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The Gerontologist; Apr 1992; 32, 2; Research Library
pg. 203

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The Gerontologist
Vol. 32, No. 2, 203–212

The emotional strain associated with caregiving as experienced by both black (n = 117) and white (n = 464) daughter caregivers was examined from a role theory perspective. Black daughters reported less role strain overall. Conflict between caregiving duties and the caregivers' personal and social life was a predictor for both groups. For black women the unique predictors were: poor perceived health, unavailability of respite support, and lower caregiving role demand. For white women poor quality of parent-daughter relationship and work conflict were the unique predictors.

Key Words: African-American women, Role strain, Role conflict, Role demand overload

Caregiver Strain Among Black and White Daughter Caregivers: A Role Theory Perspective[1]

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Family caregiving to the elderly is one of today's and the future's most important social issues. Because of the growing number of elderly people in the population and their increasing longevity there will be higher demands for long-term care than ever before (Cantor, 1991). The availability of adult children and other informal helpers to provide long-term community care to their elderly relatives is a critical factor in preventing or postponing institutionalization (Horowitz, 1985a; Morycz et al., 1987). But caring for impaired elderly persons in the community is stressful, and caregivers often experience emotional, physical, financial, and social consequences (e.g., Brody, 1985; Cantor, 1983; George & Gwyther, 1986; Robinson, 1983). While caregivers do not always alter their behavior as a consequence of these stresses, the accumulated strain can affect the caregivers' capacity to provide care and can thereby jeopardize the impaired elders' ability to live in the community (Toseland & Rossiter, 1989). It is, therefore, extremely important to understand the needs and concerns of these informal caregivers so that relevant policies and effective interventions can be identified.

Most caregiver research to date has examined a heterogeneous caregiver population (see Horowitz, 1985a, for a review); although some studies have focused on gender and relationship issues (Horowitz, 1985b; Stoller, 1983; Young & Kahana, 1989), racial differences in the caregiving experience have not been examined systematically. In addition, most studies on family caregiving have been exploratory and atheoretical. In contrast, this study used a role theory perspective to examine the emotional strain of both black and white women who provided primary care to their elderly parents. The following research questions were examined: 1. Does the emotional strain associated with the caregiving role differ between black and white daughter caregivers? 2. If so, what are the salient predictors of strain for the two racial groups?

The Impact of Caregiving on Women

Studies indicate that the most pervasive consequence of caregiving is the emotional strain placed on the caregivers (Archbold, 1983; Cantor, 1983; Horowitz, 1985b; Young & Kahana, 1989). Providing care to an elderly parent can restrict the personal life, social life, employment, and vocational opportunities of the caregiver. These restrictions, together with the overall emotional, physical, and financial impact of caregiving, can create a very stressful environment for the caregiver (Brody, 1981, 1985). The emotional strain in particular seems to be felt most acutely by daughter caregivers (Horowitz, 1985b; Morycz et al., 1987; Stoller, 1983; Young & Kahana, 1989). Sons tend to have less strain associated with the caregiving role. This seems reasonable since caregiver strain is often associated with the resources available, and men have been more likely to receive social support (Horowitz, 1985b). Studies also suggest that while the spouses of male caregivers were often involved in providing care to their husbands' parents, the daughters providing care to

[1]An earlier version of this paper was presented at the Annual Scientific Meeting of the Gerontological Society of America, Boston, November 1990. The author would like to thank the Inter-University Consortium for Political and Social Research for making the data available. The opinions expressed in this paper are those of the author and should not be attributed to the Consortium or the U.S. Department of Health and Human Services. The author is grateful to Linda Lopresto, Nancy Morrow-Howell, Abraham Monk, Enola K. Proctor, Martha Storandt, and Joanne E. Turnbull for valuable comments on earlier drafts of the manuscript.

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their own parents frequently attempted to minimize the involvement of their husbands in the caregiving process (Horowitz, 1985b; Stoller, 1983). In addition, it may be that men more often distance themselves emotionally from the caregiving process, possibly because their male identity is less tied to success in the nurturing role.

Barnett and Baruch (1985) studied middle-aged women's involvement in multiple roles and the relationship of role demand overload, role conflict, and anxiety. They found that the number of roles a woman occupies is significantly related to both role demand overload and role conflict. Female caregivers with competing obligations and responsibilities struggle with setting priorities and deciding how to divide their time, energy, and financial resources between their older parents and their families. Furthermore, studies indicate that employed women who face these competing demands do not lessen the extent of parent care; rather they tend to sacrifice leisure activities in order to take on the additional burden (Brody & Schoonover, 1986; Horowitz, 1985b).

