Family relationships seem to be of particular importance to an aging parent's psychological well-being. Feelings of burden experienced by an adult daughter, however, may interfere with the nature of her relationship with her aging mother and may have a potentially deleterious effect on the mother. To test this hypothesis, a study was undertaken which examined the impact of two brief interventions on 37 middle-aged women and 24 of their elderly mothers. After mothers and daughters completed initial questionnaires measuring filial behavior and relationship satisfaction, daughters were assigned to either: (1) a cognitive-behavioral presentation designed to reduce the daughter's unrealistic feelings of responsibility; (2) a supportive-educational presentation designed to increase the daughter's awareness of her mother's needs; or (3) a waiting list control group. Following the interventions, mothers and daughters completed a modified version of the initially-completed questionnaire and reported any changes in the mother-daughter relationship or in the mother's well-being. The cognitive-behavioral procedure was found to be more effective than either the supportive-educational procedure or the no-treatment control condition in reducing the daughter's burden, improving the mother-daughter relationship, and decreasing the mother's loneliness. This study provides support for a social exchange perspective for understanding the quality of the mother-daughter relationship in later life. (NB)
RELIEVING FEELINGS OF BURDEN
AMONG WOMEN WITH ELDERLY MOTHERS

Andrew E. Scharlach, Ph.D. ¹
University of Southern California

¹ Assistant Professor, School of Social Work, University of Southern California, University Park, Los Angeles, CA 90089-0411.
ABSTRACT

It was hypothesized that feelings of burden experienced by an adult daughter are likely to interfere with the nature of her relationship with her aging mother, and have a potentially deleterious effect on the mother. To test this proposition, a study was devised, which examined the impact on 37 middle-aged women and 24 of their elderly mothers of two brief interventions: 1) a cognitive-behavioral presentation designed to reduce the daughter’s unrealistic feelings of responsibility, and 2) a supportive-educational presentation designed to increase the daughter’s awareness of her mother’s needs. It was found that the first procedure was more effective than the second procedure or a no-treatment control condition in reducing the daughter’s burden, improving the mother-daughter relationship, and decreasing the amount of loneliness experienced by the elderly mother.
A typical pattern as adults become elderly is that they have greater contact with family members (Schulman, 1975; Willmott & Young, 1960). Most older adults live near their adult children, have frequent contact with at least one of those children (Cantor, 1975; Shanas, 1962), and are particularly likely to rely on an adult daughter for physical and emotional support (Robinson & Thurnher, 1979), especially when the older adult is widowed (Brody, 1981; Lopata, 1973).

Family relationships in later life seem to be of particular importance to an aging parent's psychological well-being. Harmonious relationships provide affection, approval, and understanding, which have been identified as potential contributors to feelings of security, social competence and personal worth (Conner et al., 1979). Satisfaction with family relationships has been shown to have a greater impact on overall life satisfaction than income, satisfaction with standard of living, or satisfaction with health (Medley, 1976), particularly for elderly women (Watson & Kivett, 1976). Moreover, good relationships with grown children and other family members may help to protect an older adult against feelings of loneliness (Berant & Medalic, 1978; Brown, 1960).

The potential salutary impact of filial relationships in later life does not seem to be associated with the actual amount of help that is provided. Most researchers have found no
significant relationship between the amount of contact or assistance and the parent's psychological well-being, as measured by morale (Arling, 1976; Fiore et al., 1982; Lee, 1979), life satisfaction (Weishaus, 1979), or loneliness (Arling, 1976).

Instead, the nature of the relationship seems to be more important. A secondary analysis of data from elderly respondents to the 1974 University of Chicago National Opinion Research Center Survey, for example, found that the satisfaction received from interacting with relatives was "more important than, and independent of, the frequency of such interactions for explaining variations in the life satisfaction of older persons" (Duff & Hong, 1982, p. 429). Moreover, the highest levels of life satisfaction belonged to those individuals who received the greatest satisfaction from their relationships and also reported the lowest frequencies of interaction (Duff & Hong, 1982). Other researchers have found virtually no overall correlation between the nature and amount of parent-child interaction in later life (e.g., Adams, 1968; Baruch & Barnett, 1983).

