner might have also provided help) and no paid or organizational help. For the unmarried, *any formal* and *informal* networks were differentiated. As noted, *any formal* networks could consist of only formal helpers (as they did for 36% of the married and 72% of the unmarried). *Any formal* networks could also include a formal and informal helper, as they did for 64% of the married (including 38% with a spouse and 26% with another informal helper) and for 28% of the unmarried respondents. *Informal* networks of married elders could include a spouse and nonspousal helper (43%) or only nonspousal help (57%).

INDEPENDENT VARIABLES

We describe the independent variables in Table 1. Race/ethnicity was the focal variable, coded as White, Black, or Mexican American. To address the sociocultural context for caregiving, we included four types of variables that prior theory and research indicate are likely to be associated with caregiver network composition and race/ethnicity. Demographic variables were gender, age, and years of education. Need for help variables included three indicators of health: number of IADL limitations, number of ADL limitations, and the presence of serious cognitive problems. Family network variables assessed potential availability of family helpers. Number of proximate children (those coresiding or living less than 10 miles away) and number of relatives (siblings and grandchildren) were used for both the married and unmarried. For married elders, availability was also indexed by two measures of spousal health: Spouse did not have IADL limitations, and spouse did not have ADL limitations. Medicaid and the poverty ratio measured financial resources that could facilitate use of formal help.

TABLE 1
Measures of Independent Variables

<i>Variable</i>	<i>Description (Range)</i>
Race/ethnicity	White: non-Hispanic White Black: non-Hispanic Black or African American Mexican American: Mexican American or Chicano
Demographics	
Gender	0 = female 1 = male
Age	Age in years (70-103)
Education	Years of schooling, truncated at 17 (0-17)
Need for help	IADL limitations were not being able to prepare a hot meal, to shop for groceries, to make a telephone call, or to take medication without help; or not doing the task because of health reasons (1-4)
Number of IADLs	ADL limitations were elder gets help, does not do, or has difficulty in dressing, bathing, eating, or toileting; or elder gets help, does not do, uses equipment, or has difficulty walking or getting in and out of bed (0-6)
Number of ADLs	0 = no serious cognitive problems
Cognitive problems	1 = elder gave less than half correct replies to phone version of Mini Mental Status Examination, or proxy indicated behavior symptomatic of cognitive problems (wandering, getting lost, hearing voices, or unable to leave alone)
Family network	
Number of proximate children	Number of children of elder and spouse/partner coresiding or living less than 10 miles away from parent (0-8)
Number of relatives	Number of living siblings and grandchildren of elder and spouse/partner truncated at 19 (0-19)
Spouse no IADLs	0 = spouse has any IADL limitations, as previously defined in number of IADL limitations 1 = spouse has no IADL limitations, as previously defined in number of IADL limitations
Spouse no ADLs	0 = spouse has any ADL limitations, as previously defined in number of ADL limitations 1 = spouse has no ADL limitations, as previously defined in number of ADL limitations
Financial resources	

(continued)

TABLE 1 (continued)

<i>Variable</i>	<i>Description (Range)</i>
Medicaid	0 = no Medicaid coverage 1 = self-report that health care currently covered by Medicaid
Poverty ratio	Ratio of prior year's household income to U.S. poverty figure for that year (1992/1993) for a given household size and composition truncated at 13.0 (0.0-13.0)

NOTE: ADL = activity of daily living; IADL = instrumental activity of daily living.

ANALYTIC STRATEGY

To obtain appropriate descriptive statistics and standard errors, svy commands in Stata's statistical package were used to take into account AHEAD's complex multistage sample design (StataCorp 1999:322-24). These commands adjust for sampling weights, clustering, and stratification of the sample by geographic location and size of place. Normalized weights were used to adjust for sample selection probabilities (oversampling of minority elders, nonresponse, and deviations from the 1990 census). The commands also take into account multistage sampling, that is, clustering of the sample within primary and secondary sampling units and implicitly for clustering within households (interviewing both members of couples); "They allow any amount of clustering within the primary sampling unit . . . [and] produce variance estimates that generally will be either approximately unbiased, or, if biased, they will be toward more conservative estimates" (StataCorp 1999:324).

The effects of race/ethnicity, and other independent variables (12 for the married and 10 for the unmarried), on caregiver network composition were tested in separate logistic regression models for the two subsamples. Stata's svy procedures yield *F* values and significance levels for the total model, but no other goodness-of-fit statistics.

