Social Support in the Context of Caregiving: Husbands’ Provision of Support to Wives Involved in Parent Care

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The purpose of this study was to identify ways in which social support is related to the caregiving stress and well-being experienced by adult daughter caregivers. The study focused on a specific source of support, caregivers’ husbands, and included reports from 126 caregivers and their husbands. Main and buffering effects of four types of support (emotional and instrumental support provided to the caregiver and to her parent) were tested, and caregiver’s level of optimism was controlled. Results were similar for caregivers’ and husbands’ accounts of support. Buffering effects were found only for physical health, whereas effects opposite those predicted by the buffering hypothesis were detected for positive affect. A main effect was found in nearly all analyses of marital satisfaction. No main or buffering effects of support were detected for depression. Findings highlight the complexity of supportive exchanges by illustrating the simultaneous operation of different types of support and their distinctive impact on the caregiving stress and well-being relationship.

Research on caregiving stress has amply documented that providing care to an impaired older relative can be detrimental to the health and well-being of family caregivers (e.g., Schulz, Visintainer, & Williamson, 1990; Wright, Clipp, & George, 1993; Zarit, 1989). Adult daughter caregivers are especially taxed by their caregiving responsibilities to the extent that their role as caregiver interferes with their other social roles (e.g., Brody, 1990; Stephens & Franks, 1995). As a result of the stress associated with caregiving, it has been shown that family caregivers can benefit from the support they receive from others (e.g., Bass, Tausig, & Noellker, 1988; Stoller & Pugliesi, 1989; Stommel, Given, & Given, 1990; Thompson Jr., Futterman, Gallagher-Thompson, Rose, & Lovett, 1993). Although this research has established a link between support and caregivers’ well-being, little is known about how support benefits caregivers (Thompson Jr. et al., 1993). The present investigation explores some ways in which support operates on the relationship between the caregiving stress and well-being of adult daughter caregivers.

Most research on social support has been guided by two models of support processes (Barrera, 1988; Cohen & Wills, 1985). One model (main effects) assumes that support has beneficial effects for caregivers’ well-being at varying levels of stress. The other model (buffering effects) assumes that support has differential effects on caregivers’ well-being depending on the level of stress experienced. This model predicts that the effect of high and low amounts of support on well-being is similar at low levels of stress. At high levels of stress, however, greater support exerts a beneficial effect on well-being, which offsets the negative effect of stress.

Studies of social support in the context of caregiving have provided evidence to support both the main effects model and the buffering effects model of social support (Bass et al., 1988; Stoller & Pugliesi, 1989; Stommel et al., 1990; Thompson Jr. et al., 1993). The ways in which caregiving stress and support have been conceptualized in these studies, however, limits the understanding of how support operates on the stress and well-being relationship. More specifically, the results of these studies do not elucidate some important dimensions of social support, such as: (1) who is providing the support and what kind of support is being provided (e.g., measures typically rely on an aggregated measure of number of helpers), and/or (2) which caregiving stressors the support is meant to offset (e.g., measures of caregiving stress such as amount of assistance provided do not involve caregivers’ appraisals of stressfulness; or measures of support are not specific to caregiving stress).

The present investigation builds upon this existing literature by addressing these conceptual limitations. In terms of who is providing support, the study focused on a single source of support, caregivers’ husbands. In regard to the kinds of support being provided, support was conceptualized as the emotional and instrumental support provided to the caregiver as well as that provided to her impaired parent. In addition, caregiving stress was conceptualized as caregivers’ appraisals of recently occurring events in parent care.

Husbands were selected as the support provider of interest for several reasons. Prior caregiving research has indicated that over half (56%) of adult daughter caregivers are married (Stone, Cafferata, & Sangl, 1987). Moreover, it has been shown that husbands often assist their wives with their parent-care responsibilities (Brody, Litvin, Albert, & Hoffman, 1994; Suitor & Pillmer, 1993). In addition, other research has demonstrated that for stressors experienced in a given domain, support provided by sources from that same
domain is most effective (LaRocco, House, & French, 1980). Thus, because caregiving involves stressors experienced in the family domain, it is likely that effective support would come from a family member.

Husbands’ perspectives of the support they provided to their wives were assessed in the present study in addition to caregivers’ perspectives of this support. This strategy differs from most prior research on social support in caregiving which has examined only caregivers’ self-report of the assistance they received from others. To the extent that there is agreement between caregivers’ and husbands’ accounts of the support provided, and to the extent that these accounts operate similarly on the caregiving stress and well-being relationship, interpretations of the findings are strengthened in two ways. First, greater confidence can be placed in the explanation that the beneficial effects of support are due to actual exchanges of support (Antonucci & Israel, 1986). Second, confidence is increased that findings are not simply due to the same person reporting both predictor and outcome (i.e., shared method variance).

Because prior research has shown that caregivers can benefit from the receipt of both emotional and instrumental support (e.g., Stoller & Pugliesi, 1989; Thompson Jr. et al., 1993), both types were included in the present study. In addition to the support provided to them directly, caregivers can benefit from the support provided to them indirectly through assistance to their care-recipient (Bass et al., 1988; Stoller & Pugliesi, 1989; Stommel et al., 1990). Thus, four types of support were examined in this study: emotional and instrumental support provided to the caregiver (personal support) as well as emotional and instrumental support provided to the impaired parent (secondary support).