Theoretical Framework

The scarcity hypothesis of role theory, which includes the concepts of role strain, role demand overload, and role conflict, provides a useful framework to conceptualize the experience of middle-aged women who, along with many other role demands, care for frail elderly parents. According to the scarcity hypothesis, people do not have enough time or resources to adequately fulfill their multiple role obligations. Therefore, multiple role commitments produce a strong tendency toward role strain as a consequence of role demand overload and role conflict (Goode, 1960).

As prescribed by societal and cultural norms, a middle-aged woman typically has a variety of parental, marital, vocational, and/or social obligations in addition to caregiving responsibilities (Scharlach, 1987). When the demands of these other social roles conflict with her caregiving duties, a woman is likely to experience a sense of role strain, defined as felt difficulty in the fulfillment of caregiving role obligations (Goode, 1960). One of the sources of role strain is role demand overload, which refers to the lack of sufficient time, energy, and personal resources to fulfill the responsibilities of all the roles that a person enacts (Wallace & Noelker, 1984). Role demand overload may result for a middle-aged woman who serves as the primary caregiver for an elderly parent while juggling her other roles as parent, spouse, employee, and/or grandparent. Another source of role strain is role conflict, which refers to incompatibilities of role expectations (Wallace & Noelker, 1984). In the caregiving context, a woman may need to deal with conflicting expectations from her elderly parent, spouse, children, and employer. Furthermore, a woman is likely to experience role conflict if her expectations for her performance in all of her roles is extremely high.

In the literature, the emotional cost of caregiving has been conceptualized as caregiver burden (Morycz et al., 1987; Zarit, Reever, & Bach-Peterson, 1980), caregiver strain (Cantor, 1983; Morycz, 1985; Scharlach & Boyd, 1989), and caregiver stress (Lieberman & Kramer, 1991; Stephens, Kinney, & Ogrrocki, 1991); but for the purpose of this study role theory terms will be used, and the perceived emotional strain in the fulfillment of caregiver role obligations will be conceptualized as role strain.

Racial Differences in Family Caregiving

Research on black and on white families in general indicates that kinship ties among blacks, as indicated by joint residency, visiting, and the exchange of mutual aid among kin, are stronger than they are for whites (Hays & Mindel, 1973). The black extended family system is highly integrated and serves as an important resource for survival and social mobility for its members (McAdoo, 1978; Scanzoni, 1977; Stack, 1974). Blacks of all ages are more likely than whites to live in an extended family household (Allen, 1979; Angel & Tienda, 1982; Hofferth, 1984).

Compared to whites, blacks have also demonstrated greater reliance on family than on formal care and had lower formal service utilization (Mindel & Wright, 1982). Other studies have found that blacks are more likely than whites to regard elderly persons with respect, and blacks are more likely than whites to feel that children should help their older parents (Mutran, 1985; Wylie, 1971). Reciprocal obligations of help from kin are more salient among blacks (Mutran, 1985). Furthermore, black women may be better able to cope with psychological distress (Gibson, 1982) because they may have to learn to cope with more trying circumstances in their lives (Rodgers-Rose, 1980; Spurlock, 1984).

The small amount of available empirical evidence (Morycz et al., 1987) suggests that while there are no racial differences in the amount of caregiver burden experienced, the predictors of burden for black and white caregivers are different. However, Morycz and colleagues' research was a cross-sectional study based on a purposive sample drawn from a community-based geriatric assessment center in Pittsburgh. The subjects were Alzheimer's disease patients and their primary caregivers. The generalizability of this study is limited because it was not a random or representative sample of Alzheimer's disease patients. Still, it seemed reasonable to hypothesize that the sources of caregiver role strain are different for the two racial groups because of the differences in filial norms, values, role expectations, extended family support, and patterns of formal service utilization.

Methods

Sample and Data Sources

Data were obtained from the National Long-Term Care Channeling Demonstration, 1982–1984. Channeling was a national experiment, initiated by the

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U.S. Department of Health and Human Services, to test whether an expanded, publicly financed home care program would help to reduce long-term care costs in terms of nursing home expenditures and would improve the well-being of frail elderly persons and their families. Channeling was implemented in 10 communities through case management agencies (Phillips et al., 1986). The target population was frail elderly people who were at risk of institutionalization, defined as those who had severe impairment in activities of daily living (ADLs) and/or instrumental activities of daily living (IADLs), were unable to care for themselves without the help of others over an extended period of time, and had multiple unmet service needs or a fragile informal support system (Phillips et al., 1986). Elderly persons were referred by service providers or family members to each channeling program.

