

Given that women predominate in the caregiving role, researchers have largely focused on the experience of female caregivers. This cross-sectional study takes a beginning step toward understanding the differential predictors of negative (i.e., strain) and positive (i.e., gain) appraisals among 74 husbands caring for wives with dementia. Using a multivariate model of caregiver adaptation, results indicated that social resources and health were important for understanding the variation in both positive and negative appraisals. Unique predictors of strain included memory and behavior problems, and emotion-focused coping. Alternatively, education and problem-focused coping helped to explain variation found in appraisal of caregiver role gain. Theoretical and practical implications are discussed.

Key Words: Male caregiver, Satisfaction, Burden, Spouse caregiver

Differential Predictors of Strain and Gain Among Husbands Caring for Wives With Dementia¹

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In one of the first national estimates of informal caregivers of frail older adults, Stone, Cafferata, and Sangl (1987) reported that spouses constitute the majority of sole primary caregivers, and that overall, women tend to predominate in the caregiving role. Not surprisingly, most of the research conducted over the past two decades has focused on the experience of female caregivers. Horowitz (1985b) expressed concerns that the tremendous body of literature about elder caregiving “translates into what is known about female caregivers” (p. 614). Kaye and Applegate (1990b) maintained that the focus on female caregivers has resulted in a dearth of knowledge regarding the unique needs and experiences of male caregivers. They cogently identified the demographic, economic, political, and ideological trends that are changing the nature of family roles and responsibilities and that are likely to put increasing pressure on male caregivers. In a review of the literature on older male caregivers, Gregory, Peters, and Cameron (1990) concluded that the research-based knowledge about this unique cohort within the community is extremely limited and inadequate.

A turn toward the male caregiver, particularly husbands, is warranted for a number of reasons. Studies document that 27 to 30% of all caregivers (Cantor, 1983; Chang & White-Means, 1991) and over 36% of

spouse caregivers are male (Stone et al., 1987). Husbands are the oldest subgroup of caregivers, and they report spending the greatest number of extra hours fulfilling caregiver responsibilities (Chang & White-Means, 1991; Stone et al., 1987). Over half (i.e., 55%) of them receive no assistance from others (Stone et al., 1987). Given that more women than men are diagnosed with dementia, husbands are likely to bear increasing caregiving demands (Fitting, Rabins, Lucas & Eastham, 1986), and growing numbers of men are becoming caregivers (Kaye & Applegate, 1990b). Many older men are not used to dealing with social welfare agencies and have been socialized to have a strong sense of self reliance. As such, they are severely under-represented in interventions designed for assisting caregivers (Toseland & Rossiter, 1989). Understanding the male experience is vital to the planning of gender-relevant interventions.

What we know about the predictors of strain and gain among husbands is extremely limited. Quantitative investigations focusing exclusively on husband caregivers have not controlled for essential covariates in their analyses (Kaye & Applegate, 1990a, 1990b; Mathew, Mattocks, & Slatt, 1990), and the sample sizes have been extremely small (Mathew et al., 1990). Most of the other studies that have focused exclusively on the husband caregiver have been small qualitative investigations (Archer & MacLean, 1993; Davies, Priddy, & Tinklenberg, 1986; Harris, 1993, 1995; Motenko, 1988; Vinick, 1984). Although limited in terms of the conclusions that may be drawn, these studies provide valuable in-depth accounts of the male caregiver experience. A number of these reports documented that husbands experience some form of gain as a result of caregiving, including pride, gratification, satisfaction, and feel-

¹An earlier version of this article was presented at the 48th Annual Scientific Meeting of The Gerontological Society of America, Los Angeles, CA, November 1995. The author gratefully acknowledges the comments of Jan S. Greenberg, Marsha M. Seltzer, and Mary Ann Test on earlier drafts of the article. This is article no. 96-13 from the Madison Veterans Administration, Geriatric Research, Education and Clinical Center (GRECC).

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ing closer to their wives as a result of providing care (Archer & MacLean, 1993; Davies et al., 1986; Harris, 1993, 1995; Motenko, 1988; Vinick, 1984). Motenko (1988) concluded that providing care contributes to the older man's ability to gratify his basic social needs and helps to define his identity. These qualitative investigations suggested that although strain was clearly evident in the nonverbal communication of the husbands interviewed, most of these men had a tendency to maintain a stoic and nondisclosing stance in terms of reporting affective strain (Davies et al., 1986; Vinick, 1984). Harris (1993) concluded that there is tremendous variability among husbands in terms of motivations for providing care, ways of coping, and the types and levels of strain or gain that are experienced. In sum, these qualitative investigations highlighted a number of variables that may potentially explain the variability in the appraisal of gain or strain for husband caregivers, but they did not empirically examine these relationships. The purpose of this study was to investigate the differential predictors for the appraisal of strain and gain among husbands caring for wives with dementia while controlling for contextual variables.

Conceptual Framework

The model of caregiver adaptation previously identified in this symposium (Kramer, this issue, pp. 218–232) was used to provide a conceptual framework for this study. This model takes into consideration evidence that suggests that positive and negative appraisals (i.e., strain and gain) are not polar opposites on a unidimensional continuum, and that they are likely to possess differential predictors (Costa & McCrae, 1980; Diener & Emmons, 1984; Emmons, 1986; Kramer, 1993a, 1993b; Lawton, Moss, Kleban, Glicksman, & Rovine, 1991; Miller, 1989). According to this model, background and contextual variables and resources will help to explain the variation found in appraisal of strain and gain among husband caregivers.