It has been argued that support is most effective when the resources that are provided have the potential to offset the demands of a specific stress experience (Cohen & McKay, 1984; Cutrona & Russell, 1990). That is, in order for support to be beneficial, it must serve to replenish the resources taxed by the stressor for which it was offered. Because support often has not been assessed as it relates to a specific stressor, buffering effects of support have been difficult to detect (Cohen & McKay, 1984).

Both personal and secondary support in the present study were conceptualized as support that corresponded to the stress of caregiving. The emotional support measures represented husbands’ expressions of caring and concern to caregivers about their caregiving responsibilities (personal) or to parents (secondary). Similarly, the instrumental measures of support represented husbands’ provision of assistance with caregiving tasks (secondary) or with household chores which allowed the caregiver more time and energy for caregiving (personal).

This study was designed to examine the relationships among stress, support, and well-being independent from caregivers’ generalized tendency to expect positive or negative consequences of life experiences (i.e., their dispositional optimism). Prior research on optimism has shown a positive relationship between optimism and receipt of social support (Scheier & Carver, 1992) as well as an inverse relationship between optimism and psychological distress (Scheier & Carver, 1992; Taylor et al., 1992). Given the possibility that caregivers’ levels of optimism could confound the links between stress, support, and well-being, optimism was controlled.

The present investigation had two aims. First, it investigated the effects of personal and secondary emotional and instrumental support on caregivers’ well-being, including physical health, depression, positive affect and marital satisfaction. In addition, these effects of support were examined independent of caregivers’ optimistic expectations. Because received support was examined in response to a specific stress experience, it was expected that buffering effects of support on the stress and well-being relationship would be detected (Cohen & McKay, 1984). Second, it examined the extent to which the protective effects of support were due to actual supportive exchanges by assessing the similarity between caregivers’ and husbands’ perspectives of support.

METHOD

Respondents were 126 married women who served as primary caregivers to their impaired parents. Daughters were considered to be the primary caregiver if they were the person most responsible for providing care to their parent on a daily basis. To be eligible, daughters must have been providing assistance to their parent with at least one of the following activities: personal care, shopping, preparing meals; or must have been providing supervision due to the parent’s cognitive impairment. The husbands of these adult daughter caregivers also were included as respondents in this study.

Adult daughter caregivers were recruited from a variety of sources (e.g., newspaper articles and organizational newsletters, as well as through hospital social service records of elderly patients discharged to the care of a daughter). Questionnaires were mailed to 233 potential respondents, and of these, complete data were received from 73% (N = 171) of the women (38 questionnaires were not returned and 24 were returned with incomplete or unusable data). The 126 respondents in this study were those caregivers whose husbands also returned questionnaires with complete data. The 126 women whose husbands returned the questionnaires differed (at p < .05) from the 45 women whose husbands did not in that the former expressed more marital satisfaction (M = 16.4 vs M = 13.6), reported more personal emotional support (M = 18.6 vs M = 14.4), more personal instrumental support (M = 11.1 vs M = 7.2), and were more optimistic (M = 22.9 vs M = 21.0). Caregivers and their husbands were asked to complete their questionnaires independently, and separate return mailing envelopes were provided to facilitate this process.

The average age of adult daughter caregivers was 48.8 (SD = 8.8; range = 29–71). Approximately 94% of caregivers were Caucasian. Caregivers had received, on average, 14.7 years of education (SD = 2.4; range = 11–22). Nearly 64% of caregivers were employed and worked, on average, 32 hours a week. Their household income averaged between $40,000 and $50,000 annually. Approximately 62% of caregivers had at least one child living at home, and the age of the youngest child at home was 15 years. Respondents had been married for an average of 23.4 years.
The average age of husbands was 50.5 years ($SD = 9.9$; range = 26–74). Approximately 94% of husbands were Caucasian. Husbands had received, on average, 14.8 years of education ($SD = 3.2$; range = 5–24). Nearly 83% of husbands were employed and they worked, on average, 44 hours a week.

Caregivers had been providing care to their impaired parent for an average of 6.2 years ($SD = 5.8$; range = 0.08–25), and the majority (83%) were providing assistance to their impaired mother. Many respondents (63%) were residing separately from their parent. The average age of parents was 79.1 years ($SD = 7.9$; range = 61–98). Caregivers reported that 94% of parents needed at least some help with shopping, 71% needed at least some help with preparing meals, and 54% needed at least some help with bathing. In addition, caregivers reported that 47% of parents needed at least some help in understanding simple instructions, and 29% needed at least some assistance in order to communicate clearly.

**Instruments**

Caregiving stress. — The measure of caregiving stress consisted of caregivers’ appraisals of 24 tasks often performed by adult child caregivers (e.g., ‘preparing meals for your parent’) (Albert, 1991; Kinney & Stephens, 1989). Caregivers were asked to indicate which of these tasks they had performed in the past month. For each task caregivers reported having performed, they were further asked to rate how stressful it was to perform this task. Those tasks caregivers reported not having performed were scored as “0” (did not happen). Caregivers’ ratings of these tasks were summed (separately for personal and secondary support) to represent the amount of emotional support received from husbands in the past month (higher scores reflect greater received support for these and all other support measures).

