Informal and Formal Support for Caregivers of a Demented Relative: Do Gender and Kinship Make a Difference?

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Gender and kinship were examined with regard to caregivers' use of informal and formal support and to two models of support (substitution or supplementation). Three groups of caregivers of a demented relative living at home—husbands, wives, and adult daughters—were compared on measures of both informal and formal support. The gender hypothesis deals with the similarities among caregivers of the same gender with respect to support. The kinship hypothesis refers to the similarities among caregivers having the same kinship with the carereceiver. The gender hypothesis was confirmed for informal informational support while the kinship hypothesis was supported for informal conflictual support. For most of the comparisons, the three groups of caregivers shared more similarities than differences. The interchangeability between informal and formal support seems to fall under the perspective of kinship because the daughter group is the only one where a model of supplementation was observed. © 1995 John Wiley & Sons, Inc.

Caring for a demented person is considered a stressful experience which has deleterious effects on the well-being of many caregivers (Schulz, Visintainer, & Williamson, 1990). Within the stress paradigm often used in caregiving studies, informal and formal support are considered resources that can prevent or alleviate these negative effects (Biegel, Sales, & Schulz, 1991; Pearlin, Mullan, Semple, & Skaff, 1990). Caregiver characteristics such as gender and kinship with the carereceiver would influence this process if it were found that men and women, spouses, and adult children caregivers behaved differently in using informal and formal support (Miller & Cafasso, 1992). Whether informal and

formal support varies according to the caregivers' gender and kinship with the carereceiver remains to be studied (Barush & Spaid, 1989; Enright, 1991; Zarit & Pearlin, 1993).

The gender-role socialization (see Miller, 1990) and the role/differential exposure (see Aneshensel & Pearlin, 1987) theories provide guidelines for examining the role of gender and kinship in support and caregiving. According to the first theory, similarities in the use of support should be evident between caregivers of the same gender (e.g., wives/adult daughters), while the second theory suggests that the similarities would be found between caregivers who have the same kinship bonds with the carereceiver (e.g., spouses).

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Most investigators have studied the use of informal and formal support in examining the frequency or amount of support received by caregivers rather than using a multidimensional perspective of support (e.g., aspects such as reciprocity or possible conflicts in the exchange of support). Others have studied the interchangeability of informal and formal support, that is, how the providers of these two sources of support work together or fail to do so (Zarit & Pearlin, 1993). For example, support substitutability may happen when informal support is withdrawn in the presence of formal support. However, those investigators examined either caregiver gender or caregiver kinship, but not both, and no attempt was made to compare the three major caregiver groups (husbands, wives, and adult daughters) simultaneously as in Enright's study (1991). Some investigators (e.g., Miller, 1990) focused only on husband and wife caregivers (different gender but similar kinship); while this provides information on possible gender differences, it precludes the examination of the influence of kinship. Other authors (e.g., Tennstedt & McKinlay, 1989) have compared male and female caregivers without differentiating between spouses and adult children. Finally, in comparing spouses with adult children caregivers (e.g., Semple, 1992), men and women were found in both groups of caregivers. In the last two cases, it was not possible to disentangle the relative influence of kinship and gender. To fill this gap, the aim of the present study was to determine if the ways of using informal and formal support and the interchangeability of the two sources of support differ according to gender and kinship of the caregiver (husbands, wives, and adult daughters) of demented persons. A multidimensional perspective of support was used.

According to the gender-role socialization theory (see Miller, 1990; Risman, 1987), it is assumed that during childhood women internalize different gender role patterns than do men and that these patterns become part of their respective personality traits. Women are socialized to an ethic of care that leads to the recognition of others' needs, as well as to close affiliation and disclosure with others, while men internalize an ethic of rights, weighing others' claims against their own and emphasizing self-reliance and individuation (Belle, 1987; Gilligan, 1982; Nestmann & Schmerl, 1991). The norm of self-reliance leads men to view help-seeking as an admission of incompetence; for women, help-seeking is seen as a means to sustain personal relationships (Belle, 1987; McMullen & Gross, 1983).

Although empirical findings are mixed, the differences found between men and women suggest that women seek and receive more support, especially emotional assistance, than men do in times of stress (Belle, 1987; Nestmann & Schmerl, 1991). While women receive more support, they also provide more help than men do, since the latter seek support mainly from their wives (Belle, 1987; Gottlieb & Selby, 1989; Nestmann & Schmerl, 1991; Vaux, 1985). The fact that women experience less reciprocity of informal support in their relations with men gives rise to what has been termed a "support gap" (Belle, 1982; Kessler, McLeod, & Wethington, 1985; Nestmann & Schmerl, 1991). As well, women are less satisfied than men with the support received, suggesting that the expectations of women for support may differ from those of men (Hirsch, 1979).

According to the social role/differential exposure theory (see Aneshensel & Pearlin, 1987; Barnett & Baruch, 1987; Miller, 1990; Risman, 1987), social interactions shape behaviors and take place within the context of current roles. The differences in the way men and women relate to support may be due to their obligation to fulfill current social roles. Risman (1987) noted that "gender status affects behavior not only, or even primarily, through role internalization but because of placement and experiences within social networks" (p. 10). Within the social role/differential exposure theory, it is argued that many roles can generate competing demands especially for women, who are more likely than men to carry out caring functions as well as their other roles (see Barnett & Baruch, 1987). Women tend to shoulder the burden of that type of situation by themselves, instead of asking for help from others in their network; for men, their need of support is thought to be legitimate when they are called upon to assume a caring function as well as meet other competing demands (Barnett & Baruch, 1987; Gerstel & Gross, 1987). However, according to other researchers (Gove & Zeiss, 1987; Thoits, 1983), the obligation to assume many roles does not always lead to role constraints, either for men or for women. Having many roles, particularly outside the family, may provide a variety of opportunities and facilitate access to social networks and supportive behaviors. Noninsular networks provide a broader range of resources than homogeneous networks (Granovetter, 1973).

In the caregiving situation, fulfilling different roles can be considered in relation to kinship. In contrast to the spouse caregiver, the adult child caregiver often continues to fulfill three other

roles: spouse, active parenting to small children, and paid employee outside the home. Also, married adult children caregivers, in their role of spouse, contrast with spouse caregivers whose marital relationship is hampered by the fact that they not only lose a wife or husband but also a source of support. Finally, adult children caregivers may have a higher level of education and income than spouse caregivers and these characteristics are positively associated with access to resources and with the size of the social network of nonkin members (Antonucci, 1985; Miller & Montgomery, 1990). Therefore, within the theory of role/differential exposure, a kinship perspective appears important because of different life experiences and different types and numbers of roles according to the cohort.