Appraisal of Strain and Gain

The primary focus of the literature to date has been on the more negative appraisal of caregiver strain, also referred to as *burden*. Burden has been defined as the caregiver's appraisal of distress that results from the care recipient's physical dependence and cognitive incapacity (Poulshock & Deimling, 1984). It is generally agreed to include adverse effects in spheres of family or personal life and emotional and time strains (Braithwaite, 1992; Horowitz, 1985a; Lawton, Kleban, Moss, Rovine, & Glicksman, 1989). Because studies have tended to lump men and women together or to focus on documenting mean differences between men and women on burden scores, little is known about the unique predictors of strain for husband caregivers. Qualitative studies indicate that older men are reluctant to verbalize feelings of strain even though they may experience them (Davies et al., 1986; Vinick, 1984), perhaps explaining some findings of higher levels of burden for

wives as compared with husbands (Pruchno & Resch, 1989; Young & Kahana, 1989), although many studies find no difference in burden levels. But when the focus of research ends with an investigation of gender differences in burden, the assumption seems to be that lower levels of burden equal inconsequential burden. Yet husbands do report strain, some more than others, and the field is left with little understanding of the variables that contribute to the variation found among husbands in the appraisal of strain.

Gain may be defined very broadly as the extent to which the caregiving role is appraised to enhance an individual's life space and be enriching. It may include any positive affective or practical return experienced as the direct result of becoming a caregiver such as the satisfactions, rewards, gratifications, or benefits that are perceived. There are a number of developmental theories that suggest that the role of caregiving for older men may serve to enhance the appraisal of gain. For example, one of the developmental tasks for older adults according to Peck (1968) is ego differentiation versus work role preoccupation whereby individuals benefit when they are able to redefine their sense of worth or purpose as separate from the work role and shift to accepting new roles. The tasks of caregiving for a spouse with dementia thrust individuals into a very demanding and distinct new role in which another is dependent upon them. This coincides at a time in life when men have more permission to express the less sex-typed qualities that are required in this role such as caring and nurturance (Guttman, 1987). Continuity theory (Atchley, 1972) suggests that caregiving may enhance older men's sense of satisfaction as it provides them with an opportunity to fulfill an important role in keeping the marriage and family intact through their caring efforts. Indeed, although quantitative investigations of the gain experienced by male caregivers are largely absent, most of the qualitative studies indicate that male caregivers appraise the caregiving role as emotionally gratifying and satisfying (Archer & MacLean, 1993; Kaye & Applegate, 1990b), and that they report pleasure at becoming more compassionate, thoughtful, and experiencing personal growth in general (Harris, 1993). Understanding the predictors of gain for husbands may provide insight for working more effectively with this subgroup of caregivers.

Resources

Resources are widely acknowledged to play a central role in understanding caregiver outcomes and are hypothesized to assist in explaining the tremendous variation found among caregivers (Pearlin, Mulvan, Semple, & Skaff, 1990). Three resource domains potentially available to husband caregivers include physical resources (i.e., health), social resources (i.e., satisfaction with social participation), and coping strategies. Health may be defined narrowly as the absence of disease, or more broadly as a condition in which the caregiver "enjoys a robust life with the energy needed to engage in satisfying pursuits and

explorations of the environment" (Rice, 1992, p. 11). Lazarus and Folkman (1984) maintained that the role played by health is especially evident in stressful transactions that are enduring or chronic in nature. Both male and female spouses have reported substantially poorer health compared with other subgroups of caregivers (Cantor, 1983) and with their age-matched peers (Haley, Levine, Brown, Berry, & Hughes, 1987; Pruchno & Potashnik, 1989), but there are a number of ways in which the physical health of older men may differ from the physical health of older women. Although older women visit physicians more frequently and make greater use of preventative and curative health services (Nathanson, 1990), older men have higher rates of serious, potentially fatal diseases, and are hospitalized more often (Thomas & Kelman, 1990). Findings regarding the role of physical health and appraisal of strain or gain among husbands have been sparse and inconclusive. For example, Pruchno and Potashnik (1989) found poorer health was a significant predictor of burden for wives but not for husbands. Alternatively, in one of the only identified national studies of male caregivers, Kaye and Applegate (1990c) found that although male caregivers generally perceived themselves to be in relatively good health, more than 40% indicated that their health limited the care that they could provide to the care receiver, and better health was strongly associated with higher ratings of mental health.

Qualitative studies that have focused exclusively on husbands have reported a perception that increased social isolation and limited social support contribute to strain (Archer & MacLean, 1993; Davies et al., 1986; Harris, 1993; Vinick, 1984). Harris (1993) concluded that although social isolation from family and friends was a common theme found among husbands, there was tremendous variation in terms of husbands' participation in social activities and levels of social support received. In general, numerous studies suggest that the social activities of older men differ from the social activities of older women. Older men have been found to interact less frequently with intimate friends (Fox, Gibbs, & Auerbach, 1985; Powers & Bultena, 1976), to be less satisfied with their social contacts (Antonucci & Akiyama, 1987), to be less likely to confide in others (Connidis & Davies, 1990), and to rely more exclusively on their spouse for emotional support (Chappell, 1990) than older women. Husband caregivers have described the value of participating in social activities outside of the caregiving context as an important element for maintaining mental health (Archer & MacLean, 1993). Consistent with theoretical formulations, past research has documented a relationship between social participation and psychological well-being (Cohen & Wills, 1985; Kessler & McLeod, 1985). Quantitative investigations of the relationship between social participation and appraisal of strain or gain among husbands are notably absent from the literature. It is posited that satisfaction with social participation will play an important role in influencing husbands' appraisal of strain and gain given that

their primary source of social contact and support (i.e., their spouse) is seriously threatened as a result of the dementing illness.