The lack of symmetry between relationship satisfaction and frequency of interaction has been explained utilizing exchange theory (e.g., Dowd, 1975; Duff & Hong, 1982). From this perspective, the more contact and assistance a daughter provides her aging mother, the more likely she is to believe that her inputs outweigh her benefits, resulting in a feeling of burden. Adams (1968), for example, found that those adults who reported the greatest imbalance in the amount of assistance given to and received from their parents also reported experiencing the greatest strain in their filial relationships.
When an adult daughter is dissatisfied, the quality of her relationship with her elderly mother is likely to suffer, thereby affecting the mother, as well. Bengtson and his colleagues, for example, have found a significant correlation \((r=.37)\) between the ratings of adults and their aging parents regarding the affectual quality of their relationship (Bengtson, 1984). Evidence of a daughter's dissatisfaction may be particularly detrimental to an elderly widow, who is apt to rely heavily upon her daughter for emotional support (Lopata, 1973), in response to the increased feelings of loneliness and unhappiness which seem to follow the loss of a husband (Berg et al., 1981; Harris & Associates, 1975; Kivett, 1979; Tunstall, 1967).

Sources of a Daughter's Discomfort

This study was concerned with two potential sources of discomfort which can affect a daughter's relationship with her aging mother: 1) perceived role conflicts (e.g., as a result of competing obligations), and 2) unmet role expectations (e.g., as a result of unrealistic feelings of responsibility).

Conflicts among competing obligations can increase the perceived cost of interacting with an aging mother, and thereby promote feelings of burden. This may be particularly true for a middle-aged woman, whose multiple commitments -- e.g., to a job, a husband, children, and an aging parent -- often place greater demands on her time, energy and resources than at any other period in her life (Brody, 1981).

The frustration and resentment that can be engendered by
such role conflicts (Goode, 1960) have been described in a number of recent anecdotal and clinical reports (e.g., Brody, 1981, 1983; Bumagin & Hirn, 1982; Silverman et al., 1981; Silverstone & Hyman, 1982; Weishaus, 1979). And, a longitudinal study of middle-aged adults in San Francisco found that 12 of the 29 respondents who lived near their aging parents "expressed feelings ranging from irritation to exasperation and desperation about the infringements or constraints upon their lifestyle induced by (providing assistance to) the parents" (Robinson & Thurnher, 1979).

A daughter's unrealistic sense of responsibility for meeting her mother's needs can compound perceived role conflicts, exacerbating her feeling of discomfort. Moreover, to the extent that she is unable to fulfill unrealistic expectations, a daughter is likely to see herself as violating communal norms of mutual responsiveness, which prescribe that individuals in close personal relationships should strive to meet one another's perceived needs, without concern for the personal costs involved (Clark & Mills, 1979). Failure to satisfy an elderly mother's perceived needs is apt to be accompanied by guilt feelings (e.g., Berkman & Houser, 1982; Blenkner, 1965; Robinson & Thurnher, 1979), which can increase a daughter's dissatisfaction with the relationship (Clark, 1982).

The Present Study

This study represented an empirical test of two procedures for relieving an adult daughter's feelings of burden related to perceived inequity and unmet role expectations. Furthermore, this
study examined whether a reduction in a daughter's discomfort would be associated with an improvement in the mother-daughter relationship, and a decrease in her mother's unhappiness and loneliness.