Scores for personal emotional support could range from 0 to 36, and caregivers’ mean level of personal emotional support was 18.6 ($SD = 10.3$; range = 0–36). Scores for secondary emotional support could range from 0 to 24, and the mean level of secondary emotional support was 8.5 ($SD = 6.4$; range = 0–24). Cronbach’s alpha for caregivers’ reports of personal emotional support was .92. For secondary emotional support, the alpha was .91.

Personal instrumental support involved husbands’ provision of help to the caregiver with household responsibilities. The inclusion of assistance with household responsibilities was based on research which suggests that even in two-income households, women retain primary responsibility for home maintenance and childcare (e.g., Berardo, Shehan, & Leslie, 1987; Biernat & Wortman, 1991; Bromet, Dew, & Parkinson, 1990). The instrumental support caregivers reported receiving from their husbands was assessed using 20 items adapted from previous investigations (e.g., Barrera et al., 1981; Norbeck, Lindsey, & Carriero, 1981). Caregivers were asked to indicate how often their husband had provided each of seven types of instrumental support in the past month (e.g., ‘pitched in and did chores around the house’). Secondary instrumental support consisted of husbands’ provision of tangible assistance to the impaired parent. Caregivers were asked to indicate how often their husband had provided each of 13 types of instrumental support to their impaired parent (e.g., ‘helped your parent with transportation’). Again, each item was rated on a 5-point scale (ranging from 0 ‘never’ to 4 ‘about every day’), and these ratings were summed (separately for personal and secondary support) to represent the amount of instrumental support caregivers had received from their husbands in the past month.

Scores for personal instrumental support could range from 0 to 28, and caregivers’ mean level of personal instrumental support was 11.1 ($SD = 5.7$; range = 0–27). Scores for secondary instrumental support could range from 0 to 52, and the mean level of secondary instrumental support was 6.7 ($SD = 6.8$; range = 0–34). Cronbach’s alpha for caregivers’ reports of personal instrumental support was .69. For secondary instrumental support, the alpha was .84.

The social support measures completed by the husbands were parallel to those completed by the caregivers. The only difference was that these measures were worded from the husbands’ perspective (e.g., ‘listened to your wife talk about her feelings concerning caregiving’). These personal and secondary emotional and instrumental support measures were rated and scored in the same way as were those for the caregivers. In addition, the possible range of scores for husbands’ reports are identical to those of caregivers’ reports.
Husbands' mean level of personal emotional support was 18.5 (SD = 8.6; range = 0–36), and their mean level of secondary emotional support was 9.1 (SD = 6.4; range = 0–24). Husbands' mean level of personal instrumental support was 12.4 (SD = 5.8; range = 0–28), and their mean level of secondary instrumental support was 8.8 (SD = 9.2; range = 0–40). Cronbach's alpha for husbands' reports of personal emotional support was .91; for secondary emotional support it was .91; for personal instrumental support, it was .74; and the alpha for secondary instrumental support was .91.

Physical health. — The physical health of caregivers was assessed using the sum of three items, each rated on a 4-point scale (higher scores reflect better health). Caregivers were asked to rate: (a) their current health (ranging from 1 “poor” to 4 “excellent”); (b) the extent to which their daily activities are limited by their health (ranging from 1 “no limitations” to 4 “severely limited”); and, (c) their satisfaction with their health (ranging from 1 “not at all satisfied” to 4 “completely satisfied”). Scores for physical health ranged from 3 to 12, and the mean level of self-reported physical health was 8.6 (SD = 2.2; range = 3–12). Cronbach’s alpha for this measure was .80.

Depression. — The Center for Epidemiologic Studies—Depression Scale (CES-D) was used to assess caregivers’ levels of depressive symptomatology in the past week. This 20-item scale was designed to assess depressive symptomatology in the general population, and scores can range from 0 to 60 (with higher scores reflecting greater symptomatology). A cutoff score of 16 on the CES-D has been reported to be indicative of a risk for clinical depression, and 42.4% of caregivers in the present study scored at or above this cutoff. The mean level of caregivers’ depressive symptomatology was 15.8 (SD = 12.0; range = 0–51). Cronbach’s alpha in the present sample was .93.

Positive affect. — The positive affect subscale of the Bradburn Affect Balance Scale (Bradburn, 1969) was used to assess caregivers’ positive emotions. Caregivers were asked to indicate whether or not they had experienced any of five positive feelings during the past week. Scores on this scale could range from 0 to 5 (with higher scores reflecting more positive affect). The mean level of positive affect was 3.4 (SD = 1.3; range = 0–5). Cronbach’s alpha for the present sample was .64.