Coping is defined "as constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141). Drawing upon multiple theoretical formulations, the theory of caregiver adaptation proposed elsewhere in this symposium (Kramer, this issue, pp. 239–249) suggests that the way in which the caregiver copes is likely to impact his or her appraisal of the caregiving role in terms of strain or gain. Although there are a myriad of ways for categorizing coping responses, many approaches distinguish between strategies oriented toward solving challenging problems (i.e., problem-focused) or strategies oriented toward managing emotions (emotion-focused; for a review of the literature, see Kramer & Vitaliano, 1994). Both theory and the empirical literature suggest that problem-focused coping may promote well-being, whereas emotion-focused responses may engender more negative outcomes, particularly in contexts that are chronic rather than short term (Roth & Cohen, 1986). Some research has indicated that emotion-focused coping is associated with strain for husbands. For example, two studies have reported a negative correlation between emotion-focused strategies and various indicators of distress among husband caregivers (Parks & Pilisuk, 1991; Quayhagen & Quayhagen, 1988). Although no empirical studies have reported on the relationship between types of coping and caregiver gain among husbands, Harris (1993) suggested that husbands felt more effective when they were able to take an active problem-solving approach. It is posited that problem-focused strategies that allow the caregiver to take control and problem-solve to bring about positive changes will engender a sense of personal efficacy and reward for the husband caregiver.

Background and Context

Many of the current theories that have guided investigations of caregiver adaptation recognize the important role that contextual and background variables play in influencing the caregiver experience. Contextual and background variables generally consist of the sociodemographic variables of the caregiver, and the characteristics of the care receiver, often, conceptualized as the stressors the caregiver is called upon to manage (Biegel, Sales, & Schulz, 1991; Kramer, 1993a). These two groups of variables are postulated to influence the types of caregiving activities the individual is engaged in, the resources that are available to manage these responsibilities, the appraisal of gain and strain, and ultimately, well-being.

Caregiver Characteristics. — Because most studies that have examined the relationship between caregiver characteristics and appraisals have failed to distinguish gender and spousal and nonspousal caregivers (Gold, Franz, Reis, & Senneville, 1994; Orbell

& Gillies, 1993; Pratt, Schmall, Wright, & Cleland, 1985), little is known about the extent to which the characteristics of the husband caregiver will differentially impact appraisal of strain or gain. Some evidence suggests that age may influence strain. For example, Fitting et al. (1986) reported that older husband's burden scores were higher with increasing levels of care receiver impairment. Yet other characteristics, such as employment status, education, and income have not yet been reported.

Care Receiver Characteristics/Stressors. — The most commonly studied care receiver characteristics that are typically conceptualized as stressors among dementia-specific populations include indicators of illness severity such as functional status and illness symptoms (i.e., memory and behavior problems). In a review of the caregiving literature, Biegel et al. (1991) concluded that there is consistent evidence that stressors are primary determinants of caregiver strain across numerous caregiving contexts. Because older men tend to rely more exclusively on their spouses for emotional support (Chappell, 1990), it is likely that memory and behavior problems may affect husbands strongly because such problems interfere with their wives' ability to function as confidants. This was supported in two studies that included husband caregivers (Harper & Lund, 1990; Zarit, Todd, & Zarit, 1986). For example, Harper and Lund (1990) found memory and behavior problems to be a particularly important predictor of strain among husbands. Stressors that require both physical, hands-on care, and interpersonal skills are likely to be challenging to the older male caregiver who has not generally had the experience or the socialization to provide such care. Davies et al. (1986) concluded that husband caregivers seemed to have a greater concern with physical and affective issues of care provision than did female caregivers. Findings regarding the relationship between stressors and gain among husbands have not yet been reported.

In the present cross-sectional analysis, this study focused on the following primary research question: To what extent are the appraisals of strain and gain among husband caregivers a function of demographic characteristics, stressors, and resources? In addition, although the primary focus of caregiver research has been on an examination of main effects, both theory and recent empirical literature suggest the utility of examining moderator effects (Belle, 1987; Seltzer, Greenberg, & Krauss, 1995). As such, this study will also examine the extent to which the resources available will buffer the effects of stressors.

Methods

Sample

This analysis is based on a study of husbands caring for wives with dementia in Madison, Wisconsin and surrounding counties. A multimethod approach to participant recruitment was utilized that included community agencies (i.e., the Alzheimer's Associa-

tion, adult daycare and home health, information and referral organizations), geriatric evaluation services, and notices in the public media (broadly seeking husbands caring for wives with memory problems). Recruitment efforts also included the "snowball" technique, whereby study participants referred other potentially eligible husbands to the study. This solicitation strategy was chosen to avoid biases in many caregiving samples due to recruitment of participants solely from formal service providers (Barer & Johnson, 1990); however it has the disadvantage of limiting knowledge regarding to whom the findings may be generalized.