For the married subsample, multinomial logistic regression was used, and the model including the 13 independent variables was run twice in order to obtain all comparisons among the three types of networks comprising the dependent variable. In each run of the model, we used two dummy variables to represent the three network types. One run compared elders who relied on either of the two types of informal networks (*spouse only* and *informal*) with those with formal networks (the omitted referent category of *any formal*). In the second run of the model, the reference category was *informal*, yielding a new comparison between the two types of informal networks (*spouse only* versus *informal*). The comparison between *any formal* and *informal* networks in the second run replicated the same comparison from the first run of the model (with signs reversed); for this reason, only the results from the first run are shown in tabular form.

Binomial logistic regression was used for the unmarried elders to identify the effects on network composition of race/ethnicity and the

other 10 predictors. *Informal* networks were compared with *any formal* networks, the omitted reference category.

In the logistic regression models described above for both subsamples, the models were run twice to obtain comparisons among all three of the racial/ethnic groups. In all runs of the models, race/ethnicity was entered as two dummy variables, but the reference category differed. In one run, the omitted reference category was White elders, yielding comparisons of the Black and Mexican American elders' networks with those of Whites. The reference category in the other run was Black elders, yielding a new comparison of the networks of Mexican Americans with those of Black elders. The comparison between White and Black elders' networks from this run replicated data for the same comparison from the first run (with signs reversed) of the models; for this reason, only the results from the first run of each model are shown in tabular form.

Results

DESCRIPTIVE RACIAL/ETHNIC DIFFERENCES

The data in Table 2 describe variations in the IADL caregiver networks and the sociocultural context of caregiving for the Black, Mexican American, and White elders. Significant racial/ethnic differences in network composition were found only for married respondents. The most common pattern for married White and Black Americans was a network including only the spouse, but Mexican Americans' networks were as likely to consist solely of the spouse as to include other informal helpers. Networks including a nonspousal informal helper were more common among married Mexican American and Black elders than White elders. Networks including any formal helper were least common in all three married groups, but such networks were most likely among Mexican American elders. For unmarried elders in all racial/ethnic groups, solely informal networks were much more common than were those with any formal helper. Most other variables showed significant racial/ethnic differences for both subsamples. These differences were taken into account in the multivariate analyses of network composition.

TABLE 2
Racial/Ethnic Differences Within Marital Status

Variable	Married			Unmarried			P
	White (n = 404)	Black (n = 83)	Mexican (n = 44)	White (n = 585)	Black (n = 168)	Mexican (n = 47)	
Dependent variable							
Caregiver network							*
Spouse only	77.7%	55.4%	36.4%	71.6%	79.8%	63.8%	
Informal	15.6%	37.3%	36.4%	28.4%	20.2%	36.2%	
Any formal	6.7%	7.2%	27.3%				
Independent variables							
Gender							
Female	45.8%	38.6%	40.9%	86.3%	86.9%	78.7%	
Male	54.2%	61.4%	59.1%	13.7%	13.1%	21.3%	*
Mean age	79.1	79.2	79.5	83.5 ^a	80.5 ^b	81.1 ^b	*
Mean education	10.4 ^a	7.1 ^b	3.5 ^c	9.9 ^a	7.6 ^b	3.2 ^c	*
Mean number of IADLs	1.9 ^a	2.2 ^b	2.0 ^{a,b}	1.8 ^a	2.1 ^b	1.8 ^{a,b}	*
Mean number of ADLs	2.2	2.5	2.3	2.4	2.6	2.5	
Cognitive problems							*
No	79.2%	54.2%	75.0%	75.6%	58.3%	57.4%	
Yes	20.8%	45.8%	25.0%	24.4%	41.7%	42.6%	
Mean number of proximate children	1.0 ^a	1.2 ^a	2.8 ^b	1.1 ^a	1.5 ^b	2.2 ^c	*
Mean number of relatives	7.7 ^a	7.9 ^a	14.4 ^b	7.2 ^a	8.5 ^b	14.0 ^c	*
Spouse no IADLs							*
Has IADLs	18.1%	34.9%	68.2%				
No IADLs	81.9%	65.1%	31.8%				

(continued)

TABLE 2 (continued)

Variable	Married			Unmarried			p
	White (n = 404)	Black (n = 83)	Mexican (n = 44)	White (n = 585)	Black (n = 168)	Mexican (n = 47)	
Spouse no ADLs							
Has ADLs	28.0%	32.5%	47.7%				*
No ADLs	72.0%	67.5%	52.3%				
Medicaid							
No	93.3%	78.3%	50.0%	79.8%	56.5%	42.6%	*
Yes	6.7%	21.7%	50.0%	20.2%	43.5%	57.4%	
Mean poverty ratio	2.7 ^a	1.6 ^b	1.1 ^c	2.3 ^a	1.8 ^b	1.6 ^b	*

NOTE: Means and percentages are based on raw data. All significance values are for two-tailed tests and take design effects into account by using the Stata software. For categorical variables, the Pearson chi-square with the Rao and Scott second-order correction was used (svytab); for continuous variables, regression procedures were used (svyreg), as there is no Stata procedure analogous to analysis of variance. Means in the same row that have different superscripts differ at $p \leq .05$. ADL = activity of daily living; IADL = instrumental activity of daily living.