Overall, 5,626 elderly persons completed the baseline interviews with a response rate of 88.9% (Phillips et al., 1986). Individuals who were identified by the elders as their primary informal caregiver — the family member or friend who provided the greatest amount of unpaid assistance to the elderly person in terms of taking care of him or her, attending to his or her affairs, or performing chores around the house (Stephens & Christianson, 1986) — were also surveyed. Due to budget constraints, only the primary caregivers of the elderly sample members who entered the demonstration program between November 1982 and May 1983 were included (Phillips et al., 1986). These 1,940 primary caregivers completed the baseline interviews with a response rate of 77.5% (Phillips et al., 1986). Of this sample, 604 (31.3%) were daughters of elderly persons; only those who reported being in either the black or white racial group were studied. Of the 581 daughter caregivers in this present study, 20% were black and 80% were white (none were of Hispanic origin). The original data were collected through both baseline and follow-up interviews, but for the purpose of this study, only the baseline (preintervention) data of the daughter caregivers and their elderly parents were analyzed. The sample was not a random sample of the elderly population, although the participants included a broad range of frail elderly individuals and their caregivers.

Measures

The dependent variable — caregiver role strain — was measured by asking the primary caregiver to rate the amount of emotional strain or stress that caring for the elderly person placed on her using a 5-point scale where 1 meant she experienced little or no emotional strain and 5 meant a great deal of emotional strain. Role strain was operationalized as a unidimensional concept and contained a measure of overall emotional strain. The global measure of emotional strain has been shown to correlate positively with an established 14-item family strain scale (reliability coefficient = .77) (Morycz, 1985). The global rating of emotional strain as well as the 14-item family strain scale have been used in other studies (Cantor, 1983; Morycz, 1985; Sainsbury & Grad de Alarcon, 1970; Scharlach & Boyd, 1989).

Using role theory, four sets of predictor variables — role demand overload variables, role conflict variables, resources variables, and parent impairment/caregiver sociodemographic variables — were identified and hypothesized to be associated with the caregiver role strain experienced by the primary caregivers of frail elderly persons. Parent impairment characteristics, caregiver demographic characteristics, and the availability of social resources were control variables. These variables were included because they were identified to be important determinants of caregiver strain in other studies (e.g., Bromberg, 1983; Cantor, 1983; Deimling & Bass, 1986; Poulshock & Deimling, 1984; Pratt et al., 1985).

Role demand overload was operationally defined by six items: (a) average number of caregiving days per week; (b) average number of hours per day spent in fulfilling caregiving responsibilities; (c) total number of ADL and IADL tasks the caregivers provided for the elderly parent; (d) duration of the caregiving; (e) total number of other social roles (including being married, being the mother of children under 15, and being the caregiver of another chronically impaired person); and (f) the number of working hours per week. These measures quantitatively indicate the extent to which a daughter caregiver was involved in multiple roles.

In order to summarize the data and to avoid the problem of multicollinearity, a principal components analysis with varimax rotation was performed to create a role demand overload composite score. This method is appropriate because it can extract components that can account for the most variance possible (Cohen & Cohen, 1983). Three components were identified. Component I included number of caregiving days per week, number of caregiving hours per day, and total number of ADL and IADL tasks provided. Conceptually, this component represents the specific demand of the caregiving role. Component II included number of other social roles and number of working hours per week. Conceptually, this component reflects other competing role demands of the caregiver. Component III was caregiving duration, a dimension of role demand that represents the tenure of the caregiving role.

Because items were measured with different scales, the items were transformed to *T* scores ($M = 50$, $SD = 10$). Composite scores were formed for component I (three items) and component II (two items) by adding the appropriate *T* scores. Alpha coefficients for the caregiving role demand (I) and competing role demand (II) composite scores for the total sample were .81 and .56, respectively. The magnitude of alpha coefficient for the second composite was relatively low because there were only two items in this scale. As Nunnally (1978) notes, the reliability of a scale is a function of the number of items in that scale, other things being equal. The estimated reliability was examined under the assumption that two or more items such as time commitment to the parental role and to other long-term caregiving respon-

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sibilities could be added to the scale. The alpha coefficient of the competing demand composite measure with four items or six items would, hypothetically, be .72 and .80, respectively. In the subsequent multiple regression analyses, the original two items were entered into the regression, with results similar to those of the analysis that tested the competing demand composite. Duration of caregiving (III) was treated as an independent measure representing the tenure of caregiving.

Role conflict was operationally defined by six items: caregiving effects on other relationships, limits on time with family, limits on personal privacy, limits on social life, perceived time conflict in caring for elderly parent, and work conflict. Work conflict was defined as being present when a daughter caregiver turned down a job, refused a more demanding job, decreased working hours, or was unable to look for work when desired. The primary caregivers were asked to rate their perceptions in these areas on a 3-point scale: not a problem (1), a problem but not serious (2), and a serious problem (3). Principal components analysis with varimax rotation of the six measures of role conflict revealed two components. Component I contained the first five items and represented perceived conflict between caregiving and the caregiver's personal and social life. The raw scores of the five items were summed to create a composite score (alpha coefficient = .83). Only work conflict, another dimension of competing demands, loaded on component II. It was treated as a separate independent variable. Zero-order correlations between role demand overload, role conflict, and other predictor measures ranged from .09 to .32, indicating that multicollinearity was not a problem.