Marital satisfaction. — Caregivers’ feelings of marital satisfaction were assessed using the 5-item Quality of Marriage Index (QMI; Norton, 1983). Each item was rated on a 4-point scale (ranging from 1 “strongly disagree” to 4 “strongly agree”), and these ratings were summed to represent caregivers’ levels of marital satisfaction. Scores for marital satisfaction could range from 5 to 20 with higher scores reflecting greater satisfaction. The mean level of marital satisfaction was 16.4 (SD = 4.0; range = 5–20). Cronbach’s alpha for this measure in the present sample was .97.

Of the six correlation coefficients indicating associations among the four well-being measures, four were significant at or beyond the .05 level. Depression was significantly related to positive affect (r = −.58), to marital satisfaction (r = −.34), and to physical health (r = −.45). In addition, positive affect was significantly correlated with physical health (r = .22).

Dispositional optimism. — Dispositional optimism was assessed using the Life Orientation Test (LOT; Scheier & Carver, 1985). The LOT assesses individual differences in generalized outcome expectancies. This 12-item scale comprises four positively worded items, four negatively worded items, and four filler items to disguise the purpose of the test. Each item was rated on a 4-point scale ranging from strongly disagree to strongly agree, with higher scores representing greater dispositional optimism. The mean level of optimism (excluding the four filler items) was 22.9 (SD = 4.0; range = 13–32). Cronbach’s alpha for this measure was .83. The LOT was not significantly related to caregiving stress, to any of the eight social support measures, or to marital satisfaction. However, the LOT was significantly related to the three remaining indices of well-being (r = .34 with physical health; r = −.58 with depression; and, r = .47 with positive affect) and to the interaction of stress and caregivers’ report of personal emotional support (r = .19).

Parent’s impairment. — Caregivers’ reports of their parent’s functional impairment were assessed with six items (e.g., Was your parent able to shop for groceries?) taken from the Multi-level Assessment Instrument (Lawton, Moss, Fulcomer, & Kleban, 1982), and reports of their parent’s cognitive impairment were assessed with four items (e.g., Was your parent able to understand simple instructions?) commonly used in clinical settings (Pearlin, Mullan, Semple, & Skaff, 1990). Caregivers rated the level at which their parent could perform each of the 10 activities on a 3-point scale (ranging from 1 “without help” to 3 “not at all able”). Ratings of these 10 items were summed to represent the level of parent’s impairment. The mean level of parent’s impairment was 17.5 (SD = 4.7; range = 10–30). Cronbach’s alpha for this measure was .88. It should be noted that although three caregivers indicated that their parent could have performed all 10 activities without help (a score of 10), these same women also indicated providing assistance with some of these activities as well as other caregiving tasks and often reported them as stressful.

Analysis Plan
In the next section, hierarchical multiple regression analysis is used to test for main effects as well as for buffering effects of support. Separate analyses are conducted for caregivers’ reports of each of the four support measures predicting each of the four well-being indices. These analyses are then repeated for husbands’ reports of each of the four support measures predicting each of the four indices of caregivers’ well-being.

In each analysis, following the control variables (optimism, caregiver age and household income, and level of parent’s impairment) caregiving stress is entered first, support is entered second, and the interaction of stress and support is entered last (Baron & Kenny, 1986). To reduce the potential for multicollinearity among the predictors,
centered scores are used in these analyses (Jaccard, Turrisi, & Wan, 1990). In addition, the decomposition of significant interaction effects is based on the procedures put forth by Jaccard et al. (1990). As such, a high level of support is defined as at least one standard deviation above the mean on a given measure of social support, and a low level of support is defined as at least one standard deviation below the mean.

RESULTS

The correlation coefficients among the social support measures are presented in Table 1. The portion of the matrix above the diagonal displays intercorrelations among support scales based on caregivers' reports, and the portion of the matrix below the diagonal displays intercorrelations based on husbands' reports. The coefficients on the diagonal represent correlations between caregivers' and husbands' accounts of support, and these coefficients indicate moderate to high levels of agreement.

A summary of the findings regarding the impact of caregivers' and husbands' accounts of support on the caregiving stress and well-being relationship is presented in Tables 2 and 3. These tables display, for each index of well-being, whether significant main and/or buffering effects of stress and support were detected. In the present analyses, regression coefficients significant at or beyond the .05 level indicate main effects of caregiving stress or support, and an $R^2$ change that is statistically significant for the interaction term indicates a buffering effect of support (Jaccard et al., 1990).

As demonstrated in the tables, the findings for the models with husbands' reports were quite similar to those for caregivers' reports. Results for caregivers' accounts of support indicated that, with one exception (that for personal instrumental support and marital satisfaction) all models were significant at or beyond the .05 level. The amount of variance accounted for in well-being in the significant models ranged from 13.1% to 43.7%. Results for husbands' accounts of support indicated that, in two of the four analyses of marital satisfaction (those for personal and secondary instrumental support), the total model did not reach significance at the .05 level. All of the remaining models were significant at or beyond the .05 level of significance. The amount of variance accounted for in the significant models with husbands' reports ranged from 11.5% to 43.7%. The four control variables together accounted for 15.4% of the variance in physical health, 34.5% in depression, 27.2% in positive affect, and 3.3% of the variance in marital satisfaction.