* $p \leq .05$.

MULTIVARIATE RACIAL/ETHNIC DIFFERENCES

Table 3 shows the findings from logistic regressions addressing our research questions about racial/ethnic variations in caregiver network composition. We report unstandardized (*b*) coefficients to show significance levels; associated odds ratios show how membership in specific racial/ethnic groups affected the odds of having a particular caregiver network pattern. Standardized (β) coefficients are reported to compare the relative impact of race/ethnicity and the other independent variables on network composition (Selvin 1996). We derived these coefficients by dividing each unstandardized coefficient by its estimated standard error, as these estimates take clustering of the sample into account; these coefficients can be greater than +1 or -1.

Married elders. The first research question asked whether IADL caregiver networks of married Black, Mexican American, and White elders differ when other correlates of network composition are taken into account. Data from the two multinomial logistic regression runs presented in the first three columns of Table 3 indicate that the overall answer to this question is a partial yes. Married Black elders' networks differed from White and Mexican American elders in their inclusion of informal helpers other than the spouse, but married White and Mexican American elders' networks did not differ.

The first two columns of Table 3 present findings from the model run with networks including any formal helper as the reference category to which the two types of informal caregiver networks were compared. As data in the first column show, the racial/ethnic groups did not differ in reliance on spouse only and any formal networks. Other variables did significantly differentiate elders from these two types of networks. The magnitude of the standardized regression coefficients indicate that the elder's number of IADL limitations had the greatest relative impact ($\beta = -4.42$), with more limitations decreasing sole reliance on the spouse versus using any formal help, as did Medicaid coverage ($\beta = -3.21$). Being a male help recipient ($\beta = 3.05$) and having a spouse without IADL limitations ($\beta = 2.94$) increased the likelihood of solo spousal networks.

The second column of Table 3 shows one significant racial/ethnic difference when married elders whose network included an informal helper other than (or in addition to) the spouse were compared with

TABLE 3
 Logistic Regression Models of Characteristics
 Predicting the Composition of Caregiver Networks
 for Married ($n = 531$) and Unmarried ($n = 800$) Elders

Variable	Married		Unmarried	
	Spouse Only/ Any Formal ^a	Informal/ Any Formal ^a	Spouse Only/ Informal ^b	Informal/ Any Formal ^c
	b ^d	b ^d	b ^d	b ^d
	β^c	β^c	β^c	β^c
	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Black/White ^f	-0.09	0.86	-0.96**	0.44
	-0.19	1.34	-2.69	1.59
	0.91	2.36	0.38	1.55
Mexican/White ^f	-0.79	-1.15	0.36	-1.35*
	-1.33	-1.40	0.46	-2.33
	0.45	0.32	1.43	0.26
Mexican/Black ^g	-0.70	-2.01*	1.32†	-1.79***
	-0.94	-2.25	1.69	-3.58
	0.50	0.13	3.74	0.17
Male	1.27**	0.39	0.88**	-0.11
	3.05	0.94	2.84	-0.45
	3.56	1.48	2.41	0.90
Age	-0.04	0.01	-0.05†	-0.04**
	-1.05	0.15	-1.88	-2.88
	0.96	1.01	0.95	0.96
Education	0.04	-0.03	0.07	-0.06*
	0.70	-0.40	1.23	-2.15
	1.04	0.97	1.07	0.94
Number of IADLs	-0.68***	-0.42†	-0.26	0.04
	-4.42	-1.97	-1.53	0.46
	0.51	0.66	0.77	1.04
Number of ADLs	-0.22†	-0.03	-0.19*	-0.23***
	-1.96	-0.31	-2.20	-4.79
	0.80	0.97	0.83	0.80
Cognitive problems	0.24	-0.64	0.88*	-0.21
	0.47	-1.36	2.27	-1.11
	1.27	0.53	2.41	0.81
Number of proximate children	-0.24	0.06	-0.30**	0.51***
	-1.29	0.33	-3.01	4.92
	0.79	1.06	0.74	1.67
Number of relatives	0.06	0.05†	0.01	0.03
	1.63	1.73	0.27	1.43
	1.06	1.05	1.01	1.03
Spouse no IADLs	1.75**	-0.64	2.39***	
	2.94	-1.12	6.87	
	5.75	0.53	10.91	