In the empirical literature on caregiving, Enright (1991) compared the amount of combined support received (informal and formal help) by husbands, wives, and adult children caregivers. Differences were observed among the three groups of caregivers, whether employed or unemployed. Neither gender nor kinship seemed to account for these differences. Among the studies on wife and husband caregivers (different gender/same kinship), only Pruchno and Resch (1989) found differences according to gender; wives received less help than husbands. While gender may be important, similarities between caregivers of the same gender but different kinships were not examined. Other authors noted no difference between wife and husband caregivers in informal support (Jutras, Veilleux, & Renaud, 1989) or in combined informal and formal support (Barusch & Spaid, 1989; Miller, 1990; Noelker & Wallace, 1985). When different types of informal or formal support were examined, very few differences were reported between husbands and wives (Barusch & Spaid, 1989; Noelker & Wallace, 1985). Observations of similarities between these two groups of caregivers of the same kinship but of different gender are in line with the kinship perspective. However, the absence of a third group of caregivers precludes the recognition of differences between spouse and nonspouse caregivers.

When men and women were compared without distinguishing kinship, results were rather inconclusive. In some studies, where the impaired person's functional status was a controlled variable, female caregivers were found to be disadvantaged in that they received less informal assistance (Tennstedt & McKinlay, 1989) and desired additional informal support (George, 1987). In the study by Thompson, Futterman, Gallagher-

Thompson, Rose, and Lovett (1993), women caregivers benefited more than men from four out of six types of informal support. No relation was noted between gender and informal support (George, 1987), nor between gender and formal help (Bass & Noelker, 1987; George, 1987; Gonyea & Silverstein, 1991; Tennstedt, Crawford, & McKinlay, 1993). In brief, when differences were found, the gender perspective was reinforced. However, these studies did not verify if caregivers of the same gender (e.g., women), but different kinship (wives/daughters), were similar in their use of the two types of support.

Other investigators reported differences among caregivers of different kinship without distinction of gender. Compared to nonspouse caregivers, spouses received less informal support (Miller & Montgomery, 1990; Tennstedt, McKinlay, & Sullivan, 1989) or less combined informal and formal support (Béland, 1991). Still others observed that spouse caregivers were privileged; they had more informal assistance than other caregivers (Jutras et al., 1989), fewer conflicts in the use of support (Semple, 1992), and more of them found that the informal help received was sufficient (Lesemann & Chaume, 1989). However, other studies revealed no differences between spouse and nonspouse caregivers in their provision of informal or formal support (Bass & Noelker, 1987; George, 1987; Gonyea & Silverstein, 1991; Lesemann & Chaume, 1989; Noelker & Wallace, 1985) even after coresidence status was considered (Tennstedt et al., 1993). Taken together, these results are ambiguous; when differences are observed, one cannot verify the possibility that the use of support is similar for those of the same kinship.

Finally, while it is well recognized that support is a multidimensional construct (Gottlieb & Selby, 1989; Stewart, 1993), most of the studies reported above have been focused mainly on the quantity of support that caregivers can expect. Such critical dimensions of support as "conflicts" and "appraisal of satisfaction with support" were rarely examined and reciprocity, considered relevant in caregiving and provision of support, was ignored (Gottlieb, 1991).

With regard to the interchangeability of the two sources of social support, the substitution model (Noelker & Bass, 1989) suggests that existing informal support may be withdrawn when formal assistance is available to the caregivers/carereceivers' dyad or vice versa. The supplementation model (Noelker & Bass, 1989) calls for a sharing of tasks between the formal and informal resources, where the formal pro-

viders help with tasks that the family also does and more informal assistance is associated with more formal assistance. Few studies have examined these two models with regard to gender and kinship. Compared with men, women caregivers were more commonly found in the supplementation model and receiving assistance from formal services only with tasks that they themselves provided (Noelker & Bass, 1989). Compared to adult children, spouse caregivers were more likely to have a combined (informal and formal helpers) network (Soldo, Agree, & Wolf, 1989) and their tolerance for nonassisted home care tasks from formal support was lower (Soldo, 1985). In these three studies, it was not possible to differentiate between gender and kinship in the interchangeability of informal and formal support.

In the current study, attention was given to separating the influence of gender from that of kinship on the ways informal and formal support are used and the interchangeability of these two sources of support. According to the gender-role socialization theory, it was hypothesized that caregivers who are wives or adult daughters of the carereceiver will be similar to each other and different from husband caregivers in the way they use the two sources of support. The kinship hypothesis, based on role/differential exposure, suggests that caregivers who are husbands or wives of the carereceiver will be similar to each other and different from adult daughter caregivers with respect to the use and interchangeability of support. Multiple dimensions of support were examined.

METHOD

Sample

The data collected in this study came from the first wave of a longitudinal study of factors related to caregivers' well-being. A convenience sample of 265 French-speaking primary caregivers was used. Nearly 11% of the caregivers refused to participate, claiming that they did not have time to take part in a study.

The subjects were recruited mainly from community health and social service agencies, through physicians, publicity, and a register of caregivers compiled for a study of Alzheimer's disease (Gauvreau et al., 1988). Approximately 62% of the subjects lived in or near Montréal (Province of Québec, Canada); the remaining came from other areas of the province. The caregiver had to be a member of the family, live with a demented relative (75% Alzheimer, 6% multiinfarct, 19% nonspecific dementia excluding dementia due to stroke or alcoholism), and have the main responsibility for his/her care. Caregivers who were users of informal support (score of ≥ 1 on the informal support frequency scale) and of at least one formal service were selected from the original sample because substitution and supplementation models of the two sources of support were to be examined. This subsample included husbands (n = 65), wives (n = 77) and daughter caregivers (n = 50); caregivers with another type of kinship were excluded because of the small sample size. Analyses of variance followed by

Table 1. Characteristics of Caregivers and Carereceivers

	Daug	hters	Wi	ves	Husb	ands			
	(n =	= 50)	(n = 77)		(n = 65)				
Characteristics (Possible Range)	M	SD	M	SD	M	SD	F	p	
Caregiver									
Age (24-88)	49.42	7.51	68.65	7.83	71.98	7.52	139.79	<.001°	
Family income (0-9)a	7.12	1.71	5.92	1.41	6.25	1.50	9.37	<.001	
Education (2-26)	11.52	2.95	9.25	3.55	9.71	5.11	5.10	.007d	
Number of roles (0-3)	1.40	.93	.25	.49	.17	.38	71.39	<.001	
Frequency of caregiving tasks ^b	.65	.17	.64	.18	.59	.20	2.12	.123	
Carereceiver									
Age (50-91)	79.90	6.29	73.36	7.83	72.58	7.04	17.20	<.001	
Length of cohabitation (0-77 years)	20.35	20.73	40.73	12.56	46.18	7.97	51.94	<.001°	
ADL impairment ^b	.27	.22	.30	.28	.31	.27	.39	.680	
Frequency of dysfunctional behaviors ^b	.38	.13	.34	.15	.34	.13	1.79	.170	

aFamily income: 5 = \$12,000−\$19,999; 6 = \$20,000−\$29,999; 7 = \$30,000−\$39,999. bStandardized score (0−1). cDifference between the three groups. dDaughters differ from both husbands and wives.