Resources of the daughter caregiver were defined as both internal and external (nonmaterial) resources available to her. Because the resources available may moderate the effect of role overload and role conflict on caregiver role strain, the effect of role overload and role conflict were assessed after the effect of resources was taken into account. Indicators of internal resources included the perceived health status of the caregiver herself and the quality of the parent-daughter relationship. Perceived health status was rated by the daughter caregivers on a 4-point scale ranging from excellent health (1) to poor health (4). The daughters rated the quality of the relationship with their parents on a 3-point scale ranging from very good (1) to not very good (3). External resources refer to the availability of respite support and the number of informal secondary helpers. The availability of respite was measured by the question: "If you were unable to help the elderly person, is there someone (including all friends, family members, and paid workers) who would do the things that you do?" The number of secondary informal helpers available, defined as those who provided intermittent help to the elder, as reported by the primary caregivers ranged from 0 to 4.

The level of ADL impairment and the total number of behavioral problems manifested by the elderly parent were included in the analysis in order to control for their effects, if any, on the caregiver role strain score. The level of ADL impairment was measured by five ADL items: eating, bathing, dressing, toileting, and getting out of bed or a chair. The measure of behavioral problems of the elderly person was a number count, from the caregivers' perspective, of such problems as embarrassment, forgetting/confusion, and yelling. This variable was used instead of the cognitive impairment variable in the multivariate analysis because of problems of multicollinearity. The age and income of the caregiver were also included in the analyses so that the effect of role overload, role conflict, and race could be assessed after the effects of parent impairment and caregiver sociodemographic variables were taken into account in the multiple regression analyses. The race of the caregiver was dummy coded with 1 denoting white and 0 denoting black.

Analyses

Hierarchical regression analyses were used to find the determinants of caregiver role strain. Two models were tested: (a) a simple additive model, in which role demand overload variables and role conflict variables would have an additive effect on caregiver role strain; and (b) a model with additive and interactive effects, in which role demand overload variables and role conflict variables would have interactive effects with race. Parent impairment, caregiver sociodemographic variables (excluding race), and resource variables were entered first as controls because they are temporally prior to other sets of predictor variables (Cohen & Cohen, 1983). The role demand overload variables were entered second and the role conflict variables were entered third because, according to the scarcity hypothesis, multiple roles (measured by role demand overload variables) precede role conflict, which arises when the demands from many roles are such that adequate performance of one role jeopardizes fulfillment of other roles. The race variable was entered fourth. Thus, the effect of race was assessed after controlling for parent impairment, caregiver sociodemographic variables, resources, role demand overload, and role conflict.

The interaction terms (including race by resource variables, race by role overload variables, and race by role conflict variables) were entered last because of structural necessity (Cohen & Cohen, 1983). The appropriate test for the significance of the interaction term was the hierarchical F test for the increment to R^2. This method statistically removed the variance of predictors already in the regression equation from those yet to be entered and allowed correct interpretation of the partialled cross-product terms as interactive effects (Cohen & Cohen, 1983).

Results

As Table 1 shows, the elderly parents in this study were very old, with almost one-third 85 years of age or older. The black parents were functionally more impaired than their white counterparts, especially in

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Table 1. Demographic and Impairment Characteristics of Frail Elderly Parents of Black and White Daughters in Study of Caregiver Strain (%)[a]

Characteristic	Black (n = 117)	White (n = 464)
Age		
64 to 69 years	11.1%	8.4%
70 to 74 years	12.0	10.8
75 to 79 years	19.7	18.1
80 to 84 years	25.6	23.5
85 to 89 years	17.9	24.1
90 and over	13.7	15.1
Gender of elderly parent*		
Female	78.6	86.2
Male	21.4	13.8
Marital status*		
Currently married	8.5	15.6
Not currently married	91.5	84.4
ADL impairment[b]**		
Mild or no impairment	11.0	18.3
Moderately severe	27.4	17.7
Very severe	24.8	38.4
Extremely severe	36.8	25.6
Cognitive impairment[c]		
Mild or no impairment	34.2	45.5
Moderate	43.9	38.0
Severe	21.9	16.5
Impairment in continence*		
Incontinence	60.7	47.0

[a]The data in this table were collected from the in-person baseline assessment interview with the elderly respondents or their proxies.

[b]ADL impairment consisted of problems with eating, dressing, bathing, getting out of bed or a chair, or using the toilet. Four levels of impairment were mild or none (impaired on bathing only or no ADL impairment), moderately severe (not impaired on eating or transfer, but impaired on either toileting or dressing), very severe (not impaired on eating, but impaired on transfer), and extremely severe (impaired on eating).