Eligibility criteria included husband caregivers identified as primary caregivers, who were currently residing with wives diagnosed with dementia. Participants were required to speak English and be at least 50 years of age. Table 1 presents the background characteristics of the sample. The sample consisted of 74 husbands whose ages ranged from 51 to 86 years. The mean age of 72 was similar to that found in a national study of family caregivers (Stone et al., 1987). Although there was considerable variation with respect to education, over half (54%) had some post-high school training. The majority (78%) were retired, and the largest percentage of caregivers reported annual household incomes of \$10,000 to \$19,000 (33%), with the median ranging from \$20,000 to \$29,000. The sample represented an exclusively Caucasian population. Seventy-two percent were

Table 1. Demographic and Background Characteristics of Husband Caregivers (N = 74)

Age [Mean (standard deviation)]	72	(8)
Education		
Elementary	1	1%
Some high school	13	18%
High school (graduate)	20	27%
Post high school college	15	20%
College graduate	10	14%
Graduate or professional school	15	20%
Work Status		
Employed full-time	8	11%
Employed part-time	8	11%
Retired	58	78%
Race		
Caucasian	74	100%
Yearly Income		
Less than \$10,000	0	0%
\$10,000 to \$19,999	24	33%
\$20,000 to \$29,999	18	24%
\$30,000 to \$39,999	15	20%
\$40,000 to \$50,000	8	11%
More than \$50,000	9	12%
Duration of caregiving in months [Mean (standard deviation)]	52	(39)
Number of Armed Forces veterans	53	72%
Number of current recipients of Veteran's Administration health care services	6	8%
Years married to care receiver [Mean (standard deviation)]	45	(12)
Number previously married	10	14%

veterans of the Armed Forces; however only 8% were currently using VA health care services. The number of years married ranged from two to 66 with a mean of 45, and 14% of the husbands interviewed had been married before anywhere from one to four times.

The care receivers (i.e., the wives) ranged in age from 47 to 91, with a mean of 71. The most common diagnosis associated with the wives' memory loss was Alzheimer's disease (AD; 61%), followed by multi-infarct dementia (16%), mixed diagnoses of more than one type of dementia (14%), Parkinson's disease (5%), and Huntington's chorea (4%). The mean duration of illness, measured in months, was 78.

Data Collection and Measures

After telephone screening, face-to-face interviews were conducted with eligible husbands at the time and site of their convenience, most often in their own homes. The interviews were structured, providing primarily quantitative types of data, and lasted approximately 90 minutes. Each caregiver was paid \$15 for the interview.

Psychometric Properties of the Study Scales. — Psychometric properties of the scales used in the current study are presented in Table 2. All of the standardized Cronbach alphas were above .76, demonstrating acceptable internal consistency reliability. Detailed descriptions of the measures used are described as follows.

Background and Context Variables

Caregiver Characteristics. — Caregiver demographic and background characteristics examined in this study included age, education, income, and employment status. Both education and income consisted of six categories, which are detailed in Table 1. A dummy variable was created for employment status (i.e., 0 = *retired*, 1 = *employed*).

Stressors/Care Receiver Characteristics. — Duration of caregiving was measured by asking husbands "How long ago did you first begin to provide your wife with any type of assistance that you had not

provided before?" A shortened version of the Memory and Behavior Problems Checklist (MBPC; Zarit & Zarit, 1987) was utilized as a measure of stressors or degree of level of impairment and disruptive behaviors that the caregivers are called upon to manage. The MBPC "provides an excellent assessment of care-recipient-centered problems" (Vitaliano, Young, & Russo, 1991, p. 70), has strong psychometric properties, and has been frequently utilized in caregiver research (Haley et al., 1987; Kramer, 1993a; Vitaliano et al., 1991b). The Katz Index of Activities of Daily Living (ADL; Katz, Ford, Moskowitz, Jackson, & Jaffee, 1963) measure calls for a dichotomous rating of six ADL functions (i.e., bathing, dressing, going to the toilet, transferring, continence, and feeding) in terms of whether the individual performs the activity without assistance. Instrumental Activities of Daily Living (IADL; i.e., higher level self-care tasks; Lawton & Brody, 1969) were assessed by asking caregivers to indicate whether their spouse was independent in the following: using the telephone, going shopping, preparing meals, taking medicine, handling money, doing laundry, and driving. The ADL and the IADL scales were scored for the total number of limitations.

Resources

Health. — Health was measured using a 4-point (1 = *poor* to 4 = *excellent*) self-rated measure (Mossey & Shapiro, 1982) that correlates with objective measures and has been found to predict mortality better than objective health status measures (LaRue, Bank, Jarvik, & Hetland, 1979; Mossey & Shapiro, 1982).