Tukey-b multiple comparison tests revealed that the mean age of the three groups differed. For the mean levels of family income and education and the mean number of roles, they differed only between daughters and husbands and between daughters and wives; husbands and wives were similar (Table 1). The frequency of caregiving tasks, the carereceiver's level of impairment in activities of daily living (ADL), and the frequency of dysfunctional behaviors did not differ among the three groups.

Measures

A pretest with 32 subjects was carried out using the scales developed for this study. Psychometric data reported on the following pages are from the sample of caregivers in the study of factors related to well-being from which the current subsample (n = 192) was taken.

Informal support. Two 13-item subscales, used to measure reciprocity and conflict, were taken from the Interpersonal Relationship Inventory (IPRI; Tilden, Nelson, & May, 1990). The construct validity of the IPRI as well as the internal consistency reliability and the test-retest reliability were found to be satisfactory by Tilden et al. (1990). The reciprocity subscale (current α = .78) measured the perceived availability (not at all = 0, much = 3) or occurrence (never = 0, most of the time = 3) of an exchange of emotional or tangible support as well as the return of this support. The conflict subscale (current $\alpha = .80$) measured perceived or enacted discord in relationships caused by the behaviors of others (Tilden et al., 1990). The caregivers' answers excluded any possible reciprocity or conflicts with the demented carereceiver. The r between reciprocity and conflicts is . 10. The French translation of the IPRI was done by two independent people using the back translation method (Haccoun. 1987).

The informal support measures also included frequency and satisfaction. The informal support frequency scale (7 items, $\alpha = .74$) was developed to assess how often (never = 0, most of the time = 3) caregivers effectively benefit from three types of support: tangible, emotional, and informational. To examine each type of support, three subscales were derived from the total scale. Tangible support (4 items) represents the help received for transportation, respite, instrumental activities of daily living (IADL), and for the carereceiver's ADL impairment. Emotional support (1 item) means the psychological comfort re-

ceived, while informational support (2 items) represents the guidance offered to the caregivers for themselves and for the carereceivers' care. Although the α for the total scale was high, the r's between the three subscales, which varied between .35 and .43, were considered sufficiently low to allow separate examination of each type of support. Because of the small number of items, no attempt was made to verify the internal consistency for these last three scores.

To measure informal support satisfaction ($\alpha =$.81) for each of the items of the informal support frequency scale, a second assessment was done during which the respondents were asked if the reported frequency corresponded to what they wanted (much less often or much more often = 0, a little less often or a little more often = 1, and as often as wanted = 2). This ranking considers the possibility that, on the one hand, a frequent supportive behavior might be perceived by the caregivers as being as often as they wanted or too often (e.g., support may interfere with their privacy). On the other hand, "never" receiving help might correspond to what they wanted or be considered "less often" than what they wanted. For the frequency, three subscales were used: satisfaction with tangible support, satisfaction with emotional support, and satisfaction with informational support (r's between the three subscales were between .56 and .61). The r's between reciprocity, conflict, total frequency, and total satisfaction of informal support measures varied from -.40 (between conflict and satisfaction) to .35 (between frequency and reciprocity).

Formal support. The number of services and the usefulness of services were measured. The number of services was assessed using an index which included nine formal services received from structured organizations, regardless of whether the caregivers paid for the services. The score was computed by adding the answers (no =0, yes = 1) about whether or not the caregivers had received, in the previous 6 months, help with housework, meals, transportation, personal care for the demented person, or had received respite from guardianship, services from a day care center, a support group, or visiting nurses for themselves or for the carereceiver. For the index of usefulness of services, three questions were asked about each service the respondents had received: If the services helped them, were useful to them (not at all = 0, very much = 3, for both questions), and if they were inconvenient (very much = 0, not at all = 3). A global score of usefulness of services was computed by adding

the answers to the three questions for all services received and then dividing the score by the number of services received.

The formal support frequency ($\alpha = .66$) and the formal support satisfaction ($\alpha = .79$) were assessed using the same 7 items as for the informal support frequency and satisfaction scales (see above). As with informal support, three subscales were derived from both the total formal support frequency scale and the total formal support satisfaction scale, in order to distinguish tangible, emotional, and informational formal support. The r's between the three subscales of frequency were between .28 and .44; for the satisfaction subscales, the r's varied between .48 and .64. Finally, the r's among the numbers of services, their usefulness, the total formal support frequency, and total formal satisfaction varied from -.03 to .51. The lowest r was between formal support satisfaction and the number of services; the highest was between formal support frequency and the number of services.

Control variables. Most sample characteristics (e.g., age, education) were assessed by the usual questions; for income, an ordinal scale varying from 0 to 9 developed by a provincial survey (Gouvernement du Québec, 1987) was used. The number of roles index was the total of "yes" answers to three possible roles: worker, looking after persons living with the caregiver (excluding the carereceiver), and, for the daughter caregivers, the role of wife (no = 0, yes = 1). The kinship role (for the daughter caregivers, that of child and for husband or wife caregivers, that of spouse) were excluded from the index, as was the role of caregiver, since each respondent had both roles (kinship and caregiver).

The carereceiver's level of dependency in ADL was measured by a scale ($\alpha = .90$) developed for this study to assess the degree of impairment in accomplishing nine activities of personal care such as eating and dressing (completely able = 0, able if the person is told what to do or how = 1, able if relevant objects are prepared = 2, able to execute part of the activity = 3, completely unable = 4). The frequency of dysfunctional behaviors (never during the previous month = 0, occurs daily = 3) was measured by the French version (Hébert, Bravo, & Girouard, 1993) of the Revised Memory and Behavior Problems Checklist (Teri et al., 1992), for which satisfactory psychometric properties have been reported; alpha was .83. Finally, the frequency of tasks carried out by the caregivers was measured by an index (25 items, $\alpha = .86$) developed for this study to assess how often (0 = never, 3 =

most of the time) the caregivers had performed, during the previous week, tasks related to ADL and IADL activities. Items were based on those from the index of Steinmetz and Amsden (1983). A higher score means a higher frequency of task performance. A lower frequency represents either the possibility that most of the tasks required by the carereceiver were performed by other people or that the carereceiver's level of impairment did not require that the task be accomplished.