TABLE 3 (continued)

Variable	Married		Unmarried	
	Spouse Only/ Any Formal ^a	Informal/ Any Formal ^a	Spouse Only/ Informal ^b	Informal/ Any Formal ^c
	b ^d	b ^d	b ^d	b ^d
	β ^e	β ^e	β ^e	β ^e
	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Spouse no ADLs	1.65**	0.67	0.98**	
	2.74	1.39	2.88	
	5.21	1.95	2.66	
Medicaid	-1.62**	-1.44*	-0.18	-0.69**
	-3.21	-2.50	-0.31	-3.22
	0.20	0.24	0.84	0.50
Poverty ratio	-0.14	-0.34**	0.20†	0.00
	-1.63	-2.66	1.77	0.05
	0.87	0.71	1.22	1.00

NOTE: All significance levels are for two-tailed tests. ADL = activity of daily living; IADL = instrumental activity of daily living.

† $p \leq .10$. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

a. Results from multinomial logistic model run with “any formal” as the reference category.

b. Results from the multinomial logistic model run with “informal” as the reference category. Figures are only shown for the comparison between “spouse only” and “informal” help, as those for the comparison between “any formal” and “informal” help are identical (with signs reversed) to those presented in column 2. The overall F value for both runs was 14.61, $p = .0000$.

c. Results from the binomial logistic regression model run with “any formal” help as the reference category. The overall F value was 6.77, $p = .0000$.

d. Unstandardized regression coefficients.

e. Standardized regression coefficients.

f. Results from models run with “White” as the reference category.

g. Results from models run with “Black” as the reference category. Figures are shown only for the comparison between Mexican American and Black elders, as those for the comparison between White and Black elders are identical (with signs reversed) to those presented above for the comparison between Black and White elders’ networks.

those whose networks included any formal helper. The networks of Black and Mexican American elders did not differ from those of White elders, but the model run with Blacks as the reference category showed a difference in the Mexican American and Black elders’ networks. The odds ratio (0.13) shows married Mexican American elders were 87% less likely than were comparable Black elders to use an informal helper other than the spouse than to use any formal help. Both measures of financial resources significantly reduced reliance on informal helpers other than the spouse compared to using formal

help. The standardized coefficients for these measures ($\beta = -2.66$ for the poverty ratio and $\beta = -2.50$ for Medicaid) indicate they had a somewhat larger impact than being Mexican American rather than Black ($\beta = -2.25$).

The third column of Table 3 presents the findings comparing solo spousal networks with those including nonspousal informal helpers, obtained from the run of the multinomial model in which *informal* networks were the reference category. It shows that the informal helpers of married elders who did not use any formal aid differed for Black and White elders, but not for Mexican American and White elders. The odds ratio (0.38) shows that Black elders were 62% less likely than comparable White elders to rely solely on their spouses than to use any other informal helper. Networks of Mexican American and Black elders who relied on informal helpers also tended to differ ($p = .098$). The similarity of this difference to that between Black and White elders became clear when Mexican Americans were made the reference category compared to Black elders (data not shown). This reversed odds ratio (0.27) indicates that these Black elders were 87% less likely than were comparable Mexican American elders to rely solely on their spouses than to use an informal helper other than the spouse.

The standardized regression coefficients indicate that availability of primary family and being male had greater relative impacts on informal network composition than did being Black or White. Increases in the odds of a solo spousal network, compared with using other informal helpers, were associated with a spouse without any IADL limitations ($\beta = 6.87$), fewer proximate children ($\beta = -3.01$), a spouse without ADL limitations ($\beta = 2.88$), male help recipients ($\beta = 2.84$), and with being White rather than Black ($\beta = -2.69$).

Unmarried elders. The second research question asked whether IADL caregiver networks of unmarried Black, Mexican American, and White elders differ when other correlates of network composition are taken into account. Data from the binomial logistic regression (in the last column of Table 3) indicate that networks of unmarried Mexican Americans differed from those of Black and White elders, but those of Black and White elders did not differ. Unmarried Mexican American elders' networks were significantly less likely than were those of comparable White and Black elders to contain only informal

helpers than to include formal help. The odds ratios (0.26 and 0.17, respectively) show that solely informal networks were 74% less likely to occur for unmarried Mexican American than for comparable White elders and were 83% less likely to occur for Mexican American than Black elders.