Emotional Support

In the models examining caregivers' accounts of personal emotional support (shown in the first column of Table 2), a

Table 1. Correlation Coefficients Among Social Support Scales

<table>
<thead>
<tr>
<th>Social Support Scales</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Personal Emotional</td>
<td>.38*</td>
<td>.47*</td>
<td>.40*</td>
<td>.37*</td>
</tr>
<tr>
<td>(2) Secondary Emotional</td>
<td>.56*</td>
<td>.67*</td>
<td>.47*</td>
<td>.66*</td>
</tr>
<tr>
<td>(3) Personal Instrumental</td>
<td>.46*</td>
<td>.42*</td>
<td>.62*</td>
<td>.48*</td>
</tr>
<tr>
<td>(4) Secondary Instrumental</td>
<td>.38*</td>
<td>.76*</td>
<td>.45*</td>
<td>.80*</td>
</tr>
</tbody>
</table>

Notes: Coefficients above the diagonal pertain to the report of caregivers; Coefficients below the diagonal pertain to the report of husbands; Coefficients on the diagonal pertain to the association between caregivers' and husbands' reports. *p < .01.

Table 2. Summary of Findings of Effects for Emotional Support

<table>
<thead>
<tr>
<th>Well-Being/Predictors</th>
<th>Caregivers' Reports</th>
<th>Husbands' Reports</th>
<th>Caregivers' Reports</th>
<th>Husbands' Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>$b = -.012$</td>
<td>$b = -.006$</td>
<td>$b = -.006$</td>
<td>$b = -.007$</td>
</tr>
<tr>
<td>Support</td>
<td>$b = .013$</td>
<td>$b = .002$</td>
<td>$b = .022$</td>
<td>$b = -.019$</td>
</tr>
<tr>
<td>Stress × Support</td>
<td>$R^2 = 1.9$</td>
<td>$R^2 = 0.5$</td>
<td>$R^2 = 1.2$</td>
<td>$R^2 = 0.8$</td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>$b = .247^{***}$</td>
<td>$b = .205^{***}$</td>
<td>$b = .222^{***}$</td>
<td>$b = .221^{***}$</td>
</tr>
<tr>
<td>Support</td>
<td>$b = -.168$</td>
<td>$b = .129$</td>
<td>$b = -.103$</td>
<td>$b = -.056$</td>
</tr>
<tr>
<td>Stress × Support</td>
<td>$R^2 = 0.0$</td>
<td>$R^2 = 0.4$</td>
<td>$R^2 = 0.4$</td>
<td>$R^2 = 0.3$</td>
</tr>
<tr>
<td>Positive Affect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>$b = -.001$</td>
<td>$b = -.001$</td>
<td>$b = -.002$</td>
<td>$b = -.002$</td>
</tr>
<tr>
<td>Support</td>
<td>$b = .014$</td>
<td>$b = .012$</td>
<td>$b = .008$</td>
<td>$b = .011$</td>
</tr>
<tr>
<td>Stress × Support</td>
<td>$R^2 = 3.1^{*}$</td>
<td>$R^2 = 1.5$</td>
<td>$R^2 = 4.4^{**}$</td>
<td>$R^2 = 1.2$</td>
</tr>
<tr>
<td>Marital Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>$b = -.043$</td>
<td>$b = -.024$</td>
<td>$b = -.008$</td>
<td>$b = -.001$</td>
</tr>
<tr>
<td>Support</td>
<td>$b = .219^{***}$</td>
<td>$b = .141^{**}$</td>
<td>$b = .268^{***}$</td>
<td>$b = .194^{**}$</td>
</tr>
<tr>
<td>Stress × Support</td>
<td>$R^2 = 0.0$</td>
<td>$R^2 = 0.2$</td>
<td>$R^2 = 1.9$</td>
<td>$R^2 = 0.4$</td>
</tr>
</tbody>
</table>

Notes: All analyses controlled for caregivers' dispositional optimism, age and household income, and parent's impairment; $b$ = Unstandardized regression coefficient representing a main effect of support when significant; $R^2$ = Percent change in variance accounted for representing a buffering effect of support when significant. *p < .05; **p < .01; ***p < .001.
main effect of caregiving stress was detected only in the analysis of depression. A main effect was found for personal emotional support only in the analysis of marital satisfaction. A buffering effect was detected only in the analysis of positive affect.

Further analysis of this interaction effect indicated that the slope of positive affect on caregiving stress was not significant at one standard deviation from the mean. However, the slope was significantly different from zero at 1.5 standard deviations above \( b = -.022 \) the mean but not below the mean \( b = .019 \). The sign of the significant coefficient suggested that as caregiving stress increased, positive affect decreased for those receiving a high amount of support. This finding was opposite that predicted by the buffering hypothesis.

The findings for the models with husbands’ reports of personal emotional support are presented in the second column of Table 2. These findings were similar to those found in the models for caregivers’ reports. The only difference in the pattern of significance was that no buffering effect was detected in the analysis of positive affect.

For caregivers’ reports of secondary emotional support (the third column), a main effect of caregiving stress was found only in the analysis of depression. A main effect of secondary emotional support was detected only in the analysis of marital satisfaction. A buffering effect of secondary emotional support was found only in the analysis of positive affect.