[c]Measured by the Short Portable Mental Status Questionnaire (SPMSQ), a 10-item test of mental functioning. Mild impairment was indicated by 9–10 correct answers out of a possible 10, moderate impairment by 6–8 correct answers, and severe impairment by 0–5 correct answers.

$*p < .05$; $**p < .01$.

the rate of incontinence (60.7% of black parents as compared with 47.0% of the white).

Table 2 shows the sociodemographic characteristics of the caregivers. A large proportion (about 88%) of the daughter caregivers could be characterized as middle-aged (41–60 years old) or elderly people (61 and older), and almost half were employed. Black caregivers on the whole had less income with 28.4% earning less than $500 per month as compared with 11.5% of the white group. The black daughters were less likely to be married (36.8% vs. 57.1%), and 56.9% reported their health as being only fair or poor as compared with only 39.1% of the white daughters. The black daughters also tended to have had less education.

Table 3 shows the means and standard deviations of the role strain variable and other predictor variables for the two racial groups. For whites, the mean role strain score was 3.89 (SD = 1.32), which was significantly higher than the black daughters' mean score of 3.51 (SD = 1.39). Although there were more similarities than differences between the two groups, it is interesting to note that while the black daughters reported less strain, the caregiving role demand for them was higher. Distribution of the role strain scores indicates that 88% of the blacks as compared with 91% of whites reported some degree of emotional strain associated with their caregiving responsibilities.

In order to test for racial differences in caregiver role strain, hierarchical multiple regression was conducted with the race variable entered last. The additive model explained 29.5% of the variance in caregiver role strain, $F(14, 481) = 14.40$, $p < .0001$. Each set of predictors, except role demand overload, made a significant incremental contribution to predicting caregiver role strain. After controlling for the effects of all other variables in the model, race added 1.3% ($p < .05$) to the variance of caregiver role strain. The slope for whites was .38 ($p < .01$) higher than for

Table 2. Characteristics by Race of Daughter Caregivers (%)[a] in Study of Caregiver Strain

Characteristic	Black (n = 117[b])	White (n = 464[c])
Age		
40 years or younger	12.0%	11.0%
41 to 50 years	23.1	20.7
51 to 60 years	38.5	34.9
61 to 70 years	20.5	28.4
71 to 80 years	5.1	4.7
Older than 80	.9	.2
Income (per month)**		
Less than $500	28.4	11.5
$500 to $999	21.1	20.6
$1000 or more	50.0	67.9
Education*		
None or elementary	15.4	11.5
Some secondary	27.4	15.8
Completed high school	31.6	43.2
Some post-high school	13.7	17.1
Completed college	6.0	7.4
Post college	6.0	5.0
Marital status**		
Currently married	36.8	57.1
Not currently married	63.2	42.9
Employment status		
Currently employed	50.4	46.6
Not currently employed	49.6	53.4
Living arrangement		
Living with elderly	62.4	52.6
Living apart	37.6	47.4
Perceived health of caregiver**		
Excellent	15.5	17.7
Good	27.6	43.2
Fair	41.4	27.9
Poor	15.5	11.2
Has children under 15	25.6	19.6
Has other caregiving responsibility	12.8	18.4
Has respite support	30.8	27.2

[a]The data in this table were collected by either telephone interview or in-person interview with the primary caregivers.

[b]This is 25.9% of all black caregivers in the channeling caregiver sample. Other black caregivers included 20.2% spouse, 8.7% son, 2.0% daughter-in-law, 9.1% sibling, 6.4% grandchild, 10.6% other relative, and 17.1% friend.

[c]This is 32.9% of all white caregivers in the channeling caregiver sample. Other white caregivers included 23.4% spouse, 11.6% son, 5.4% daughter-in-law, 6.1% sibling, 2.6% grandchild, 7.5% other relative, and 10.5% friend.

$*p < .05$; $**p < .01$.

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Table 3. Means and Frequency Distributions of Major Variables by Race of Caregiving Daughters in Study of Caregiver Strain[a]

Variable	Black (n = 117)	White (n = 464)	
Caregiver role strain			χ^2 = 19.80***
1 (Little or none)[b]	12.0%	8.9%	
2	15.4%	6.5%	
3	22.2%	20.2%	
4	18.8%	15.4%	
5 (A great deal)	31.6%	49.0%	
	M (*SD*)	*M* (*SD*)	*t*
Caregiver role strain	3.51 (1.39)	3.89 (1.32)	−3.36***
Parent impairment and caregiver sociodemographic variables			
Impairment of ADL of parent	2.87 (1.04)	2.71 (1.04)	.14
Behavioral problems of parent	2.12 (1.26)	1.95 (1.12)	.15
Caregiver age (categories)	2.86 (1.09)	2.96 (1.07)	.38
Caregiver income (categories)	2.22 (.86)	2.56 (.69)	−3.84***
Resource variables			
Perceived health of caregiver	2.56 (.93)	2.32 (.89)	2.59**
Quality of relationship	1.36 (.55)	1.39 (.57)	−.52
Respite	.32 (.47)	.28 (.45)	−.85
Secondary help	1.27 (1.16)	1.11 (1.05)	1.51
Role demand overload variables			
Caregiving duration	2.83 (1.46)	2.77 (1.45)	.48
Caregiving role demand	155.67 (22.94)	148.57 (25.48)	2.74**
Competing demands	99.25 (16.41)	100.19 (16.76)	−.55
Role conflict variables			
Conflict in life	9.24 (3.19)	9.87 (3.23)	−1.89
Work conflict	.39 (.49)	.34 (.47)	1.09