Procedures

Two standardized interviews (maximum of 2 weeks interval) of 2 hr each were conducted. The interviewers received an average of 5 days of systematic training. Most of the subjects were met at their home in the absence of the relative or when another person took care of him/her.

RESULTS

Using standardized scores (0-1), multivariate analyses of variance (MANOVAs, $p \le .05$) were performed to verify if differences existed among the three groups of caregivers with regard to informal and formal support variables. When MANOVAs revealed a significant difference among the three groups with regard to support variables, two t tests were performed on each variable to test the gender hypothesis and two others to test the kinship hypothesis. However, each hypothesis is based on the assumption of equivalence as well as the assumption of difference (e.g., the kinship hypothesis supposes that wives and adult daughters will be similar and that both will be different from husbands). The probability of committing an error in not rejecting the null hypothesis when it is false (type II error) was thus as great as the probability of committing an error in rejecting the null hypothesis when it is true (type I error). The two types of error were, therefore, fixed at equal probabilities after determining an effect size. Cohen (1988) defines the effect size as the percentage of nonoverlap among the distributions of scores for the groups under study. The percentage of nonoverlap of 50% was retained for the current study. When a higher percentage of nonoverlap is observed, one may accept the influence of gender or kinship on the ways of using social support. The effect size for a nonoverlap of 50% is .86 (Cohen, 1988, p. 32). According to that value and to the sample size of the three groups of caregivers, the levels of sig-

Table 2. Gender and Kinship Hypotheses, Total Informal Support Scores

	Daug	phters	Wi	ves	Hust	pands		
	(n = 50)		(n =	= 77)	(n =	= 65)		
Gendera	M`	SD	M`	SD	M`	SD	t-Value	p
Reciprocity	.64	.14	.64	.16	_	_	-0.27	.785
Conflicts	.31	.19	.21	.16	_	_	-3.21	.002
Informal frequency	.30	.20	.25	.19	_	_	-1.35	.182
Informal satisfaction	.70	.24	.77	.26	_	_	1.50	.136
		men 127)						
Reciprocity	.64	.15			.59	.16	-2.15	.034
Conflicts	_	_			.19	.13	_	-
Informal frequency	.27	.19			.22	.15	-2.19	.030
Informal satisfaction	.74	.25			.83	.20	2.44	.016
	Daughters		Wives		Husbands			
Kinship ^b	М	SD	М	SD	М	SD	t-Value	p
Reciprocity	_	-	.64	.16	.59	.16	-1.80	.074
Conflicts	_	_	.21	.16	.19	.13	-0.70	.487
Informal frequency		_	.25	.19	.22	.15	-1.30	.194
Informal satisfaction	_	_	.77	.26	.83	.20	1.43	.156
						uses 142)		
Reciprocity	.64	.14			.61	.16	1.25	.213
Conflicts	.31	.19			.20	.14	3.77	<.001
Informal frequency	.30	.20			.24	.17	2.05	.044
Informal satisfaction	.70	.24			.79	.24	-2.40	.019

*Daughters and wives were considered similar if $\rho > \alpha = \beta = .013$, and women and husbands were considered different if $\rho \leq \alpha = \beta = .004$.

bWives and husbands were considered similar if $\rho > \alpha = \beta = .008$, and daughters and spouses were considered different if $\rho \leq \alpha = \beta = .004$.

nificance were obtained by NCSS-PASS (Number Cruncher Statistical System-Power Analysis and Sample Size) software (Hintze, 1991) and are reported at the bottom of each *t*-test table.

A MANOVA on the informal support variables of reciprocity, conflicts, informal frequency, and informal satisfaction indicated a significant difference among the three groups of caregivers, F = 4.668, $p \le .001$. Two other MANOVAs were performed, one on the subscales of frequency of tangible support, emotional support, and informational support and the other on the three satisfaction subscales for the three types of support. These analyses showed a significant difference among the three groups of caregivers on the frequency subscales, F = 2.106, p = .05, as well as on the satisfaction subscales, F = 2.996, p = .01.

For the formal support variables, no significant difference was found in any of the analyses. In-

deed, the MANOVAs of the number and usefulness of services as well as of the formal frequency and formal satisfaction variables revealed nonsignificant results. The analyses for formal frequency of tangible support, emotional support, and informational support analyses, and for formal support astisfaction with these three types of support also were not significant. Since the daughters' level of education and family income was different from that of the other two groups of caregivers, the same MANOVAs were performed considering the two variables as covariates. Identical results were found, thus excluding education and family income from further consideration.

Since the F statistics were significant for informal support variables and not significant for formal support variables, gender and kinship hypotheses were tested only for the informal support variables. The gender hypothesis states that caregivers who are wives and daughters will

be similar to each other in their ways of using informal support and different from husband caregivers. The t tests revealed no significant difference between wives and daughters with regard to three variables (reciprocity, frequency, satisfaction); however, for the variable "conflicts," the difference was significant (Table 2). Because wives and daughters were similar on these variables, they were combined in a single group of women and compared with the group of husband caregivers. No differences were found between the group of women and the group of husbands. The results therefore did not confirm the gender hypothesis with regard to reciprocity, frequency, and satisfaction; while wives and daughters were similar (women's similarities), they did not differ from husbands. Wives and daughters were not similar on the conflicts variable.

The kinship hypothesis was tested for the same four informal support variables (reciprocity, conflicts, frequency, and satisfaction). According to that hypothesis, caregivers who are husbands and wives will be similar to each other and spouses will be different from adult daughters. No differ

ences were found between husbands and wives for the four informal support variables. Since the husbands and wives met the conditions of spouse similarity, they were combined in a single group (spouse group) and compared with daughter caregivers. No difference was found between spouses and daughters with regard to reciprocity, frequency, and satisfaction. However, daughters reported significantly more conflicts than did spouse caregivers (Table 2). The results, therefore, confirmed the kinship hypothesis for the conflicts variable only. Neither the gender hypothesis nor the kinship hypothesis was confirmed with regard to reciprocity, frequency, and satisfaction of informal support.