Intervention A utilized a novel cognitive-behavioral presentation which was developed for this study. This cognitive-behavioral intervention assisted daughters to modify unrealistic expectations regarding their responsibilities for their aging mothers and encouraged them to interact with their mothers in a manner which promoted their mothers' self-reliance and their own emotional gratification. From a social exchange perspective, it was predicted that decreased unnecessary assistance and increased personal benefit should reduce a daughter's sense of inequity and thereby improve the quality of the relationship. Moreover, any resulting decrease in the mother's reliance on the daughter should also have secondary benefits for the mother, due to the association which has been found between personal control and psychological well-being among older adults (e.g., Langer & Rodin, 1976; Schulz, 1976). Even if this intervention improved the relationship but actually reduced the amount of assistance a daughter provided, it should be beneficial rather than harmful to her mother, since the nature of the mother-daughter relationship, rather than the amount of contact and assistance, seems to be the more important factor in determining an elderly mother's well-being.

Intervention B, on the other hand, utilized a conventional supportive-educational presentation based in part on the "As
Parents Grow Older" model (Silverman et al., 1981). This supportive intervention informed daughters about the problems experienced by older adults and encouraged them to interact with their mothers in a manner which best met their mother's need for assistance. It was predicted that increased sensitivity to the mother's needs should somewhat improve the quality of the relationship. However, from a social exchange perspective, any resulting increase in the amount of assistance a daughter provided would probably be associated with an increased perception of inequity, potentially offsetting any improvement in the mother-daughter relationship.

In accordance with the rationale presented above, it was predicted that intervention A would be more effective than intervention B in a) reducing the amount of distress a daughter experienced as a result of her interactions with her aging mother, b) improving the mother-daughter relationship, and c) improving her elderly mother's psychological well-being.

METHOD

Subjects

The subjects were 37 women between the ages of 38 and 62 (mean age = 50), who responded to notices advertising "an experimental educational experience which might improve the relationships of adult daughters and their elderly mothers." Participants were accepted for the study only if their mothers were widowed, resided in the local metropolitan area, and were able to function independently. All of the women were Caucasian;
21 were Jewish, 8 were Protestant, 3 were Catholic, and 5 had no religious preference. 35 of the 37 women had finished high school, and 21 of them had also finished college.

In 24 of the 37 cases, the daughters indicated that it would be possible also to interview their widowed mothers. The mothers ranged in age from 69 to 92 (mean age = 78), and did not require assistance with more than one of the physical activities of daily living (e.g., bathing, eating, ambulating independently). However, many of these elderly women did need help with some of the instrumental activities of daily living (e.g., house cleaning, shopping, transportation), which have been identified by Lawton and his colleagues (Lawton et al., 1982).

Measures
Each of the 37 daughters completed a questionnaire containing a number of measures of filial behavior and relationship satisfaction. To assess the amount of assistance she was currently giving her mother, each daughter was asked to rate, on a six-point scale, how frequently she actually provided each of 21 possible types of physical and emotional support which a community-dwelling older adult may need (as identified by Cicirelli (1981) and Lawton et al. (1982)). In addition, each daughter rated how often she felt that she was not doing as much for her mother as she should, and also how often she felt that she was already doing more for her mother than was fair, given her other obligations.

A global assessment of relationship quality was obtained from responses to a modified form of Bengtson's Affectual
Solidarity Scale (Bengtson & Black, 1973), which included additional questions such as "How close do you feel to your mother?" and "How much do you enjoy your visits together?" Zarit's Burden Interview (Zarit and Zarit, 1982) was utilized to assess strain, including feelings of guilt and resentment, which daughters might experience as a result of their supportive role.

The 24 mothers were also asked to complete a modified version of the Affectual Solidarity Scale, reworded to reflect the mother's perspective. In addition, they rated their current level of happiness, on a three-point scale, and indicated how frequently they felt lonely, on a four-point scale. A loneliness measure was included here because of its potential sensitivity to interpersonal distress, and because loneliness in the elderly has been found to correlate with signs of psychological distress, such as anxiety, dissatisfaction and depression (Perlman et al., 1978).