Satisfaction with Social Participation. — Satisfaction with social participation was assessed using measures developed by George and Gwyther (1986). Caregivers rated their satisfaction with the frequency and quality of their social and recreational participation (i.e., phone contacts and visits with family and friends, church and club attendance, time spent in personal hobbies, and relaxing). The subjective assessments were summed to form a scale measuring satisfaction with social participation. Many of the scale items correlated with the amount of tangible social support and assistance received by caregivers

Table 2. Scale Characteristics (N = 74)

Scale	Number of Items	Mean	SD	Range (Actual)/Possible	Standardized Cronbach Alpha
Duration of caregiving (in months)	1	51.7	39.14	(4-204)/na	na
Memory and Behavior Problems Checklist	17	20.3	9.2	(4-45)/0-68	.76
Katz Activities of Daily Living (ADL)	6	3.2	2.2	(0-6)/0-6	.88
Instrumental activities of daily living (IADL)	8	7.1	1.8	(0-8)/0-8	.88
Satisfaction with social participation	7	16.7	5.6	(5-28)/0-28	.78
Health	1	3.0	.88	(1-4)/1-4	na
Problem-focused coping	14	38.9	8.9	(21-56)/14-56	.84
Emotion-focused coping	21	43.0	10.1	(23-70)/21-84	.80
Strain	25	22.2	12.8	(1-75)/0-100	.86
Gain	15	48.2	7.8	(29-60)/15-60	.90

(Clipp & George, 1990), and the construct validity of this scale was supported by significant correlations with the adequacy of social support available to caregivers (Clipp & George, 1990; George & Gwyther, 1986).

Coping. — Problem- and emotion-focused coping responses were measured with a revised version of the Ways of Coping Checklist (WCCL; Vitaliano, Russo, Carr, Maiuro, & Becker, 1985) that has been widely used in the stress and coping literature (Harvis & Rabins, 1989; Kramer & Vitaliano, 1994; Sistler, 1989; Vitaliano, Maiuro, Russo, & Becker, 1987). Husbands were asked the following question: "Please think back over the past six weeks and recall a situation, event, or behavior involving your wife that has been stressful and is currently of concern to you." They were then instructed to describe the situation in an open-ended fashion and to indicate how frequently they used each coping strategy (on a scale from 1 = *never used* to 4 = *regularly used*) in response to the stressful experience. Representative sample items from the problem-focused scale include "I made a plan of action and I followed it," and "I came up with a couple of different solutions to the problem." Three emotion-focused subscales (i.e., wishful thinking, avoidance, and self-blame) were combined to form one emotion-focused scale. Representative sample items from this scale included "I tried to make myself feel better by eating, drinking, smoking, or taking medications," "I hoped a miracle would happen," and "I kept my feelings to myself."

Caregiver Appraisal

Strain. — The 25-item Screen for Caregiver Burden (SCB) was developed to assess both objective (i.e., prevalence count of stressful experiences) and subjective burden (i.e., ratings from 1 to 4 of distress in relation to each experience) among caregivers of spouses with AD (Vitaliano, Russo, Young, Becker, & Maiuro, 1991). The subjective scale was ideally suited for the current study as a measure of caregiver strain

because of its strong psychometric properties, brevity, and specificity to spouses (Vitaliano, Becker, Russo, Magana-Amato, & Maiuro, 1988–1989; Vitaliano et al., 1991a). Representative sample items include "I am totally responsible for keeping our household in order," and "I feel so alone as if I have the world on my shoulders."

Gain. — A 15-item scale that was designed to capture long-term rewards and satisfactions was used as a measure of caregiver gain. Items for the Caregiving Satisfaction Scale (CSS) were initially identified through exploratory interviews with caregivers and through the relevant caregiving literature (Strawbridge, 1991). Representative sample items include "Caring for my wife has helped me realize that I can do things I never knew that I could do," "Caring for my wife gives me small but important uplifts now and then," and "Caring for my wife gives my self-esteem a boost." Scoring was done on a 4-point response set from 1 = *strongly disagree* to 4 = *strongly agree*, with higher scores indicating a higher level of reward or satisfaction with caregiving.

Results

The primary research question investigated was the following: To what extent are the appraisals of strain and gain among husband caregivers a function of demographic characteristics, stressors, and resources? Two separate hierarchical multiple regressions were performed for each appraisal outcome. Due to the number of independent variables and the limited sample size, only the variables that were significantly associated with either gain or strain were entered into the analysis. In addition, because a number of the stressor variables were correlated with one another, only two of them (memory and behavior problems [MBP] and duration) were chosen for the analysis to allow for a more parsimonious model. For example, as shown in Table 3, which summarizes the intercorrelations of the study variables, strain was significantly associated with three of

Table 3. Intercorrelations of all Independent and Dependent Variables (N = 72)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Age	—													
2 Education	.10	—												
3 Income	-.05	.53***	—											
4 Employment status	-.37**	-.02	.04	—										
5 Memory and behavior problems	.03	.22	.24*	-.12	—									
6 Activities of daily living (ADL)	.17	-.05	-.18	.03	.12	—								
7 Instrumental (ADL)	.01	-.16	.02	-.19	.30**	.51***	—							
8 Duration of caregiving	.03	-.02	.11	.05	.15	.47***	.31**	—						
9 Health	-.03	.29**	.14	.07	-.04	-.09	-.08	-.04	—					
10 Satisfaction with social participation	.21	.03	.06	-.16	-.18	-.23*	-.24*	-.16	.13	—				
11 Emotion-focused coping	-.05	-.16	-.20	-.11	.17	.15	.18	.19	-.20	-.23*	—			
12 Problem-focused coping	-.20	-.07	.00	.23*	.05	.42***	.26*	.12	.06	.05	.34**	—		
13 Strain	-.17	-.06	.03	-.05	.42***	.22	.27*	.34**	-.26*	-.42***	.57***	.16	—	
14 Gain	.05	-.35**	-.18	.08	.02	.10	.04	.07	.12	.27*	.16	.42***	-.09	—

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

the primary stressor variables, including memory and behavior problems ($r = .42, p < .001$), IADL ($r = .27, p < .05$), and duration of caregiving ($r = .34, p < .01$). Memory and behavior problems and duration of caregiving were both significantly correlated with IADL and were chosen as the representative variables because they were more strongly correlated with strain than IADL, but were not associated with one another.