The gender and kinship hypotheses were tested again, using the procedure described above, with regard to frequency and satisfaction of the three types of informal support (tangible, emotional, and informational support). For the gender hypothesis, no difference was found on the scores of frequency of tangible, emotional, and informational support between wives and daughters (same gender) nor between the women's group

Table 3. Gender Hypothesis, Types of Informal Support

	Daug	hters	Wiv	ves .	Husb	ands		
	(n = 50)		(n =	: 77)	(n = 65)			
Frequency	M`	SD	M`	SD	M`	SD	t-Value	р
Tangible support	.27	.23	.19	.22	_	_	-1.93	.056
Emotional support	.45	.35	.50	.32	_	_	0.73	.469
Informational support	.28	.24	.25	.24	_	_	-0.71	.476
.,	Women (n = 127)							
Tangible support	.23	.22			.17	.16	-1.83	.069
Emotional support	.48	.33			.41	.30	-1.58	.117
Informational support	.26	.24			.21	.22	-1.60	.111
	Daughters		Wives		Husbands			
Satisfaction	М	SD	М	SD	М	SD	t-Value	p
Tangible support	.67	.24	.76	.28		_	1.78	.078
Emotional support	.73	.37	.78	.36	_	_	0.75	.458
Informational support	.74	.29	.79	.30	_	_	0.85	.400
	Wo	men						
	(n =	127)						
Tangible support	.73	.27			.81	.24	2.32	.022
Emotional support	.76	.36			.75	.36	-0.11	.912
Informational support	.77	.30			.88	.21	3.16	.002

^{*}Daughters and wives were considered similar if $\rho > \alpha = \beta = .013$, and women and husbands were considered different if $\rho \le \alpha = \beta = .004$.

(wives and daughters) and the men's group (Table 3). The gender hypothesis thus was not confirmed for the frequency of the three types of support; although wives and daughters were similar to each other, when combined they did not differ from the men caregivers. As for satisfaction, no differences were observed between wives and daughters for the three variables (satisfaction with tangible, emotional, and informational support); when combined, they differed from the men only in their satisfaction with informational support. Wives and daughters were equally satisfied with the frequency of informal informational support, while men were more satisfied than the women; this lends some credence to the gender hypothesis.

Regarding the kinship hypothesis, no differences were found between husbands and wives (same kinship) for informal frequency of or satisfaction with tangible, emotional, and informational support. As well, no differences were found between the combined spouse group (husbands and wives) and the daughter caregivers (Table 4).

In summary, confirmation for the gender hypothesis was found in only one area of informal support: the frequency of informational support. Confirmation was found for the kinship hypothesis only in regard to conflicts.

To further explore the possibility of differences among husbands, wives, and daughters as caregivers, it was decided to examine separately, for each group of caregivers, relationships between the informal support variables as well as those between the formal support variables. Pearson correlations were done to complement the MAN-OVAs in looking at similarities within each group of caregivers rather than looking at differences between the groups themselves. Groups were considered similar if the r's were not different from zero (nonsignificant) or different from zero (significant) but with the same sign (+ or -). The level of significance was controlled by basing the analyses on the Bonferroni type adjustment (Collis & Rosenblood, 1985). As shown in Table 5, daughters and wives were similar with regard to five out of six informal support variables, with the exception of a significant correla-

Table 4. Kinship Hypothesis, Types of Informal Support

	Daug	ghters	Wi	ves	Hust	ands		
	(n = 50)		(n = 77)		(n = 65)			
Frequency	M`	SD	M	SD	M.	SD	t-Value	p
Tangible support	_		.19	.22	.17	.16	-0.65	.519
Emotional support	_	_	.50	.32	.41	.30	-1.77	.078
Informational support	_		.25	.24	.21	.22	-1.12	.263
			Spo	uses				
			(n =	142)				
Tangible support	.27	.23	.19	.19			2.43	.017
Emotional support	.45	.35	.46	.31			-0.04	.971
Informational support	.28	.24	.23	.23			1.31	.194
	Daughters		Wives		Husbands			
Satisfaction	М	SD	М	SD	М	SD	t-Value	ρ
Tangible support		_	.76	.28	.81	.24	1.27	.205
Emotional support	_	_	.78	.36	.75	.36	-0.42	.673
Informational support	_		.79	.30	.88	.21	2.30	.023
				uses				
			(n =	142)				
Tangible support	.67	.24	.78	.26			-2.66	.009
Emotional support	.73	.37	.77	.36			-0.63	.532
Informational support	.74	.29	.83	.27			-1.92	.058

Note. Wives and husbands were considered similar if $p > \alpha = \beta = .008$, and daughters and spouses were considered different if $p \le \alpha = \beta = .007$.

tion between frequency of informal support and reciprocity for wives; it was not significant for the daughters. The similarities among wives and daughters were as follows: conflicts and reciprocity (ns), satisfaction and reciprocity (ns), frequency and conflicts (ns), satisfaction and conflicts, p \leq .009, and satisfaction and frequency, $p \leq$.009. However, for the same five relationships, daughters and wives differed from the husbands with regard to two of them (satisfaction/conflicts; satisfaction/frequency) in that the women showed significant correlation coefficients and the men nonsignificant correlation coefficients. Thus, a gender pattern was observed for only two relationships (conflicts and satisfaction; frequency and satisfaction). A kinship pattern was not supported by the findings. Indeed, wives and husbands were similar for three out of six relationships; wives and husbands did not differ from daughters on any of the six.

Regarding formal support variables (Table 5), wives and daughters were similar and did not differ from husbands in four out of six relationships: frequency of formal support and number of services; satisfaction of formal services and number of services; frequency and satisfaction of formal services; utility and number of services. Hence, no support for the gender perspective was observed for the formal support variables. However, with regard to kinship, the pattern of inter-

correlations was the same for wives and husbands in all relationships. Three of them were significant: number of services and frequency of formal support, frequency and satisfaction, and frequency and utility. The three nonsignificant links were: number and satisfaction, number and utility, and satisfaction and utility, for husband and wife caregivers. However, spouse caregivers differed from daughters for two relationships: frequency and utility and satisfaction and utility. This lends some support to the kinship perspective in regard to formal support. The influence of either gender or kinship on the caregivers' support appears to differ according to whether the support is informal or formal.

To examine the relationship between formal and informal support, Pearson correlations were done between selected measures of formal and informal support as suggested by Stoller (1989). The level of significance was controlled by carrying out the Bonferroni type adjustment (Collis & Rosenblood, 1985). For daughters (Table 6), a significant and positive relationship was noted between the total frequency of formal and informal support, as well as between the frequency of formal and informal informational support. These results give credence to the supplementation model; that is, both informal and formal resources are offered to the caregiver/carereceiver dyad. For wives and husbands, there was no sig-

Table 5. Pearson Correlation Coefficients Between Informal Support Variables and Between Formal Support Variables for Daughters, Wives, and Husbands

Variables	les Reciprocity		1		Number of Services		4		5			
1. Conflicts (IS)	d	23										
	w	.15										
	h	.23										
2. Frequency (IS)	d	.29	d	24								
	w	.35*	W	12								
	h	.23	h	09								
3. Satisfaction (IS)	d	.24	d	4 2 *	d	.52*						
	w	04	w	−. 45 *	w	.40*						
	h	.22	h	−.31	h	.13						
4. Frequency (FS)							d	.55*				
, , ,							w	.47*				
							h	.59*				
5. Satisfaction (FS)							d	08	d	.43*		
` '							w	.14	w	.36*		
							h	09	h	.34*		
6. Utility (FS)							d	18	d	.23	d	.491
,							w	.10	w	.46*	W	.22
							h	.15	h	.33*	h	.14

Note. IS (Informal support), FS (Formal support), d (daughters), w (wives), h (husbands).