The standardized regression coefficients for other significant variables show that having more proximate children ($\beta = 4.92$) and fewer help recipient ADL limitations ($\beta = -4.79$) had the strongest relative impacts on the odds of unmarried elders having solely informal networks versus networks including formal help. The effect of being Mexican American or Black was weaker ($\beta = -3.58$) than that of these variables, but somewhat stronger than that of the other significant variables (Medicaid coverage, $\beta = -3.22$; age, $\beta = -2.88$; being Mexican American or White, $\beta = -2.33$; and education, $\beta = -2.15$).

Discussion

The goal of this study was to advance our understanding of racial/ethnic variations in caregiver network composition. Using data from a nationally representative sample, we considered many factors associated with network composition, focused on IADL tasks, and drew on the hierarchical compensatory and task-specific perspectives on network composition to achieve this end. We addressed three issues that had not received sufficient attention: (1) whether racial/ethnic variations in networks were similar for married and unmarried elders; (2) whether distinguishing spousal and other informal helpers among married elderly influenced conclusions about racial/ethnic variations in network composition and (3) whether networks of comparable Mexican American, White, and Black American elders varied. Findings indicate that conclusions about racial/ethnic differences in IADL caregiver networks depend in part on the marital status of the elders and on differentiating spouses from other informal helpers of married elders, as suggested by both theoretical models. Results also indicate that Black and White Americans differ only in the composition of their informal caregiver networks. Findings also suggest that the inclusion of formal helpers in caregiver networks may differ for elderly Mexican Americans and comparable White and Black Americans.

Overall, the findings confirm and extend those from prior research on the inclusion of formal helpers in the caregiver networks of elderly Black and White Americans and are in keeping with similar predictions from both theoretical models about the low likelihood of reliance on formal help. In representative community samples, reliance on formal help to meet various long-term care needs is uncommon and typically has not been found to vary by race in multivariate analyses with appropriate controls. This study confirmed these conclusions for both married and unmarried elders: Use of formal IADL help was rare, and Black and White Americans' reliance on formal help did not differ when other major influences on network composition were considered. The present study also enhanced the robustness of this conclusion for married elders. The use of formal help was similar for married Black and White elders even when (1) racial differences in the spouse's impairments in instrumental and basic activities of daily living were taken into account, and (2) networks including formal help were compared with informal networks composed solely of spouses or those including informal helpers other than the spouse.

Our findings did show, however, that Black elders with solely informal networks were significantly more likely than were comparable White elders to have informal helpers other than the spouse than to rely solely on their spouses. As more than 90% of married Black and White elders only had informal IADL caregivers, this difference is noteworthy. Our finding is consistent with portrayals of Black families having a communal rather than individualistic orientation to caregiving responsibilities (Dilworth-Anderson et al. 1999). It is also congruent with evidence that Black families are more likely than White Americans to endorse the sharing of caregiving responsibilities (Dilworth-Anderson and Burton 1999; Lee, Peek, and Coward 1998; Stommel et al. 1998). Yet, Stoller and Cutler's (1992) multivariate study of a representative sample of married elders did not find a racial difference in sole reliance on the spouse. This inconsistency with our finding may be related to the limitation of that study's sample to married couples living in two-person households and the lack of control for spousal impairment. We found no indication, however, that married Mexican Americans were more likely to have communal informal networks than were comparable White elders. Further study of Mexican American networks is warranted given descriptions of Mexican American familism as involving a collectivist orientation (Aranda

and Knight 1997) and the possibility that the sample size of Mexican Americans in the present study was insufficient to detect a difference.

The hierarchical compensatory and task-specific models help us understand these findings about married elders' informal caregiver networks. Both perspectives predict high reliance on the spouse. The hierarchical model assumes spouses are the most preferred helpers and, when available, the spouse is likely to provide all the needed care. The task-specific model proposes that the structures of marital dyads and of tasks related to functional limitations are highly likely to match. Consistent with both models, solo spousal IADL caregiver networks were most prevalent for White and Black elders. The finding that sole reliance on the spouse was more common for White than Black elders (77.7% vs. 55.4%), a difference sustained in the multivariate analyses for elders whose networks consisted entirely of informal helpers, appears more consistent with the task-specific model. This model recognizes that characteristics of informal groups besides the marital dyad may match the structure of some tasks. It also acknowledges racial/ethnic variations in informal group structures that could affect the likelihood of this match.