Procedure

Following completion of these initial questionnaires, the 37 daughters were randomly assigned to one of three conditions, after stratifying for factors which might affect their availability to their aging mothers: 1) whether the daughter was employed full-time; 2) whether she was married; 3) whether she had dependent children living at home; and 3) whether she had siblings in the area. Because of differential drop-out rates, the group assignment process actually resulted in 14 participants in condition A, 13 in condition B, and 10 in condition C. The group means did not differ significantly on any of the variables.
under investigation.

The daughters assigned to condition A were invited to attend a series of two workshops, led by the investigator, which provided a cognitive-behavioral intervention designed to help participants clarify and reevaluate their existing attitudes regarding appropriate filial behavior. In particular, this cognitive-behavioral intervention advised these daughters that older persons benefit from the opportunity to maintain as much choice and control over their own lives as possible, and that well-meaning assistance which fosters unnecessary physical and psychological dependency can be harmful. The daughters were encouraged to recognize the limitations which may exist in their ability to meet their mother's needs, and to reassess unrealistic expectations which can promote dissatisfaction and increased dependency. In addition, the normal developmental tasks of mid-life were discussed, and it was suggested that participants attempt to interact with their mothers in such a way that the independence and emotional needs of both would be met to the maximum degree possible.

The daughters assigned to condition B, on the other hand, attended two workshops, also led by the investigator, which provided a supportive educational experience designed to help participants be more sensitive to their mother's needs. The physical, social and status losses of the later years were discussed, and the daughters were encouraged to consider how they might best assist their mothers to fill the gaps which can result from such losses. It was suggested that participants attempt to
interact with their mothers in such a way that they would feel secure that they were meeting their mother's needs in an adequate manner. Thus, intervention B primarily concerned the needs and limitations of the mother, while intervention A primarily concerned those of the daughter.

The daughters assigned to condition C were placed on a waiting list, and served as a control group for this study.

For a period of six weeks following the workshops, each participant was contacted on a weekly basis by telephone, to check her progress and to reinforce the appropriate intervention. At the end of these six weeks, all daughters and mothers responded to a modified version of the questionnaire they had initially completed, and indicated whether they had observed any changes in their relationship or in the mother's well-being. In addition, they were debriefed regarding their experiences, in light of the hypotheses and conditions of the study.

RESULTS

INSERT TABLE 1 ABOUT HERE

Pre-Treatment Correlations

Table 1 shows the intercorrelations among selected pre-treatment characteristics of the daughters and mothers. As shown in Table 1, the daughters who experienced greater burden reported poorer relationships with their aging mothers, as indicated by their scores on the Affectual Solidarity Scale ($r=-.57, p<.001$). In addition, their mothers reported themselves as being lonelier.
and less happy (r = -.34, p = .06). Daughters who believed that they were doing more for their mothers than was fair, given their other obligations, were particularly likely to feel burdened (r = .74, p < .001) and to have poor filial relationships (r = -.65, p < .001). The amount of contact and assistance that the daughters provided was significantly related to their reported levels of burden (r = .41, p = .004), but not to the levels of affectual solidarity reported by themselves or their mothers, nor to the mothers' reports of loneliness and happiness.

These pre-treatment findings confirmed that it was appropriate to attempt to improve the mother-daughter relationship and the mother's psychological well-being by reducing the burden experienced by these daughters.

Pre-Treatment Comparisons

Table 2 shows the mean level for each variable, before and after each treatment. One-way (1x3) analyses of variance indicated that the three groups differed significantly prior to the intervention with respect to the mothers' happiness (F = 7.62, p = .004), but not with respect to any other variable in Table 2 (all F's < 2.50, p > .10). Because of the one between-group difference that did exist before the intervention, difference scores were used to examine the amount of change that resulted from the various experimental manipulations.

Post-Treatment Comparisons
Post-treatment differences among the three conditions were analyzed with one-way (1x3) analyses of variance, using the change scores for each of the variables. In addition, changes within each condition were analyzed using paired t-tests.