^{*}p ≤ .01.

	Da	ughters	W	ives	Husbands (n = 65)		
	(n	= 50)	(n :	= 77)			
Variables	r	p	r	P	r	p	
Total informal frequency vs							
Number of services	.18	.207	.24	.033	01	.939	
Total formal frequency	.45	.001	.22	.055	.01	.961	
Frequency of informal							
vs							
Frequency of formal							
Tangible support	.31	.030	.20	.090	09	.474	
Emotional support	.26	.068	.27	.020	.20	.105	
Informational support	.52	<.001	.18	.117	.26	.039	

Table 6. Pearson Correlation Coefficients Between Informal and Formal Support Variables for Daughters, Wives and Husbands Caregivers

nificant association, thus providing no substantiation for either the substitution or the supplementation model. In brief, the substitution model, which posits that more formal services are correlated with fewer informal resources (significant and negative relationships), was not confirmed by the findings observed in any group for any variable. However, with respect to the supplementation model, kinship appears to be important; two relationships between informal and formal support were significant for daughters, none for spouses.

DISCUSSION

While the gender-role socialization theory emphasizes gender influence as a determinant of caregivers' use of support, the social role/differential exposure theory proposes kinship influence. Neither of the two theories prevails in this study, since a pattern of similarities was observed among the three groups of caregivers; where differences were found, both gender and kinship influences explained the differences.

Two significant differences were observed between conflicts and satisfaction for the frequency of the informational informal support. Daughters were different from spouses with respect to conflicts while husband and wife caregivers were similar. Kinship rather than gender seemed to account for this difference. Semple (1992) also found that adult children reported more conflicts with their informal network than did spousal caregivers. In the present study, daughters had a greater number of roles than did the spouse caregivers and were thus exposed to more people; the greater number of interactions may increase the

probability of conflicts rather than the probability of more support.

Confirmation of the gender hypothesis is observed in regard to satisfaction with the frequency of informational informal support that deals with how to take care of their relative and how to take care of themselves. Wives and daughters were similar and were less satisfied than husbands; women's expectations regarding informational support may be higher than men's because of their natural tendency toward affiliation and self-disclosure (Belle, 1987; Nestmann & Schmerl, 1991). Moreover, women's perception of their caregiving functions may generate a greater need for that type of information. In that line of thought, Miller (1987) found that, compared to husbands, wife caregivers paid greater attention to nurturant activities and to interpersonal relationships with the carereceiver. As well, men's lack of attendance at family support group meetings was interpreted as a possible attempt to ignore the uncertainty they experienced as caregivers (Miller, 1987).

The three groups of caregivers were not different for any other informal and formal support variables. Although women may be more comfortable than men in asking for help (Belle, 1987), when their caregiving role is predominant, they may refrain from seeking help because they consider that taking care of their husband or relative is their own personal responsibility. In Abel's study (1989), most daughter caregivers renounced all support and attempted "to absorb the costs of caregiving themselves" (p. 211) rather than impose on their family. However, it may not matter whether men find it easy or not to ask for help; providers of both formal and informal services may think that men are uncomfortable with

caregiving, a "woman's task," and spontaneously offer them help without waiting to be asked. In the present study, no question was asked about the process of asking for help. Therefore, for different reasons, women and men caregivers of the current study could be similar in their use of support. Also, in the present study, the few differences among the three groups are consistent with those of Tennstedt et al. (1993) who noted that among coresident caregivers, kinship between the caregiver and the carereceiver was not a predictor of the use of formal services. However, Tennstedt's et al. (1993) findings contrast with Enright's (1991) results that show that differences among the three groups of caregivers depend on kinship when the combined informal and formal help was examined.

Similarity prevailed among the three groups of caregivers in regard to the intercorrelations between the support variables. However, some exceptions emerged when informal and formal support were considered separately. Gender seems influential in the distinctive aspects of informal support, while kinship appears to account for the distinctive aspects of formal support. For women, less frequent help from the informal network was related to less satisfaction and this, in turn, was associated with more conflicts; these relationships were not significant for husbands. Since men tend to be more self-reliant than women (Nestmann & Schmerl, 1991), their expectation of frequency of support may be lower. Women may expect more support from their informal network because of their natural affiliative tendency, the result of the socialization process. The negative relationship between frequency of informal support and satisfaction with informal support evokes the possibility of a gap between what women caregivers expect and what they receive. With respect to the negative relationship between conflicts and satisfaction, the difference between women and men caregivers may be attributed to women's greater sensitivity to the qualitative aspect of support (Nestmann & Schmerl, 1991).

In examining the correlations among formal support variables, kinship emerges for two of them. In contrast to daughters, the frequency with which spouse caregivers received formal support is related significantly to the utility of the services. Also, no relationship was observed between spousal satisfaction with frequency of formal services and utility of services; this relationship was significant for daughters. Thus, the notion of quantity (i.e., frequency) when evaluating the utility of formal services seemed important for spouses but not for daughters. For the latter, only the subjec-

tive aspect of satisfaction was related to the utility of formal services. With regard to the frequency of formal support, spousal expectations may be higher than those of daughters; the former do not want to feel indebted to their informal network, especially to their children, whereas daughters may be chiefly concerned with obtaining services tailored to their specific needs. The emergence of gender influence on informal support variables, and of kinship influence on formal support variables may be an indication that different rules govern the use of specific aspects of informal and formal support.

Concerning the relationship between informal and formal support, the daughter/carereceiver dyad was the only group in which significant positive correlations were observed. The relationship observed between the informal and formal frequency of support (total score), more precisely between formal and informal informational support, lends credibility to the supplementation model in which both formal and informal resources give help to the dyad. The daughters' role/differential exposure can be a possible explanation for this result. Compared to spouse caregivers, daughters interact with more people and have more opportunities to ask and receive information from a larger informal network. Members of the daughters' informal network may suggest formal sources of information about caregivers and about the caregiving situation. Ageism may prevent informal and formal sources of support from offering information to spouse caregivers.