We view the present findings about the use of formal IADL caregivers by Mexican American elders with considerable caution because they are based on small samples. Nevertheless, noting them seems useful, as little is known about this growing segment of our elderly population. Unlike prior research, the findings stem from multivariate analyses that considered relevant variables and are based on respondents from a representative sample of Americans. The significant differences showed a greater likelihood of inclusion of formal helpers in the networks of Mexican American elders than of comparable White or Black elders. These unexpected findings clearly need replication. Such work would benefit from Dilworth-Anderson's and Burton's (1999) recommendation for a more detailed analysis of the similarities and differences in the sociocultural context of various minority groups. For example, it is often assumed that Mexican and Black Americans face similar discrimination in the health and social service systems (Lubben and Becerra 1987; Wallace et al. 1995). Yet, recent evidence indicates that Black Americans are more likely than are Hispanic Americans to hold strong beliefs about racial discrimination in the health care system (La Veist, Chamberlain, and Jarrett 2000) and to experience stress due to racial bias (Williams 2000). It is

also possible that Mexican American families absorb paid personal care workers into their family systems in different ways than other families do (Aranda and Knight 1997).

Our findings also indicate that health and financial resources typically had stronger relative net impacts on network composition than did race/ethnicity. Health resources fostered sole reliance on the spouse. Spouses without IADL limitations were much more likely to be solo caregivers than were spouses with such limitations. The spouse's ADL limitations and the number of the elder's IADL and ADL limitations had similar, though smaller, effects. We view these findings as consistent with the task-specific model. These are situations where the health resources of the spouse are likely to match the task needs of the care recipient, either because the spouse has the functional abilities needed to provide care or the care recipient has a level of functional limitations that requires limited energy or skills from the spouse. Personal and governmental financial resources fostered the inclusion of formal helpers in caregiver networks. We found these effects despite controls for availability of informal helpers, suggesting that the generally low use of formal helpers does not simply reflect a hierarchy of preferences but also the inaccessibility of formal services. Racial/ethnic differences in health and financial resources are part of the sociocultural context for caregiving. This indicates the importance of considering the functional health of the marital pair in research on racial/ethnic variations in spousal caregiving and the health and financial resources of married and unmarried elders in studies of reliance on formal caregivers.

Despite the usefulness of these findings, we recognize several limitations in the study. Beyond the need to replicate the findings concerning the Mexican American elders due to their very small sample size, the size of the sample of married Black elders may have limited the statistical power of racial comparisons. These numbers also limited the kinds of variations in the composition of informal networks we could study and precluded analyses of possible differences in the types of formal helpers used for specific IADL tasks. Limitations in the interview questions prevented us from investigating racial/ethnic differences in networks used for specific IADL tasks or those among elders who had IADL difficulties but received no help or received help less than weekly. We were unable to determine if there were differences in the impact of race/ethnicity, or other factors, on IADL and

ADL networks because the available sample of elders receiving ADL help was too small.

Nonetheless, this study advances knowledge about community-based networks that assist minority and White elders with IADL difficulties and suggests significant directions for practitioners and policy makers. Findings indicate that informal caregiver networks of married Black elders are more likely to include informal helpers other than the spouse than are those of comparable White elders. This suggests practitioners may be able to involve a greater range of supporters to assist married Black than White elders. Health of both the focal elder and his or her spouse influenced network composition, indicating that the health of both members of elderly couples is important to consider when practitioners assess the need for additional informal or formal help and policy makers set program eligibility criteria. The data also show that minority elders are at least as willing as comparable White elders are to rely on formal help, suggesting practitioners should not hesitate to refer minority elders to formal help resources.

NOTES

1. There would have been 244 married and 326 unmarried cases with data on activities of daily living (ADL) networks, using the same selection criteria noted in the Sample section. These married cases included 183 White, 42 Black, and 19 Mexican American elders; the unmarried numbers were 238, 72, and 16, respectively.

2. This resulted in the loss of approximately 6% of otherwise eligible married elders and 10% of the unmarried subgroup. Logistic regressions (not shown) were run to see if there were racial/ethnic differences in the probability of elimination for this reason, controlling all other variables (described in the Independent Variables section). The one significant difference showed that unmarried Black elders were more likely than comparable White elders to be eliminated due to receiving help less than weekly ($p = .001$).

3. In 52 couples, both partners met all inclusion criteria and were both included in the sample of 531 married respondents. The Analytic Strategy section describes how appropriate standard errors were obtained, given this clustering within households.

REFERENCES

- Angel, Ronald J. and Jacqueline L. Angel. 1997. *Who Will Care for Us? Aging and Long Term Care in Multicultural America*. New York: New York University Press.