--- INSERT TABLE 3 ABOUT HERE ---

**Reported Behaviors.** As shown in Table 2, the actual amount of assistance given did not change significantly for any of the intervention conditions (all t's < 1.20, p > .25). However, as Table 3 indicates, daughters who reduced the amount of assistance they were providing tended also to reduce their feeling of burden (r=.29, p=.04) and increase their reported affectual solidarity (r=-.32, p=.03).

Table 2 provides evidence that the daughters in the cognitive-behavioral condition (A) were significantly less likely than previously to feel that they did more for their mothers than was fair, given their other obligations (t = -2.48, p<.05); but, this change was not strong enough to produce an overall significant F. In addition, a decrease in a daughter's feeling that she was doing more than was fair was likely to be accompanied by a decrease in the amount of burden she was experiencing (r = .39, p<.005), as shown in Table 3.

**Discomfort.** The daughters in Condition A showed a significant decrease in burden (t = -3.75, p = .002). No change occurred for the daughters in the supportive-educational condition (B) or the control condition (C). An 1x3 ANOVA showed that the differences among the three conditions were marginally significant.
(F = 2.95, p = .06). Thus, although the daughters' actual behavior did not change significantly, their discomfort over it (guilt, resentment, etc.) did drop as a result of the intervention.

**Relationship Quality.** As shown in Table 2, a significant increase in the daughters' affectual solidarity scores was produced by Condition A (t = 3.61, p = .003) as well as Condition B (t = 2.34, p = .04). No change occurred in Condition C. An 1x3 ANOVA, comparing the change scores for the three groups, reached marginal significance (F = 2.37, p = .10). The change in the daughters' affectual solidarity scores was correlated with the change in their mothers' scores (r = .40, p = .04), so this measure was independently confirmed by the mothers' judgments.

In order to improve the stability of the measure, the scores on the Affectual Solidarity Scale were combined with the scores on the Burden Interview. This composite measure (the burden score minus the affectual solidarity score) increased significantly from pre-test to post-test in the cognitive-behavioral condition (A) (t = 4.35, p = .001), but not in the supportive-educational condition (B) or the control condition (C). An 1x3 ANOVA demonstrated significant differences among the change scores for this measure of overall relationship quality (F = 3.93, p = .03).

In addition, the daughters in Condition A were more likely than those in Condition B or C to indicate that their interactions with their mother had become more rewarding during the intervention period (X² = 12.3, p < .01). More rewarding relationships were indicated by 12 of the 14 participants in Condition A, 4 of the 13 participants in Condition B, and 2 of the
10 participants in Condition C.

**Mothers' Psychological Well-Being.** A marginally significant change occurred in the loneliness ratings of the mothers of daughters in the cognitive-behavioral condition (A) \((t = -2.05, p = .08)\), as shown in Table 2. There were no changes in the reported loneliness of the mothers in the supportive-educational condition (B) or the control condition (C). An ANOVA performed on the change scores was marginally significant \((F = 2.68, p = .09)\). There were no changes in the mothers' ratings of their happiness for any of the three intervention conditions.

The daughters were asked whether they had observed any changes in their mother's level of happiness or loneliness during the intervention period. A significant decrease in their mother's loneliness was reported by the daughters in Condition A \((t = -4.18, p < .01)\), but not by the daughters in Condition B or C. No significant changes in their mother's happiness were reported by any of the three groups of daughters.

The mothers were asked whether they had noticed any changes in their relationships with their daughters during the intervention period. Most of the mothers had not. In those few cases where changes were mentioned, they were as often positive as negative.

**DISCUSSION**
This study has examined the impact of two brief interventions designed to relieve some of the feelings of strain reported by women with elderly mothers. One intervention (Condition A) involved a cognitive-behavioral presentation, which assisted participating daughters to clarify unrealistic expectations regarding their filial responsibilities and to interact with their mothers in a manner which promoted mutual satisfaction and parental self-reliance. The other intervention (Condition B) involved a supportive-educational presentation, which informed participants about the problems experienced by older adults, and assisted them to identify ways in which they might best meet their mother's need for assistance.