Finally, among the three groups of caregivers, the substitution model was not observed. The informal network does not diminish its support when formal agencies are involved in the home care of demented elderly. The results of the current study add to other similar findings suggesting that "service substitution" might be a myth (see Stoller, 1989). Soldo et al. (1989) reported that there is "considerable disagreement as to the evidence necessary to support claims of service substitution" (p. 207). As for the supplementation model, it has been found that families who benefited from formal support continued to give greater assistance than the formal providers and the level of informal support is positively associated with the level of formal support (Horowitz, 1985; Soldo et al., 1989; Stoller, 1989; Tennstedt & McKinlay, 1989). From a political point of view, the lack of evidence for substitution is important since there is fear that existing informal support will be withdrawn when formal assistance is made available to the caregivers/carereceivers' dyad; that fear is compounded by social concerns about allocating more money for subsidized services. In light of the socialized health care system that is in place in Canada, the no-substitution finding deserves particular attention. Moreover, in the Province of Québec (Canada), community and home care programs are established through a network of Local Community Services Centers where caregivers can ask for services directly without going through a professional (Lévesque, 1993).

The results of this study come from a convenience sample of caregivers who were users of at least one formal service and therefore cannot be generalized to other groups of caregivers. However, it should be remembered that all three groups of caregivers had comparable exposure to stressful situations, all caregivers lived with the carereceiver, the number of caregiving tasks and the carereceivers' ADL dependency and frequency of dysfunctional behaviors did not differ from group to group. Although the hypotheses examined are heuristically useful, qualitative research is needed to clarify why and how gender and kinship should be considered with respect to support in the caregiving situation and to identify the nature of the conflicts in the exchange of support. Support is not only a source of help; it may become a source of stress. It also is suggested that, in future studies, the examination of the gender and kinship hypotheses with regard to the multidimensional aspects of support be extended to adult son caregivers.

In summary, for most of the comparisons, the three groups of caregivers shared more similarities than differences. The gender perspective has credence for satisfaction with the frequency of informational support and for correlations between some informal support variables. The kinship perspective has credence for the conflicts variable, for the correlations between some formal support variables and for the supplementation model. Kinship and gender seem to account for specific and different aspects of support. However, the interpretation of the findings remains tentative at this time because of the lack of a comprehensive paradigm of the influence of gender and kinship attributes in caregiving. Further examination of these constructs is important to the development of nursing in the areas of caregiving and social support.

REFERENCES

Abel, E.K. (1989). The ambiguities of social support: Adult daughters caring for frail elderly parents. Journal of Aging Studies, 3, 211-230.

- Aneshensel, C.S., & Pearlin, L.I. (1987). Structural contexts of sex differences in stress. In R.C. Barnett, L. Biener, & G.K. Baruch (Eds.), Gender and stress (pp. 75-95). New York: Free Press.
- Antonucci, T.C. (1985). Personal characteristics, social support, and social behavior. In R. Binstock & E. Shanas (Eds.), Handbook of aging and the social sciences (pp. 94-128). New York: Van Nostrand Reinhold.
- Barnett, R.C., & Baruch, G.K. (1987). Social roles, gender, and psychological distress. In R.C. Barnett,
 L. Biener, & G.K. Baruch (Eds.), Gender and stress (pp. 122-143). New York: Free Press.
- Barusch, A.S., & Spaid, W.M. (1989). Gender differences in caregiving: Why do wives report greater burden? *The Gerontologist*, 29, 667-676.
- Bass, D.M., & Noelker, L.S. (1987). The influence of family caregivers on elder's use of in-home services: An expanded conceptual framework. *Journal of Health and Social Behavior*, 28, 184-196.
- Béland, F. (1991). The principal caregiver as the pivot in the relationship between sources of help [abstract]. *The Gerontologist*, 31, 292.
- Belle, D. (1982). The stress of caring: Women as providers of social support. In L. Goldberger & S. Bresnitz (Eds.), *Handbook of stress* (pp. 496–505). New York: Free Press.
- Belle, D. (1987). Gender differences in the social moderators of stress. In R.C. Barnett, L. Biener, & G.K. Baruch (Eds.), Gender and stress (pp. 257-277). New York: Free Press.
- Biegel, D.E., Sales, E., & Schulz, R. (1991). Family caregiving in chronic illness. Newbury Park, CA: Sage.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Orlando, FL: Academic Press.
- Collis, B.A., & Rosenblood, L.K. (1985). The problem of inflated significance when testing individual correlations from a correlation matrix. *Journal for Research in Mathematics Education*, 16, 52-55.
- Enright, R.B. (1991). Time spent caregiving and help received by spouses and adult children of brain-impaired adults. *The Gerontologist*, 31, 375-383.
- Gauvreau, D., Bouchard, R., Gauthier, S., Mathieu, J., Boily, C., Cholette, A., Robitaille, Y., Bouchard, P., Bouchard, N., Doyon, L.P., Gaudreault, M., Ouellet, A., Dumont, M., Kishka, P., Fournier, C., Nalbantoglu, J., Lacoste-Royal, G., Gautrin, D., Froda, S., DeBraekeleer, M., Bouchard, G., & Mortimer, J. (1988). The IMAGE project: A geographical laboratory for the investigation of multidisciplinary data. In P. M. Sinet, Y. Lamour, & Y. Christen (Eds.), Research and perspectives in Alzheimer's disease (pp. 40-50). Heidelberg: Springer-Verlag.
- George, L.K. (1987). Easing caregiver burden: The role of informal and formal supports. In R.A. Ward and S.S. Tobin (Eds.), *Health in aging: Sociological issues and policy directions* (pp. 133–158). New York: Springer.

- Gerstel, N., & Gross, H.E. (1987). Introduction and overview. In N. Gerstel & H.E. Gross (Eds.), Families and work (pp. 1-12). Philadelphia, PA: Temple University Press.
- Gilligan, C. (1982). In a different voice. Cambridge, MA: Harvard University Press.
- Gonyea, J.G., & Silverstein, N.M. (1991). The role of Alzheimer's disease support groups in families' utilization of community services. *Journal of Gerontological Social Work*, 16(3/4), 43-55.
- Gottlieb, B.H. (1991). Social support and family care of the elderly. Canadian Journal on Aging/La Revue canadienne du vieillissement, 10, 359-375.
- Gottlieb, B.H., & Selby, P.M. (1989). Social support and mental health: A review of the literature. (Research Report). Ontario, Canada: University of Guelph.
- Gouvernement du Québec. (1987). Et la santé, ça va? [How is your health?]. (Rapport de l'enquête Santé [Québec health survey report], tome 1.) Québec: Les publications du Québec.
- Gove, W.R., & Zeiss, C. (1987). Multiple roles and happiness. In F.J. Crosby (Ed.), Spouse, parent, worker: On gender and multiple roles (pp. 125-137). New Haven: Yale University Press.
- Granovetter, M. (1973). The strength of weak ties. American Journal of Sociology, 78, 1360-1380.
- Haccoun, R.R. (1987). Une nouvelle technique de vérification de l'équivalence de mesures psychologiques traduites [A new verification technique for the equivalency of translated psychological measures]. Revue Québécoise de Psychologie, 8(3), 30-39.
- Hébert, R., Bravo, G., & Girouard, D. (1993). Fidélité de la traduction française de trois instuments d'évaluation des aidants naturels de malades déments [Accuracy of the french translation of 3 evaluation instruments used in studies on natural caregivers of persons with dementia]. Canadian Journal on Aging/Revue Canadienne du Vieillissement, 12, 324-337.
- Hintze, J.L. (Ed.). (1991). NCSS power analysis and sample size version 1.0. Kaysville, UT: Author.
- Hirsch, B. (1979). Psychological dimensions of social networks: A multimethod analysis. American Journal of Community Psychology, 73, 256-277.
- Horowitz, A. (1985). Family caregiving to the frail elderly. *Annual Review of Gerontology and Geriatrics*, 5, 194-246.
- Jutras, S., Veilleux, F., & Renaud, M. (Eds.). (1989).
 Des "partenaires" méconnus: les aidants des personnes âgées en perte d'autonomie [Unrecognized partners: People helping elders losing their autonomy]. (Research Report). Montréal, Québec: Université de Montréal, Groupe de recherche sur les aspects sociaux de la prévention.
- Kessler, R.C., McLeod, J.D., & Wethington, E. (1985). The costs of caring: A perspective on the relationship between sex and psychological distress.
 In I.G. Sarason & B.R. Sarason (Eds.), Social support: Theory, research, and applications (pp. 491–502). Dordrecht, Netherlands: Matinus Nijhoff.