[a]Race of caregiver: 0 = black; 1 = white.
[b]Only the two extreme values of the scales were labeled.
**$p < .01$; ***$p < .001$.

blacks, as demonstrated by the size of the coefficient for the dummy-coded race variable. This result indicates that, other things being equal, white daughter caregivers experienced significantly higher levels of emotional strain associated with the caregiving role.

In addition to analyzing differences in the levels of role strain between black and white daughter caregivers, which was reflected in the additive model, I also analyzed the interaction effects. The interaction model was significant and it explained 32.6% of the variance in caregiver role strain, F (23, 472) = 9.96, $p < .0001$. Four interaction terms (race by perceived health status of the daughter, race by respite, race by caregiving role demand, and race by the quality of the relationship between the daughter and her elderly parent) were significant ($p < .05$). Some of the independent variables were more salient for whites than for blacks and had a greater effect on the perception of caregiver role strain. Therefore, parallel regression analyses were conducted to identify predictors for the two racial groups.

Table 4 presents the results of the hierarchical regression analyses for the black and the white daughters. The model for the blacks explained 36.1% of the variance (adjusted R^2 = .269) in caregiver role strain, F (13, 89) = 3.91, $p < .0001$. For the white daughters, the model explained 29.7% of the variance (adjusted R^2 = .275) in caregiver role strain, F (13, 378) = 12.33, $p < .0001$. These findings indicate that the determinants of role strain for the black and white caregivers are different. The differences between the regression coefficients of the respective predictors were tested. All the respective slopes were different statistically at less than the .05 level. The role demand, role conflict, and resource variables influenced blacks and whites in a different manner. A lower level of caregiving role demand significantly influenced the perception of role strain among the black daughters but had no effect on the whites. On the other hand, the role conflict variables — both perceived conflict in life and work conflict — had a slightly greater impact on the sense of role strain for the whites than for the blacks, as reflected in the magnitude of the respective unstandardized regression coefficients. Further, the perception of being in poor health significantly predicted the role strain (b = .54) of the black caregivers but had no effect on whites. In addition, the perceived unavailability of respite support (b = −.72) had a very strong impact on the role strain of blacks but had no influence on whites. Among whites, a poor quality daughter-parent relationship (b = .29) significantly related to their sense of role strain, while the quality of the parent-daughter relationship had no effect on the perception of role strain for the black caregivers. Among the control variables, parent impairment and caregiver demographic characteristics had no effect on the perceived role strain of either racial group.

Discussion

The present study addresses the issue of racial differences in family caregiving and whether these differences stem from cultural factors. The differential rate and different correlates of role strain identified between the black and the white daughter care-

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Table 4. Role Strain Models for the Black and White Daughter Caregivers in Study of Caregiver Strain

Predictor variable	Regression coefficients	
	Black	White
Parent impairment and caregiver sociodemographic variables		
Impairment of ADL of parent	−.09 (.14) −.07	.07 (.06) .06
Behavioral problems of parent	.15 (.11) .13	.08 (.06) .07
Caregiver age	.12 (.13) .09	.06 (.06) .05
Caregiver income	.03 (.16) .02	.17 (.09) .09
Resources variables		
Perceived health of caregiver	.54 (.15)*** .35	.06 (.07) .05
Quality of relationship	−.27 (.26) −.10	.29 (.11)** .12
Respite	−.72 (.29)** −.24	−.01 (.13) −.00
Secondary help	.13 (.12) .12	.02 (.05) −.01
Role demand overload variables		
Caregiver duration	.05 (.08) .05	−.01 (.04) −.01
Caregiving role demand	−.01 (.01)* −.19	−.00 (.00) −.05
Competing demands	.00 (.01) .04	−.00 (.00) −.01
Role conflict variables		
Conflict in life	.12 (.05)** .28	.17 (.02)**** .42
Work conflict	.26 (.27) .09	.34 (.12)** .13
Intercept	2.12 (1.47)	1.12 (.72)
N	103	392
R^2	.361	.297
Adjusted R^2	.269	.273

Note: Unstandardized coefficients are shown on the first line for each variable, standardized on the second line. Standard errors are in parentheses.
$^*p < .05$; $^{**}p < .01$; $^{***}p < .001$; $^{****}p < .0001$.

givers in this study offer preliminary support for a cultural explanation. Due to differences in terms of filial norms, values, role expectations, extended family support, patterns of formal services use, and ways of coping, black and white daughter caregivers perceive and react to the caregiving responsibilities in different ways. The findings indicate that, controlling for income and other differences, black women reported less caregiver role strain than did white women. This may reflect differences in the way emotional strain is interpreted or expressed by the black and white caregivers, or it may reflect the differences between the black and white women in ways of coping (Gibson, 1982).