Results indicated that the cognitive-behavioral intervention was significantly more effective than the supportive-educational intervention or a control condition in decreasing the daughter's burden, improving the quality of the mother-daughter relationship, and reducing the mother's feeling of loneliness.

These findings were consistent with pre-treatment correlations, which indicated that poorer relationships and decreased maternal psychological well-being were apt to occur when a daughter experienced discomfort in her interactions with her aging mother, particularly when she believed that she was doing more for her mother than was fair, given her other obligations.

The superiority of the cognitive-behavioral approach utilized here evidently resulted from its attention to the needs and limitations of the daughter, rather than only those of the
elderly mother. In so doing, this approach encouraged mother-daughter interactions which were potentially salutary for both participants: 1) By helping the daughter to modify unrealistic attitudes regarding filial responsibility, it may have reduced the pressure she felt as a result of competing role demands. 2) By emphasizing the importance of the mother's self-reliance, it may have inhibited unnecessary dependency, which can be frustrating for a daughter and destructive for the psychological well-being of an elderly mother. 3) By explaining that feelings of burden can be deleterious for both a daughter and a mother, it may have given the daughter tacit permission to alter her filial attitudes and behavior so as to decrease her own feelings of discomfort. In short, the cognitive-behavioral intervention evidently altered the daughter's filial expectations and behavior, and thereby reduced the perceived costs and perceived inequity associated with her interactions with her mother.

These changes in a daughter's attitudes and behavior did not negatively affect her mother's happiness or loneliness. In fact, there was evidence that the mothers whose daughters received the cognitive-behavioral presentation were less lonely than prior to the intervention. Even in those cases where the daughters actually reduced the amount of contact and assistance they were providing, their mothers did not report any significant change in their happiness or loneliness, or in the quality of the relationship, at least during the relatively brief period of this study. These findings suggest that it is possible to decrease a daughter's discomfort, even if it involves a reduction in the
assistance she gives her mother, without any immediate adverse effect on the mother's psychological well-being. Additional research is needed to investigate any long-term implications.

This study provides support for a social exchange perspective for understanding the quality of mother-daughter relationships in later life. As these findings show, a mother-daughter relationship which involves relatively high costs for an adult daughter (e.g., conflicts with her other role responsibilities, limits her other opportunities), is likely to produce feelings of distress for the daughter as well as an impairment in relationship quality. When these costs are reduced, the relationship seems to improve.

Previous empirical investigations of filial relationships from a social exchange perspective have focused primarily on the amount of contact and assistance (e.g., Lang & Brody, 1983; Thompson & Walker, 1984), and have given little attention to indicators of relationship quality. Only in anecdotal and clinical reports has there been extensive discussion of the impact of role conflict on the affectual quality of a daughter's relationship with her aging mother, and on the psychological well-being of the two women (e.g., Brody, 1981; Bumagin & Hirn, 1982; Silverstone & Hyman, 1982). The findings reported here suggest the need for increased empirical attention to qualitative, as well as quantitative, aspects of filial relationships and the factors which affect relationship quality.

Additional research is also indicated regarding the nature of filial relationships in later life and the types of interventions which might be utilized to improve them. Of
particular interest are cognitive-behavioral interventions, such as the one utilized in this study, which are designed to alter filial expectations so as to reduce burden and improve relationship quality. Such interventions should be based on an understanding of the norms and expectancies which guide filial behavior and influence the participants' affective responses to contact with one another. As yet, little is known regarding this important area (e.g., Brody et al., 1984; Seelbach & Sauer, 1977).