In both of the hierarchical multiple regressions, the first block of independent variables included caregiver education, the second block of independent variables included two sources of stress entered for control purposes, and the third block included the four resource variables. To examine the extent to which resources would have a stress-buffering effect, interaction terms were computed by multiplying each of the two selected stress variables (MBP and duration of caregiving) by each of the four resource variables. The variables representing the interaction terms were centered before forming the multiplicative terms (Cronbach, 1987; Jaccard, Turrisi, & Wan, 1990). Separate regression analyses were run to identify any significant interactions. Given the lack of association between the stressor variables and gain, it is not surprising that there were no significant interactions in the prediction of caregiver gain. Alternatively, one interaction was a significant predictor of caregiver strain (Duration \times Social Resources), and as such, the regression analysis for strain included an additional fourth block that consisted of this interaction effect.

Table 4 presents the results of the regression analyses for caregiver strain. The regression equation explained 56% of the total variance in strain. In the first step of the model, caregiver characteristics failed to

explain any of the variance in strain. In the second step, both stressor variables were significant predictors of strain, explaining 25% of the variance. In the third step, resources uniquely explained 27% of the variance in strain, the most important two being satisfaction with social participation ($\beta = -.25, p < .01$) and emotion-focused coping ($\beta = .41, p < .001$). In the fourth step, the interaction explained an additional 3% of the variance found in strain once all other variables were taken into consideration. Significant main effects in the prediction of caregiver strain in the final model included MBP, satisfaction with social participation, health, and emotion-focused coping. In other words, husbands who appraised the highest levels of strain were those who were managing more memory and behavior problems, who were less satisfied with their social participation, who reported greater use of emotion-focused coping, and who were in poorer health. For satisfaction with social participation, there was a significant interaction effect with caregiving duration. (See Figure 1 for a portrayal of this interaction effect.) When husbands were in the caregiving role for longer periods of time and when they were more satisfied with their social participation, the result was lower strain scores, indicating a buffering effect.

Table 4. Hierarchical Multiple Regression Predicting Strain Among Husband Caregivers ($N = 74$)

	Betas			
	Step 1	Step 2	Step 3	Step 4
Caregiver characteristics				
Education	-.04	-.14	.02	.03
Stressors				
Memory & behavior problems		.40***	.26**	.25**
Duration of caregiving		.27*	.15	.08
Resources				
Health			-.15	-.17†
Satisfaction with social participation			-.25**	-.25**
Problem-focused coping			.01	.03
Emotion-focused coping			.41***	.38***
Interactions				
Duration \times social resources				-.19*
Total R^2	.00	.25	.53	.56
R^2 change	.00	.25	.27	.03
F for R^2 change	.76	11.64***	9.56***	4.25*
Total F	.76	7.80***	10.49***	10.17***

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

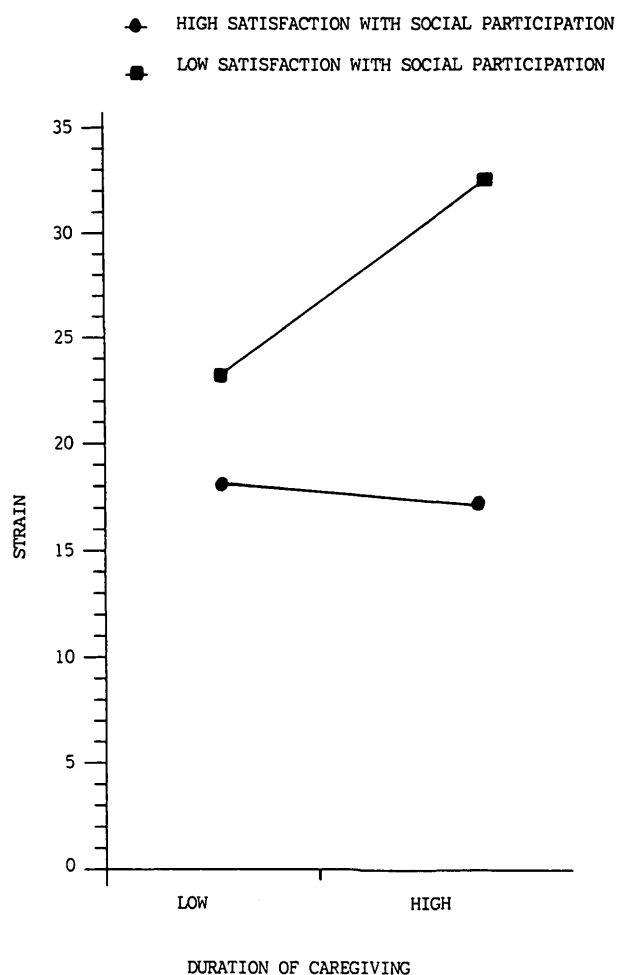


Figure 1. Buffering effect of duration of illness and satisfaction with social participation on strain in husbands caring for wives with dementia.