Further analysis of this interaction effect indicated that the slope of positive affect on caregiving stress was significant at one standard deviation above \( b = -.020 \) but not below \( b = .016 \) the mean. The sign of the significant coefficient suggested that as caregiving stress increased, positive affect decreased for those receiving a high amount of support. Again, this finding was opposite that predicted by the buffering hypothesis.

In the models examining husbands’ reports of secondary emotional support (the last column of Table 2), the pattern of significance was similar to that for the models with caregivers’ reports. The only difference in the pattern of significance was that no buffering effect was detected in the analysis of positive affect.

**Instrumental Support**

In the models testing caregivers’ reports of personal instrumental support (see Table 3), a main effect of caregiving stress was found only in the analysis of depression. A main effect of personal instrumental support was detected only in the analysis of marital satisfaction. In addition, one buffering effect of personal instrumental support was found in the prediction of positive affect.

Further analysis of this interaction effect indicated that the slope of positive affect on caregiving stress was not significant at one standard deviation from the mean. This slope was significant, however, at 1.5 standard deviations above \( b = -.025 \) and below \( b = .026 \) the mean. The signs of these coefficients suggested that as caregiving stress increased, positive affect decreased for those receiving a high amount of support, whereas for those receiving a low amount of support, positive affect increased. As before, this finding was opposite that predicted by the buffering hypothesis.

The findings for husbands’ reports of personal instrumental support were similar to those for caregivers’ reports. However, unlike caregivers’ reports, no main effect of personal instrumental support was found in the prediction of marital satisfaction. As with caregivers’ reports, decomposi-

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**Table 3. Summary of Findings of Effects for Instrumental Support**

<table>
<thead>
<tr>
<th>Well-Being/Predictors</th>
<th>Caregivers’ Reports</th>
<th>Husbands’ Reports</th>
<th>Caregivers’ Reports</th>
<th>Husbands’ Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical Health</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>( b = -.007 )</td>
<td>( b = -.006 )</td>
<td>( b = -.006 )</td>
<td>( b = -.010 )</td>
</tr>
<tr>
<td>Support</td>
<td>( b = -.005 )</td>
<td>( b = -.037 )</td>
<td>( b = -.042 )</td>
<td>( b = -.069^{**} )</td>
</tr>
<tr>
<td>Stress ( \times ) Support</td>
<td>( R^2 = 0.1 )</td>
<td>( R^2 = 0.3 )</td>
<td>( R^2 = 3.1^{*} )</td>
<td>( R^2 = 3.7^{*} )</td>
</tr>
<tr>
<td><strong>Depression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>( b = .212^{***} )</td>
<td>( b = .216^{***} )</td>
<td>( b = .223^{***} )</td>
<td>( b = .223^{***} )</td>
</tr>
<tr>
<td>Support</td>
<td>( b = .124 )</td>
<td>( b = .246 )</td>
<td>( b = .028 )</td>
<td>( b = -.004 )</td>
</tr>
<tr>
<td>Stress ( \times ) Support</td>
<td>( R^2 = 0.8 )</td>
<td>( R^2 = 0.7 )</td>
<td>( R^2 = 0.3 )</td>
<td>( R^2 = 0.3 )</td>
</tr>
<tr>
<td><strong>Positive Affect</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>( b = -.001 )</td>
<td>( b = .000 )</td>
<td>( b = -.002 )</td>
<td>( b = -.002 )</td>
</tr>
<tr>
<td>Support</td>
<td>( b = -.018 )</td>
<td>( b = -.027 )</td>
<td>( b = -.006 )</td>
<td>( b = .008 )</td>
</tr>
<tr>
<td>Stress ( \times ) Support</td>
<td>( R^2 = 4.5^{**} )</td>
<td>( R^2 = 3.2^{*} )</td>
<td>( R^2 = 2.2^{*} )</td>
<td>( R^2 = 4.7^{**} )</td>
</tr>
<tr>
<td><strong>Marital Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress</td>
<td>( b = -.015 )</td>
<td>( b = -.012 )</td>
<td>( b = -.012 )</td>
<td>( b = -.003 )</td>
</tr>
<tr>
<td>Support</td>
<td>( b = .164^{**} )</td>
<td>( b = .114 )</td>
<td>( b = .193^{***} )</td>
<td>( b = .122^{**} )</td>
</tr>
<tr>
<td>Stress ( \times ) Support</td>
<td>( R^2 = 0.7 )</td>
<td>( R^2 = 0.7 )</td>
<td>( R^2 = 0.1 )</td>
<td>( R^2 = 0.0 )</td>
</tr>
</tbody>
</table>

**Notes:** All analyses controlled for caregivers’ dispositional optimism, age and household income, and parent’s impairment; \( b = \) Unstandardized regression coefficient representing a main effect of support when significant; \( R^2 = \) Percent change in variance accounted for representing a buffering effect of support when significant.

\*\( p < .05; **p < .01; ***p < .001. \)
tion of the interaction effect for positive affect yielded a finding opposite that predicted by the buffering hypothesis.