Statistically, although the mean role strain score for black daughters was significantly lower than the mean role strain score for white daughters (3.51 vs. 3.89), substantively, both black and white women were at risk of the emotional strain associated with the caregiving role. The high prevalence (about 88% for black daughters and 91% for white) of role strain among these women also indicates that caregiving is an emotionally taxing work and suggests that a sizable number of the daughters in this sample may need support to continue their parent care responsibilities.

Different factors distinguish the two racial groups and their reaction to caregiver role strain. For blacks, significant variables in predicting role strain included two resource variables — poor health and lack of respite support — and two role theory variables — caregiving role demands and conflict in life. It appears that black women are particularly vulnerable to poor health, possibly because they are more likely to be from poverty backgrounds with consequent limited access to adequate health services throughout their lives (Spurlock, 1984). In a study of racial differences in service utilization, blacks perceived more restriction in access to formal services due to discriminatory practices in the system than did the white group (Mindel & Wright, 1982). The poor health status of black women appears to be a reflection of services needed (Mindel & Wright, 1982). For black caregivers, the association between higher levels of role strain and the lack of respite support may be due to their perception of formal care as unavailable. Under these circumstances, it makes sense that black caregivers who reported poor health and lack of respite were at risk of the emotional strain associated with caregiving.

The findings suggest that a difference between the races appears with regard to caregiving role expectations and ways of coping. Black caregivers expected themselves to do more in the caregiving role and reported more strain when caregiving role demand

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was less. Concerning role conflict variables, conflict between caregiving duties and the daughters' personal and social lives was a common predictor of strain for both groups except that it had less impact on the black daughters than on the white ones. Black women may have more adaptive skills in coping with the interference between caregiving and their personal and social life than their white counterparts. Both black and white women may benefit from cognitive counseling to deal with the unique issues and concerns associated with the caregiving role.

The data also suggest racial differences in filial norms and work values. White daughters reported more strain when the quality of the parent-daughter relationship was poor, and this is consistent with evidence in the literature (Horowitz & Shindelman, 1983; Scharlach, 1987; Scharlach & Boyd, 1989). It may be that problematic parent-daughter relationships make the necessary and frequent interaction required in caregiving more difficult emotionally. However, the quality of the daughter-parent relationship was not an issue for the black daughters. It may be that they have stronger filial obligations that motivate them to do what they feel they should do regardless of the quality of their relationship with the parent. They may also be less inclined to be aware of or to admit relationship problems since they have a stronger respect for elderly parents (Morycz et al., 1987). Work conflict was difficult for white women as they experienced pressure from two conflicting values — the traditional value of a caring role versus the newer value of a work role (Brody, 1981). The interference between elder care and work responsibilities could reflect a woman's struggle in setting life priorities. Black women, on the other hand, may be better able to handle these simultaneous roles because they have had a much longer history of labor force participation and have traditionally been expected to both work and provide for their families (Beckett & Smith, 1981).

Although parent impairment and caregiver demographic characteristics were included in the model, none of them emerged as significant influences on role strain for either racial group. This lack of relationship between an elderly person's characteristics and caregiver strain is consistent with some previous studies (e.g., Cantor, 1983; George & Gwyther, 1986). Perhaps it is the meaning of the caregiving role and the resources available to the caregiver, rather than the condition of the elderly person, that most directly affects caregiver emotional well-being.

It is difficult to determine whether racial differences result from socioeconomic or cultural factors. The results of this study do not, however, seem to support a socioeconomic explanation because the income of the caregiver was controlled. Cultural explanations for the findings of this study must be accepted with caution, and should not be inferred on the basis of residual variance explained by race; rather they should be investigated further and substantiated by evidence that cultural value/belief differences themselves actually differed between racial groups (Mutran, 1985).

There are limitations to this study. The interpretation of the results is limited by its cross-sectional nature. Longitudinal studies are needed to determine the direction of the relationships between variables and how the caregiving role changes over time. Also, because this study is a secondary data analysis, I was not able to look at qualitative variables such as values and beliefs that were not measured in the original study. As a consequence, completely accurate cultural explanations of the findings are not possible.