- Aranda, Maria P. and Bob G. Knight. 1997. "The Influence of Ethnicity and Culture on the Caregiver Stress and Coping Process: A Sociocultural Review and Analysis." *The Gerontologist* 37:342-54.
- Burton, Lynda C., Bozena Zdaniuk, Richard Schulz, Sharon Jackson, and Calvin Hirsch. 2003. Transitions in spousal caregivers. *The Gerontologist* 43:230-41.
- Cantor, Marjorie H. 1979a. "The Informal Support System of New York's Inner City Elderly: Is Ethnicity a Factor?" Pp. 153-74 in *Ethnicity and Aging*, edited by D. E. Gelfand and A. J. Kutzik. New York: Springer.
- . 1979b. "Neighbors and Friends: An Overlooked Resource in the Informal Support System." *Research on Aging* 1:434-63.
- Cantor, Marjorie H. and Mark Brennan. 2000. *Social Care of the Elderly: The Effects of Ethnicity, Class, and Culture*. New York: Springer.
- Cantor, Marjorie H., Mark Brennan, and Anthony Sainz. 1994. "The Importance of Ethnicity in the Social Support Systems of Older New Yorkers: A Longitudinal Perspective (1970-1990)." *Journal of Gerontological Social Work* 22:95-128.
- Dilworth-Anderson, Peggye and Linda Burton. 1999. "Critical Issues in Understanding Family Support and Older Minorities." Pp. 93-105 in *Full Color Aging*, edited by T. P. Miles. Washington, DC: Gerontological Society of America.
- Dilworth-Anderson, Peggye, Sharon Williams, and Theresa Cooper. 1999. "Family Caregiving to Elderly African Americans: Caregiver Types and Structures." *Journals of Gerontology: Social Sciences* 54B:S237-S241.
- George, Linda K. and Gerda G. Fillenbaum. 1985. "OARS Methodology: A Decade of Experience in Geriatric Assessment." *Journal of the American Geriatric Society* 33:607-15.
- Katz, Steven J., Mohammed Kabeto, and Kenneth M. Langa. 2000. "Gender Disparities in the Receipt of Home Care for Elderly People With Disability in the United States." *Journal of the American Medical Association* 284:3022-27.
- Kemper, Peter. 1992. "The Use of Formal and Informal Home Care by the Disabled Elderly." *Health Services Research* 27:421-51.
- La Veist, Thomas A., Diala Chamberlain, and Nicole C. Jarrett. 2000. "Social Status and Perceived Discrimination: Who Experiences Discrimination in the Health Care System, How and Why? Pp. 194-208 in *Minority Health in America*, edited by C. J. R. Hogue, M. A. Hargraves, and K. S. Collins. Baltimore, MD: Johns Hopkins University Press.
- Lee, Gary R., Chuck W. Peek, and Raymond T. Coward. 1998. "Race Differences in Filial Responsibility Expectations Among Older Parents." *Journal of Marriage and the Family* 60:404-12.
- Litwak, Eugene. 1985. *Helping the Elderly: The Complementary Roles of Informal Networks and Formal Systems*. New York: Guilford.
- Lo Sasso, Anthony T. and Richard Johnson. 2002. "Does Informal Care From Adult Children Reduce Nursing Home Admissions for the Elderly?" *Inquiry* 39:279-97.
- Lubben, James E. and Rosina M. Becerra. 1987. "Social Support Among Black, Mexican, and Chinese Elderly." Pp. 130-44 in *Ethnic Dimensions of Aging*, edited by D. E. Gelfand and C. M. Barresi. New York: Springer.
- Messeri, Peter, Merrill Silverstein, and Eugene Litwak. 1993. "Choosing Optimal Support Groups: A Review and Reformulation." *Journal of Health and Social Behavior* 34:122-37.
- Miller, Baila, Richard T. Campbell, Lucille Davis, Sylvia Furner, Aida Giachello, Thomas Prohaska, Julie E. Kaufman, Min Li, and Carmen Perez. 1996. "Minority Use of Community Long-Term Care Services: A Comparative Analysis." *Journals of Gerontology: Social Sciences* 51B:S70-S81.
- Mui, Ada C., Namkee G. Choi, and Abraham Monk. 1998. *Long-Term Care and Ethnicity*. Westport, CT: Greenwood.