For caregivers' accounts of secondary instrumental support, a main effect of caregiving stress was found only in the analysis of depression. A main effect of secondary instrumental support was found only in the analysis of marital satisfaction. A buffering effect of secondary instrumental support was found in the analysis of physical health. A marginal ($p = .06$) buffering effect was detected in the analysis of positive affect.

Further analysis of the first interaction effect indicated that the slope of physical health on caregiving stress was significantly different from zero at 1.5 standard deviations below the mean ($b = -.042$), but not above the mean ($b = .030$). The sign of the significant coefficient suggested that as caregiving stress increased, physical health decreased for those receiving a low amount of support. This finding was in accord with the buffering hypothesis.

Further analysis of the remaining interaction effect indicated that the slope of positive affect on caregiving stress was not significantly different from zero even at two standard deviations above or below the mean. However, the signs of the coefficients were in the same direction as the previous significant interaction effects for positive affect, and thus, were opposite that predicted by the buffering hypothesis.

For husbands' reports of secondary instrumental support, the pattern of findings was almost identical to that for caregivers' reports. Further analysis of the interaction effect indicated that the slope of physical health on caregiving stress was significantly different from zero at one standard deviation below the mean ($b = -.041$), but not at one standard deviation above the mean ($b = .021$). This finding was in accord with the buffering hypothesis. One difference in the pattern of significance was that the interaction of stress and secondary instrumental support which was only marginally significant for caregivers' reports was significant for husbands' reports beyond the .01 level. Further analysis of this interaction effect indicated that the slope of positive affect on caregiving stress was significant at one standard deviation above ($b = -.022$) but not below ($b = .019$) the mean. This finding was opposite that predicted by the buffering hypothesis.

DISCUSSION

Findings from the present investigation revealed evidence for both the main effect and buffering effect models of support, and these relationships emerged even after controlling for caregivers' optimism, age and household income as well as parent's impairment. The model that was supported, however, depended largely on which aspect of caregivers' well-being was considered. Results further indicated moderate to high association between caregivers' and husbands' accounts of support, and evidence for the effects of support on well-being was similar across both partners' perspectives.

The buffering effect model was supported only in analyses of caregivers' physical health. Although interaction effects were detected in analyses of positive affect, the direction of these effects was opposite to that predicted by the buffering hypothesis. Evidence for the main effect model was found in nearly all analyses of marital satisfaction. No significant effects of support were detected in the analyses of depression.

In regard to observed buffering effects, instrumental support to the parent, as reported by both caregivers and husbands, was found to buffer the relationship between caregiving stress and caregivers' physical health. Consistent with theories of social support (Cohen & Wills, 1985), those caregivers whose husbands provided less instrumental support to the impaired parent experienced significantly poorer health at higher levels of stress. The finding that support can enhance physiological functioning has been reported in many previous examinations of social support (e.g., Cassel, 1976; Cohen, 1988), as well as in studies of support to caregivers (e.g., Uchino, Kiecolt-Glaser, & Cacioppo, 1992).

Both theory and empirical research have suggested that the support provided by others can have an effect on health (Cohen, 1988). Support from others may prevent or reduce biological responses to stress that influence disease. In addition, support may benefit physical health by providing a distraction from the problem or by facilitating healthful behaviors (Cohen, 1988). It should be noted that the detection of buffering effects in the analyses of health was restricted to only one type of support, secondary instrumental support. This limited support for the buffering hypothesis in the analysis of health may, in part, be due to the fact that these caregivers were in middle age and were generally in good health.

For positive affect, the significant interaction effects were in the direction opposite to that predicted by theories of support as a buffer of stress. Such effects have been referred to as "reverse buffering" (e.g., Coyne & Bolger, 1990). Our findings generally indicated that those caregivers who received larger amounts of support experienced less positive affect at higher levels of stress.

One explanation for these findings may lie in the attributions caregivers make about such help. It has been suggested that women who highly value their ability to care for others may experience guilt when they are unable to do so (Stoller & Pugliesi, 1989). Thus, husbands’ assistance may have symbolized to caregivers their inability to fulfill all their roles responsibly, resulting in less positive affect.

The strongest evidence for the main effect model was found in the analyses of marital satisfaction. A significant main effect was detected for all four types of support as reported by caregivers, and for three of the four as reported by husbands (all but instrumental support to the caregiver). Although in some analyses the overall model was not significant at the .05 level, the pattern of significant findings was identical to those where the overall model was significant. This pattern may suggest that husbands’ provision of support conveys their feelings of caring and concern, resulting in caregivers being more satisfied with their marriage, regardless of the amount of caregiving stress they experience.

These findings are consistent with the suggestion of others that family members can be drawn closer together through their provision of care to an impaired older family member (e.g., Stoller & Pugliesi, 1989).

The consistent relationship detected between support and marital satisfaction is in accord with findings in the larger
literature on marital satisfaction. In studies of housework (e.g., Erickson, 1993; Hochschild, 1989; Suitor, 1991) and employment (e.g., Vannoy & Philliber, 1992) as well as in a study of caregiving to parents with dementia (Suitor & Pillemer, 1994), support from husbands emerged as a predictor of wives' satisfaction with the marriage. The findings from the present study as well as those in the more general literature on marital quality suggest that the determination of marital satisfaction is closely tied to the couples' exchanges of support.