In addition, the study was based on a voluntary, nonrandom sample of people who were referred to channeling by family members or other service providers for assistance; thus, the results may be subject to self-selection biases. The members of both racial groups, although not specificially identified as such in the channeling study, represent a variety of ethnic heritages as well as urban and rural backgrounds. Furthermore, it is possible that differential selection by race into the channeling sample may also bias the results. While the study may not be appropriate to generalize to the nation's elderly population as a whole, it is possible to generalize to the frail elderly population who are most at risk of institutionalization and their primary caregivers. In fact, these findings may be more relevant for policy formulation than would be information from a more representative but less impaired group (Stephens & Christianson, 1986).

Other possible limitations to this study center on measurement issues. First, the dependent variable, role strain, was operationalized as a unidimensional concept. Although it is clear that a multiple dimensions scale is more desirable than a gross measure (Horowitz, 1985a; Nunnally, 1978), the utilized measure does convey specifically the emotional aspect of the impact of caregiving on the caregivers. Second, the competing demands variable, one of the role demand overload factors, was measured only quantitatively in terms of total numbers of other social roles and working hours. Research has supported the importance of qualitative measures such as the privileges and obligations of each role in explaining the psychological well-being of women (Barnett & Baruch, 1985). Thus, measuring of competing demands quantitatively may account for their lack of effect on role strain for either racial group. Third, the size of the secondary helping network was statistically independent of role strain for both groups. Like the competing demands variable, this variable was a quantitative measure and did not provide information concerning the caregivers' subjective evaluation of the quality of the secondary helpers. Research suggests that the effects of support may depend much more on its perceived quality than on its quantity (Borden, 1991; Wethington & Kessler, 1986). And finally, as in all studies that examine self-reported traits rather than observed ones, it is possible that the racial differences are in the interpretation of role strain rather than differences in the strain actually felt by each race.

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Implications

The findings hold a number of important implications for research, policy, and practice. The conceptual framework of role theory is useful in examining the impact of caregiving on middle-aged women shouldering caregiving as well as other personal and social responsibilities. The identification of the specific relationships between role strain, role demand overload, role conflict, and resources clarifies basic theoretical premises. Further research is needed to understand the contributions of such qualitative variables as filial norms, family values, caregiving role satisfaction, and coping strategies in predicting caregiver role strain. Research should also continue to examine the effect of race, gender, ethnicity, culture, and class on patterns of use of informal supports and formal services; the factors associated with service utilization for different racial or ethnic groups; and predictors of institutionalization for elders of different ethnic or cultural backgrounds. These important policy issues continue to deserve priority attention (Cantor, 1991).

The findings also point to a need for comprehensive long-term care policies and programs to support the caregiving women who provide the bulk of care to frail elders in the community. Caregivers are likely to seek institutionalization in response to high levels of emotional strain (Lieberman & Kramer, 1991; Morycz, 1985). Multifaceted long-term care programs are needed to provide adequate, available, accessible, affordable, and culturally sensitive programs to meet the special needs of elderly people and their caregivers of different racial groups. Given the fact that the blacks had lower utilization of formal services than whites (Mindel & Wright, 1982), long-term community-based services (such as day care, home care, respite, and counseling) should be made accessible to caregivers through outreach programs. This is especially critical for black women who are vulnerable because of poorer health as well as women of both races who experience conflict between work and caregiving responsibilities.

The different correlates of role strain for black and white daughter caregivers provide new insight into the design of culturally appropriate caregiver interventions. Counseling could center on the effects that competing roles and obligations have on a woman's emotional well-being with a special emphasis on role expectations, daughter-parent relationship, and how to cope with conflict between caregiving duties and work or other aspects of a woman's life. These needs and concerns in particular should be incorporated into programs as the racial make-up of the group would indicate the need. The findings also point to important implications for the training of providers of formal services. In order to equip these helping professionals to provide quality and culturally appropriate interventions to the caregivers, programs must be designed to train care providers to identify, understand, and appreciate the special needs of each different caregiver group.

Furthermore, both public policymakers and corporate sector officials have to be aware of the special situation of employed caregivers who may need to quit their jobs or reduce working hours in order to fulfill caregiving responsibilities. It is imperative to enact an elder care policy that would provide employed caregivers, regardless of gender, with family illness leave, flexible working schedule options, respite care, and adult day care services, as well as information and referral for related needed services. Such a policy may serve as an incentive and would make it feasible for more men to take on caregiving responsibilities.

Social trends such as the demographic explosion of the aging population and women's increasing labor-force participation are bound to increase elders' demands for care while reducing the ability of the informal family system to provide such care. At present, the informal family support remains the major and most important resource of the impaired elderly. By providing comprehensive community services to effectively meet the special needs of informal caregivers of different racial or cultural groups, the public sector may be able to enhance the capacity of family caregivers and delay or prevent the institutionalization of frail elderly people.

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