- Mutchler, Jan E. and Susan Bullers. 1994. "Gender Differences in Formal Care Use in Later Life." *Research on Aging* 16:235-50.
- Netzer, Julie K., Raymond T. Coward, Chuck W. Peek, John C. Henretta, R. Paul Duncan, and Molly C. Dougherty. 1997. "Race and Residence Differences in the Use of Formal Services by Older Adults." *Research on Aging* 19:300-32.
- Norgard, Theresa M. and Willard L. Rodgers. 1997. "Patterns of In-Home Care Among Elderly Black and White Americans." *Journals of Gerontology Series B* 52B (Special Issue): 93-101.
- Peek, M. Kristen, Raymond T. Coward, and Chuck W. Peek. 2000. "Race, Aging, and Care: Can Differences in Family and Household Structure Account for Race Variations in Informal Care?" *Research on Aging* 22:117-42.
- Pezzin, Liliana E. E. and Barbara S. Schone. 1999. "Parental Marital Disruption and Intergenerational Transfers: An Analysis of Lone Elderly Parents and Their Children." *Demography* 36:287-97.
- Piercy, Kathleen W. 1998. "Theorizing About Family Caregiving: The Role of Responsibility." *Journal of Marriage and the Family* 60:109-18.
- Pyke, Karen D. and Vern L. Bengtson. 1996. "Caring More or Less: Individualistic and Collectivistic Systems of Family Eldercare." *Journal of Marriage and the Family* 58:379-92.
- Selvin, Steve. 1996. *Statistical Analysis of Epidemiologic Data*. New York: Oxford University Press.
- Shanas, Ethel. 1979. "The Family as a Social Support System in Old Age." *The Gerontologist* 19:169-74.
- Soldo, Beth J., Michael D. Hurd, Willard L. Rodgers, and Robert B. Wallace. 1997. "Asset and Health Dynamics Among the Oldest Old: An Overview of the AHEAD Study." *Journals of Gerontology, Series B* 52B (Special Issue):1-20.
- Spector, William D., John A. Fleishman, Liliana E. Pezzin, and Brenda C. Spillman. 2000. *The Characteristics of Long-Term Care Users*. AHPQ Publication No. 00-0049. Rockville, MD: Agency for Health Care Research and Policy.
- StataCorp. 1999. *Statistical Software: Release 6.0*. College Station, TX: Stata Corporation.
- Stoller, Eleanor P. and Stephen J. Cutler. 1992. "The Impact of Gender on Configurations of Care Among Elderly Couples." *Research on Aging* 14:313-30.
- Stommel, Manard, Charles W. Given, and Barbara A. Given. 1998. "Racial Differences in the Division of Labor Between Primary and Secondary Caregivers." *Research on Aging* 20:199-217.
- Tennstedt, Sharon L., Bei-Hung Chang, and Melvin Delgado. 1998. "Patterns of Long-Term Care: A Comparison of Puerto Rican, African-American, and Non-Latino White Elders." *Journal of Gerontological Social Work* 30:179-99.
- Wallace, Steven P., Kevin Campbell, and Chih-Yin Lew-Ting. 1994. "Structural Barriers to the Use of Formal In-Home Services by Elderly Latinos." *Journals of Gerontology: Social Sciences* 49:S253-S263.
- Wallace, Steven P., Lene Levy-Storms, and Linda R. Ferguson. 1995. "Access to Paid In-Home Assistance Among Disabled Elderly People: Do Latinos Differ From Non-Latino Whites?" *American Journal of Public Health* 85:970-75.
- Wallace, Steven P., Lene Levy-Storms, Raynard S. Kington, and Ronald M. Andersen. 1998. "The Persistence of Race and Ethnicity in the Use of Long-Term Care." *Journals of Gerontology: Social Sciences* 53B:S104-S112.
- White-Means, Shelley I. 2000. "Racial Patterns in Disabled Elderly Persons' Use of Medical Services." *Journals of Gerontology: Social Sciences* 55B:S76-S89.
- Williams, David R. 2000. "Race, Stress, and Mental Health." Pp. 209-43 in *Minority Health in America*, edited by C. J. R. Hogue, M. A. Hargraves, and K. S. Collins. Baltimore, MD: Johns Hopkins University Press.

- Willis, Sherry L. 1995. "Everyday Problem Solving." Pp. 287-307 in *Handbook of the Psychology of Aging*, 4th ed., edited by J. E. Birren and K. W. Schaie. New York: Academic Press.
- Wolinsky, Federic D., and Robert J. Johnson. 1991. "The Use of Health Services by Older Adults." *Journals of Gerontology: Social Sciences* 46:S345-S357.

Sheila Feld is a professor emerita of social work at the University of Michigan. Her current research focuses on caregiving, role transitions, dependency, and social support among the elders.

Ruth E. Dunkle is a professor of social work and codirector of the National Institute of Aging (NIA) training program in Social Research on Applied Issues of Aging and the Hartford Foundation initiative on geriatric social work at the University of Michigan. Her research focuses on the oldest old and service delivery issues in caregiving.

Tracy Schroepfer is an assistant professor of social work at the University of Wisconsin–Madison. Her research interests include psychosocial needs of terminally ill elders and their families, interventions to address aggressive behavior displayed by individuals with Alzheimer's disease, homeless elders, and caregiver networks.