**Conclusion**

This study represents an important step forward in understanding and alleviating sources of strain in mother-daughter relationships in later life. Whereas other investigators have merely hypothesized that a daughter's feeling of burden can be detrimental to her relationship with her aging mother, this study has shown experimentally that it is possible to improve the affectual quality of the relationship by reducing the daughter's burden, and that the mother's psychological well-being need not suffer (and may actually improve somewhat) as a result.

Furthermore, this study has demonstrated that such salutary effects are more likely when a daughter is assisted to reduce feelings of discomfort associated with perceived role conflicts and unrealistic role expectations, rather than when she is encouraged to do more for her mother. These findings suggest that the social exchange paradigm utilized in this study may offer a particularly valuable perspective for understanding and alleviating feelings of burden in late-life filial relationships.


Clark, M.S., & Mills, J. (1979) Interpersonal attraction in


Langer, E., & Rodin, J. (1976) The effects of choice and


Schulz, R. (1976) Effects of control and predictability on the


Table 1

Intercorrelations among selected pre-treatment variables
(Pearson correlation coefficients)

<table>
<thead>
<tr>
<th></th>
<th>Daughter Burden</th>
<th>Daughter Than Fair</th>
<th>Should Do More</th>
<th>Assistance Given</th>
</tr>
</thead>
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<tr>
<td>Daughter Burden</td>
<td>xxx</td>
<td>.74***</td>
<td>.23</td>
<td>.41**</td>
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<tr>
<td>Affectual solidarity</td>
<td>-.57***</td>
<td>-.65***</td>
<td>-.34*</td>
<td>.04</td>
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<td>Mother Happiness</td>
<td>-.34+</td>
<td>-.42*</td>
<td>-.25</td>
<td>.28</td>
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<tr>
<td>Mother Loneliness</td>
<td>.35+</td>
<td>.36*</td>
<td>.29</td>
<td>-.15</td>
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+ p < .10
* p < .05
** p < .01
*** p < .001
Table 2

Variable means before and after intervention (by condition)

<table>
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<th>Intervention Condition</th>
<th>A (n=14)</th>
<th></th>
<th></th>
<th>B (n=13)</th>
<th></th>
<th></th>
<th>C (n=10)</th>
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<th></th>
<th></th>
<th>F</th>
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<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>F</td>
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<tr>
<td>Assistance given</td>
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<td>38.1</td>
<td>34.8</td>
<td>34.9</td>
<td>44.8</td>
<td>45.1</td>
<td>0.96</td>
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<td>Does more than fair</td>
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<td>2.1*</td>
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<td>2.2</td>
<td>2.9</td>
<td>2.5</td>
<td>0.46</td>
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<tr>
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<td>3.0</td>
<td>2.2</td>
<td>2.0</td>
<td>0.17</td>
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<tr>
<td>Burden</td>
<td>57.4</td>
<td>49.4**</td>
<td>57.4</td>
<td>54.3</td>
<td>58.8</td>
<td>57.6</td>
<td>2.95+</td>
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<td>3.7*</td>
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<td>0.4</td>
<td>1.4</td>
<td>1.4</td>
<td>0.70</td>
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<tr>
<td>Loneliness</td>
<td>1.9</td>
<td>1.5+</td>
<td>2.6</td>
<td>2.9</td>
<td>2.6</td>
<td>2.2</td>
<td>2.68+</td>
<td></td>
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</tr>
</tbody>
</table>

+ p < .10
* p < .05
** p < .01
*** p < .005
TABLE 3

Intercorrelations among selected pre-post change scores
(Pearson correlation coefficients)

<table>
<thead>
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<th></th>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Daughter</td>
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<td>More than fair</td>
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<tr>
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<td>xxx</td>
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<tr>
<td>Burden</td>
<td>.29*</td>
<td>.39**</td>
<td>.25+</td>
<td>xxx</td>
</tr>
<tr>
<td>Affectual Sol.</td>
<td>-.32*</td>
<td>-.12</td>
<td>.17</td>
<td>-.30*</td>
</tr>
<tr>
<td>Mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affectual Sol.</td>
<td>.10</td>
<td>.02</td>
<td>-.18</td>
<td>-.23</td>
</tr>
<tr>
<td>Happiness</td>
<td>.11</td>
<td>-.11</td>
<td>.05</td>
<td>.01</td>
</tr>
<tr>
<td>Loneliness</td>
<td>-.04</td>
<td>.06</td>
<td>.12</td>
<td>.02</td>
</tr>
</tbody>
</table>