As shown in Table 5, the regression equation explained 38% of the total variance in gain. In the first step of the model, education explained 11% of the total variance ($\beta = -.33, p < .001$). In the second step, stressor variables failed to make a significant contribution to the model, explaining only an additional 1% of the variance. In the third step, resources uniquely explained 26% of the variance in gain, the most important two being satisfaction with social participation ($\beta = .29, p < .01$) and problem-focused coping ($\beta = .33, p < .001$). In the final model, significant predictors of caregiver gain included caregiver education, satisfaction with social participation, health, and problem-focused coping. In other words, husbands who appraised the highest levels of gain were those who were less educated, more satisfied with their social participation, in better health, and who reported greater use of problem-focused coping.

Discussion

Although a pervasive criticism of the social sciences research conducted over the years has been the exclusion of women as research participants, in most subfields of gerontology the opposite is true (Adams, 1994), but especially in the study of family caregiving where women predominate. As noted earlier, however, large numbers of older men assume caregiving responsibilities and are likely to bear increasing demands in the future. Given that men and women have been found to differ across a number of variables that are central to the theoretical models that have driven caregiving research (e.g., health, social support, coping strategies), the burgeoning knowledge about caregiving does little to enhance understanding of the variables that impact adaptation of the husband caregiver. This article has focused on the extent to which appraisals of strain and gain are a function of the stressors, the personal

demographic characteristics, and the resources of the husband caregiver.

Theoretically, the findings offer further evidence that although strain and gain share some similar predictors (i.e., satisfaction with social participation and health), they also have some unique predictors. Not surprisingly, stressors were found to be among the strongest predictors of caregiver strain for husband caregivers. In general, this supports previous research that has documented consistent and enduring relationships between various measures of stressors and caregiver burden across numerous caregiving contexts (see Biegel et al., 1991, for review of the literature). Interestingly, however, stressors demonstrated no relationship to caregiver gain, suggesting that appraisal of gain is equally likely for husbands managing widely varying levels of stressors and challenging symptoms. In the few studies that have simultaneously distinguished predictors of both strain and gain, this differential pattern of associations between stressors and strain and stressors and gain are reported for other samples (Kramer, 1993b; Miller, 1989; Talkington-Boyer & Snyder, 1994); however, Lawton et al. (1991) documented this pattern for spouses only.

One unexpected finding of this study was the association between lower education and appraisal of gain. Although two studies have documented a relationship between lower education and gain among adult children (Miller, 1989), and African American caregivers (Picot, 1995), this relationship was not found in a study of Caucasian wife caregivers (Kramer, 1993a). Education is a demographic variable that is likely to differentially impact the experience of caregiving for older men and women. For example, given the structural inequality of the workplace, older men are more likely to hold managerial positions or more prestigious jobs that are acquired with higher levels of education (Turner & Roszell, 1994). Thoits (1986) has argued that employment and educational role identities influence one's social status and sense of self as purposeful and meaningful. One possible explanation for the finding that more highly educated husbands appraise less gain in caregiving than less educated husbands is that they may perceive a more striking status differential between their current or prior role as a professional versus their role as caregiver. In addition, they may have become accustomed to more intellectually stimulating activities so that they don't find the daily tasks of care rewarding. An alternative explanation is that this finding might be an effect of socioeconomic status. Although income was not related to caregiver gain, the indicator used may not be a valid indicator of how much money the husbands actually have to live on because most of them were retired and inquiries about all available assets and financial resources were not made. Understanding the role of education in predicting gain has potential implications for intervening with husbands and should be further studied. Perhaps interventions that emphasize the skill and intelligence that it takes to do this job well and that focus on education, rather than support, might be a

Table 5. Hierarchical Multiple Regression Predicting Gain Among Husband Caregivers ($N = 74$)

	Betas		
	Step 1	Step 2	Step 3
Caregiver characteristics			
Education	-.33**	-.36**	-.41***
Stressors			
Memory & behavior problems		.11	.16
Duration of caregiving		.02	.03
Resources			
Health			.18†
Satisfaction with social participation			.29**
Problem-focused coping			.33***
Emotion-focused coping			.04
Total R^2	.11	.12	.38
R^2 change	.11	.01	.26
F for R^2 change	8.65**	.51	6.68***
Total F	8.65**	3.18*	5.64***

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

useful way to assist highly educated husbands to perceive more gain in their caregiving effort.

This study suggests that the two alternative types of coping strategies are differentially related to strain and gain among husband caregivers. In general, these findings paralleled those reported in a large study of spousal caregivers in which instrumental problem-focused strategies were correlated with positive affect, and emotion-focused coping were associated with more negative mental health outcomes (e.g., depression, anxiety; Pruchno & Resch, 1989). Problem-focused strategies are more proactive approaches aimed at attempting to control the stresses of caregiving (Seltzer et al., 1995), and as such may help caregivers to feel a greater sense of accomplishment or mastery. In a qualitative investigation of the older male caregiver, Harris (1993) reported that a problem-solving approach, coupled with taking control of the caregiving situation, helped husbands cope with a situation in which they may have otherwise felt helpless. Miller (1987) reported that taking control was an expressed need for both husband and wife caregivers, but that the beneficial effects for wives are often complicated by the difficulty wives may experience in assuming authority over their husbands. Alternatively, for older male caregivers, taking action and control is a natural extension of their work roles.