- Lesemann, F., & Chaume, C. (1989). Famillesprovidence: la part de l'Etat [Providential families: The government's share]. Montréal: Éditions Saint-Martin.
- Lévesque, L. (1993). Québec home-care services: A program at the local community level. In S.H. Zarit, L.I. Pearlin, & K. Warner Schaie (Eds.), Caregiving systems: Informal and formal helpers (pp. 217–232). London: Lawrence Erlbaum.
- McMullen, P.A., & Gross, A.E. (1983). Sex differences, sex roles, and health-related help-seeking. In B.M. DePaulo, A. Nadler, & J.D. Fisher (Eds.), New directions in helping (pp. 233-263). New York: Academic Press.
- Miller, B. (1987). Gender and control among spouses of the cognitively impaired: A research note. *The Gerontologist*, 27, 447-453.
- Miller, B. (1990). Gender differences in spouse caregiver strain: Socialization and role explanations. *Journal of Marriage and the Family*, 52, 311-321.
- Miller, B., & Cafasso, L. (1992). Gender differences in caregiving: Fact or artifact? *The Gerontologist*, 32, 498-507.
- Miller, B., & Montgomery, A. (1990). Family caregivers and limitations in social activities. *Research on Aging*, 12, 72-93.
- Nestmann, F., & Schmerl, C. (1991). The lady is not for burning: The gender paradox in prevention and social support. In G. Albrecht, H. U. Otto, S. Karstedt-Henke, & K. Bollert (Eds.), Social prevention and the social sciences (pp. 217-234). Berlin: Walter de Gruyter.
- Noelker, L.S., & Bass, D.M. (1989). Home care for elderly persons: Linkages between formal and informal caregivers. *Journal of Gerontology*, 44, S63-70
- Noelker, L.S., & Wallace, R.W. (1985). The organization of family care for impaired elderly. *Journal of Family Issues*, 6(1), 23-44.
- Pearlin, L.I., Mullan, J.T., Semple, S.J., & Skaff, M.M. (1990). Caregiving and the stress process: An overview of concepts and their measures. *The Ger-ontologist*, 30, 583-594.
- Pruchno, R.A., & Resch, N.L. (1989). Husbands and wives as caregivers: Antecedents of depression and burden. *The Gerontologist*, 29, 159–165.
- Risman, B.J. (1987). Intimate relationships from a microstructural perspective: Men who mother. *Gender & Society*, 1(1), 6-32.
- Schulz, R., Visintainer, P., & Williamson, G.M. (1990). Psychiatric and physical morbidity effects of caregiving. *Journal of Gerontology*, 45, P181-191.
- Semple, S.J. (1992). Conflict in Alzheimer's caregiving families: Its dimensions and consequences. *The Gerontologist*, 32, 648-655.
- Soldo, B.J. (1985). In-home services for the dependent elderly. Research on Aging, 7, 281-304.
- Soldo, B.J., Agree, E.M., & Wolf, D.A. (1989). The balance between formal and informal care. In M.G. Ory & K. Bond (Eds.), Aging and health care (pp. 193-216). London: Routledge.

- Steinmetz, S.K., & Amsden, D.J. (1983). Dependent elders, family stress, and abuse. In T.H. Brubaker (Ed.), Family relationship in later life (pp. 173–193). London: Sage.
- Stewart, M.J. (1993). Integrating social support in nursing. Newbury Park: Sage.
- Stoller, E.P. (1989). Formal services and informal helping: The myth of service substitution. *The Journal of Applied Gerontology*, 8, 37-52.
- Tennstedt, S.L., Crawford, S., & McKinlay, J.B. (1993). Determining the pattern of community care: Is coresidence more important than caregiver relationship? *The Gerontologist*, 48, S74–83.
- Tennstedt, S.L., & McKinlay, J.B. (1989). Informal care for frail older persons. In M.G. Ory & K. Bond (Eds.), Aging and health care (pp. 145-165). London: Routledge.
- Tennstedt, S.L., McKinlay, J.B., & Sullivan, L.M. (1989). Informal care for frail elders: The role of secondary caregivers. *The Gerontologist*, 29, 677– 683.
- Teri, L., Truax, P., Logsdon, R., Uomoto, J., Zarit, S., & Vitaliano, P.P. (1992). Assessment of behavioral

- problems in dementia: The Revised Memory and Behavior Problems Checklist. *Psychology and Aging*, 7, 622–631.
- Thoits, P. (1983). Multiple identities and psychological well-being. *American Sociological Review*, 48, 174–187.
- Thompson, E.H., Jr., Futterman, A.M., Gallagher-Thompson, D., Rose, J.M., & Lovett, S.B. (1993). Social support and caregiving burden in family caregivers of frail elders. *Journal of Gerontology*, 48, S245-254.
- Tilden, V.P., Nelson, C.A., & May, B.A. (1990). The IPR Inventory: Development and psychometric characteristics. *Nursing Research*, 39, 337-343.
- Vaux, A. (1985). Variations in social support associated with gender, ethnicity, and age. *Journal of Social Issues*, 41, 89-110.
- Zarit, S.H., & Pearlin, L.I. (1993). Family caregiving: Integrating informal and formal systems for care. In S.H. Zarit, L.I. Pearlin, & K. Warner Schaie (Eds.), Caregiving systems: Informal and formal helpers (pp. 303-316). London: Lawrence Erlbaum.