+  p < .10
*  p < .05
** p < .01
Table 1

Variable means before and after treatment (by condition)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n=14)</td>
<td>(n=13)</td>
<td>(n=10)</td>
</tr>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>Daughter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burden</td>
<td>57.4</td>
<td>49.4</td>
<td>57.4</td>
</tr>
<tr>
<td>Relationship quality</td>
<td>3.9</td>
<td>4.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Assistance given</td>
<td>41.6</td>
<td>38.1</td>
<td>34.8</td>
</tr>
<tr>
<td>Mother</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Loneliness</td>
<td>1.9</td>
<td>1.5</td>
<td>2.6</td>
</tr>
</tbody>
</table>
Table 2

Intercorrelations among selected variables
(Pearson correlation coefficients)

Daughter

<table>
<thead>
<tr>
<th></th>
<th>Relationship Burden</th>
<th>Quality</th>
<th>Assist. Given</th>
<th>Test-Retest Reliability</th>
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<tbody>
<tr>
<td><strong>Daughter</strong></td>
<td>xxx</td>
<td>xxx</td>
<td>xxx</td>
<td>.87***</td>
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<tr>
<td>Burden</td>
<td>.57***</td>
<td>xxx</td>
<td></td>
<td>.84***</td>
</tr>
<tr>
<td>Relationship quality</td>
<td>- .35†</td>
<td>.04</td>
<td></td>
<td>.80***</td>
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<tr>
<td>Assistance given</td>
<td>.36*</td>
<td>.15</td>
<td></td>
<td>.83***</td>
</tr>
</tbody>
</table>

Mother

| Loneliness         | .35†                | -.36*   | -.15          | .83***                  |

+ p < .10
* p < .05
** p < .01
*** p < .001
Table 3

Analyses of Covariance for Burden, Relationship Quality and Mother's Loneliness

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burden (post-test)</td>
<td>Within cells</td>
<td>1557.00</td>
<td>33</td>
<td>47.18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Burden (pre-test)</td>
<td>5981.39</td>
<td>1</td>
<td>5981.39</td>
<td>126.77***</td>
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<tr>
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<td>Constant</td>
<td>59.54</td>
<td>1</td>
<td>59.54</td>
<td>1.26</td>
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<tr>
<td></td>
<td>Condition</td>
<td>321.50</td>
<td>2</td>
<td>160.75</td>
<td>3.41*</td>
</tr>
<tr>
<td>Relationship Quality (post-test)</td>
<td>Within cells</td>
<td>83.74</td>
<td>33</td>
<td>2.54</td>
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</tr>
<tr>
<td></td>
<td>Relationship (pre-test)</td>
<td>221.10</td>
<td>1</td>
<td>221.10</td>
<td>87.13***</td>
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<tr>
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<td>6.85</td>
<td>2.70</td>
</tr>
<tr>
<td></td>
<td>Condition</td>
<td>25.37</td>
<td>2</td>
<td>12.68</td>
<td>5.00*</td>
</tr>
<tr>
<td>Mother's Loneliness (post-test)</td>
<td>Within cells</td>
<td>5.49</td>
<td>20</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loneliness (pre-test)</td>
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<td>1</td>
<td>10.08</td>
<td>36.71***</td>
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<td>1</td>
<td>0.89</td>
<td>3.23</td>
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<tr>
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<td>2.99</td>
<td>2</td>
<td>1.49</td>
<td>5.44*</td>
</tr>
</tbody>
</table>

* p < .05
*** p < .001