Attempting to regulate emotional responses to stressful events via wishful thinking, denial, suppressing feelings, self-blame, and avoidance (i.e., emotion-focused coping) was the strongest predictor of strain for the husband caregiver. Unlike problem-solving approaches, such strategies do little to offer the caregiver a sense of release or control. When asked to describe what has been most important in helping him cope with caregiving, one husband said, "That's easy. Every afternoon I go down to the bar and drink with my friends for two or three hours." Although this type of emotion-focused strategy might provide temporary relief, it is likely to do little to reduce caregiver strain and may in fact create additional challenges for the caregiver. Research indicates that men are more likely than women to cope by using drugs and alcohol (Carver, Scheier, & Weintraub, 1989) and to suppress feelings (Adams, 1994). The socialization process that does little to condone emotional release among men leaves those who experience ongoing strain in a disadvantageous position. In qualitative interviews, older male caregivers have indicated that, on one hand, they have been taught to accept their lot in life without complaint, but on the other hand, they would appreciate the opportunity to talk with other men who are in a similar situation (Davies et al., 1986; Harris, 1993).

Of all of the contextual and resource variables examined in this study, social resources were found to be a strong predictor of both strain and gain. It is commonly known that caregivers suffer significant social losses and that social support is associated with well-being across numerous caregiving contexts (Biegel et al., 1991). Many of the husbands in this study commented that their social lives have

changed dramatically over the course of the illness; their friends stopped calling and they often couldn't find the time for the social activities in which they used to be involved. Conflict theories suggest that strain is an inevitable outcome of less stable social relationships (Dooley & Catalano, 1984). Husbands who reported greater satisfaction with their social participation reported less strain and more gain than husbands who reported lesser satisfaction with their social resources. Satisfaction with social participation was found to buffer the effects of caregiving duration on strain for husbands. In one qualitative study, Harris (1993) observed that men in the early stages of caregiving had not yet built into their routine some type of respite care, and they seemed to be more distressed as a result. Providing opportunities for husbands to maintain some degree of social involvement, perhaps via respite care, appears to be important in efforts to reduce strain.

Finally, better physical health was also associated with less strain and greater gain, although the strength of these relationships was marginally significant ($p < .10$). As indicated previously, although male caregivers tend to report relatively good health in general, Kaye and Applegate (1990c) found that over 40% actually experienced limitations in ability to provide care due to poor health and that better physical health was associated with greater mental health. Stress theories suggest that health is likely to have reciprocal influences with stress, such that stress may impact health, but that poor health may also impact the individual's resistance or coping ability (Rice, 1992). Older men are found to report a number of risk factors for poor health as compared with women, such as higher levels of alcohol and drug abuse (Cleary, 1987), higher rates of serious illness (e.g., cardiovascular disease; Hazzard, 1990), and higher rates of smoking (Nathanson, 1990). Future research on the older male caregiver should more carefully examine the ways in which particular health behaviors and health status influence the appraisals of strain and gain.

The limitations of this study temper the conclusions that may be drawn. The cross-sectional nature of these findings does not answer the directional nature of the relationship between resources and appraisal of strain and gain. Although the conceptual model proffers that the caregivers' social resources and coping strategies influence strain and gain, it is equally plausible that appraisal of strain or gain influences how husbands cope or perceive social resources. Coping with stress is a dynamic rather than a static process (Lazarus & Folkman, 1984). Time-ordered data are necessary to test the directionality of the relationship between resources and both strain and gain.

Another limitation that restricts the generalizability of study findings is the nonrepresentative nature of the sample. Although efforts were made to recruit husbands from a variety of sources, the sample was nonrandom and consisted of Caucasian men who tended to have at least some high school education. These husbands who voluntarily responded to media

and press announcements, or who were recruited from caregiver services or by word of mouth, may be very different from those who were not represented in the sample (Koropecj-Cox, Perkinson, & Glicksman, 1991). The findings of this study cannot be generalized to persons of color, the poor, rural elderly, and caregivers who are members of nontraditional family groups. This limitation seems to plague much of the dementia caregiving research given the lack of theoretically and empirically salient measures in nationally representative databases (Miller, 1989). Given these limitations, it is important that these findings be viewed as a beginning step in understanding the experience of husband caregivers and that they be replicated and extended in longitudinal investigations using more representative samples.

In conclusion, this investigation was guided by the idea that in order to understand the variations in appraisal of strain and gain made by husbands, we must examine differential contextual and resource variables. Findings confirm this basic premise but caution is advised in interpreting the direction of effects and generalizing these findings. A central message from this inquiry is that the predictors of caregiver gain should not be presumed to be the same as the predictors of strain and that further work is needed to identify the variables that will enhance understanding of the variation found in the more positive theoretical dimensions of caregiver adaptation for the older male caregiver.

Older men make a larger contribution to caregiving than is typically believed (Arber & Gilbert, 1989) and are the primary source of support for older married women with physical and cognitive impairments. Harris (1995) concluded that husbands are not best understood in comparison to wives because they "adapt to the caregiving role differently, experience social isolation differently, fare differently emotionally in their caregiving experiences, and thus may respond differently to various services and counseling approaches" (p. 105). This study was a small step in the direction of beginning to understand the differential appraisals of strain and gain among husband caregivers and generally supported many of the findings reported qualitatively in the literature. Future studies might benefit from integrating both qualitative and quantitative methods in order to more fully explore and enhance understanding of the unique experiences of the older male caregiver.

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Received October 1, 1996

Accepted October 6, 1996