The pattern of findings for marital satisfaction in the present study may be due to the fact that husbands were the only source of support considered. It has been shown that well-being specific to a given domain of a person's life may be more influenced by sources of support within that domain than by sources from other domains (LaRocco et al., 1980). As such, it seems reasonable that, regardless of the amount of stress experienced, caregivers' satisfaction with their marriage would be more strongly related to husbands' provision of help than would other general indicators of caregivers' mental and physical health.

An alternative to the hypothesized causal order whereby the receipt of social support precedes changes in well-being is the suggestion that those individuals who were healthier and more satisfied with their marriage may have been better able to mobilize and utilize social support. It could also be argued that women who are more unhappy as a result of the stress of caregiving seek more assistance with their caregiving responsibilities than do women who are less unhappy. The cross-sectional design of the present investigation precludes the resolution of these competing hypotheses. Findings from longitudinal studies, however, provide evidence to support assertions about causal effects in both directions (e.g., Clipp & George, 1990; Cohen & Wills, 1985).

Despite the significant findings indicating a relationship between support and three indices of well-being, no evidence of buffering effects or main effects of support was detected in the analyses of depression. Although both main effects and buffering effects of support on depression have been shown in the larger social support literature, the lack of significant findings here is consistent with previous research examining the association between support and caregivers' depression (Stoller & Pugliesi, 1989; Stommel et al., 1990). Given that caregivers to older adults often report elevated levels of depressive symptomatology, especially female caregivers (cf. Schulz et al., 1990), it seems that support from others does little to offset the psychological distress associated with the provision of care.

The inclusion of husbands' reports in the present study offers advantages over previous research focusing solely on caregivers' self-report of support. Given the generally strong association between caregivers' and husbands' accounts of support, confidence that these reports may have reflected actual supportive transactions is enhanced. Furthermore, because the effects on well-being based on husbands' reports of support were highly consistent with those based on caregivers' reports, concerns that the effects of support are due simply to shared method variance are reduced.

In regard to the association between caregivers' and husbands' accounts of support, the magnitude of the coefficients indicates that greatest correspondence was found for instrumental support provided to the parent, whereas somewhat less correspondence was found for emotional support to the caregiver. This pattern of findings may be due to the fact that a husband's efforts to provide tangible support to a third party was more apparent to both partners than his attempts to provide emotional support to his spouse. Less correspondence between partners' reports of support to the caregiver could be due either to support provided by the husband which was not recognized by his wife (e.g., Bolger, Kessler, & Schilling, 1990), or due to intended support that was not effectively enacted. Despite variation in the levels of association observed across the different types of support, however, sufficient agreement was obtained so that caregivers' and husbands' accounts of support operated similarly in most analyses.

Caregivers' dispositional optimism was incorporated into the study design on the basis of previous research which suggested that it may confound the links between support and well-being (Scheier & Carver, 1992; Taylor et al., 1992). Although optimism was related to three indices of well-being and to the interaction of stress and caregivers' report of personal emotional support, it was not related to any other predictor variable. As such, optimism generally did not function to confound the effects of support on well-being in the present study.

Optimism did, however, operate to suppress the relationships among stress, support, and well-being in that its exclusion from the models decreased the associations among these variables. This was most evident in the analyses of positive affect where previously significant interaction effects were reduced to nonsignificance when optimism was not controlled. Although optimism did not act as a confound as was anticipated, its inclusion did indeed result in a better specified model.

In addition to the cross-sectional nature of the study design, another limitation may be the generalizability of the findings. The fact that all respondents were self-selected and only women whose husbands also participated in the study were included in the analyses may raise some concern about the representativeness of the sample. Because the caregivers whose husbands participated differed in several important ways (e.g., generally reported more support, were more satisfied with their marriage, and were more optimistic) from those whose husbands did not participate, it is not known to what extent the present findings would pertain to women with fewer psychosocial resources.

Our study extends previous research on support to caregivers in three important ways. First, it specified the source of support as well as its intended receiver, differentiated support by its content, and matched it with the stressor for which the support was offered. Second, because the perspectives of both caregivers and their husbands were included, increased confidence can be placed in the demonstrated relationships among caregiving stress, social support, and caregivers' well-being. Third, study findings helped to identify that aspect of caregivers' well-being for which the effects of husbands' support were independent of the level of stress experienced (marital satisfaction) and those for which the detected effects of this support were contingent upon the
amount of stress encountered (physical health and positive affect). This pattern of results together with the finding that support was not always beneficial to caregivers’ well-being highlight the complexity of supportive relationships in the context of caregiving stress.

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### NOMINATION FOR EDITOR-IN-CHIEF

**The Gerontologist**

The Gerontological Society of America Publications Committee is seeking nominations for the position of Editor-in-Chief of *The Gerontologist*, for a four-year term to become effective January 1, 1997. The Editor will make appointments to the editorial board, work with reviewers and authors, and take the final responsibility for the acceptance of articles for the journal. The editorship is a voluntary position. Candidates must be members of The Gerontological Society of America and dedicated to developing a premier multidisciplinary journal.

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