Depression and communication processes in later life marriages

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Objective: About six hundred and fourteen elderly people married to each other, average ages 66 and 63 respectively, in long term, mature marriages, lasting on the average 36 years, completed the Marital Satisfaction Inventory, Revised – MSIr (Snyder, D.K. 1999) and the short version of the Center for Epidemiological Studies Depression Scale (Kohout, F.J., Berkman, L.F., Evans, D.A., & Cornoni-Huntley, J. (1993). The purpose of this study was to determine whether depression in one or both spouses and poor affective and problem solving communication occur together.

Methods: Husbands and wives were divided into nine groups based on their levels of depression (hlow/wlow, hmed/wmed, hhgh/whigh, hhgh/wlow, hhgh/whgh, and wlow/hmed, hmed/wlow, and hmed/whigh). Analysis of Variance was used to examine the difference in couple affective communication and problem solving scores from the MSIr (1999).

Results: The findings indicated that when husbands or wives are more depressed, both affective communication and problem solving processes are impaired for the couple. When both are depressed, affective communication and problem solving are worse than when only one is depressed, and both husband and wife communication scores are worse when one or both partners is depressed than when neither husband nor wife is depressed.

Conclusion: While these findings do not point to cause, implications for providing mental health services (including marital therapy) or couple based education groups as supports to the depressed elderly and their spouses are recommended.

Keywords: depression; communication patterns; older couples

Introduction

Beginning with Coyne’s seminal manuscript ‘Towards an interactional description of depression’ in 1976, mental health professionals have begun to recognize the powerful influence of marital process on the onset, course, and maintenance of depressive illnesses (Banawan, O’Mahren, Beach, & Jackson, 2002; Beach, 2001; Berg-Cross & Cohen, 1995; Bookwala & Franks, 2005; Burns, Sayers, & Moras, 1994; Byrne, & Carr, 2000; Coyne, 1990; Gotlib & Beach, 1995; Hinchliffe, Vaughn, Hooper, & Roberts, 1978; Hops, Perry, & Davis, 1997; Sandberg & Harper, 2000a, 2000b; Sandberg, Miller, & Harper, 2002; Sayers, Kohn, Fresco, Bellack, & Sarwer, 2001; Whisman, 2001). As a result of ongoing efforts to study and treat marital factors that influence depression, a number of clearly defined marital therapy approaches that have been proven effective in reducing depressive symptoms now exist (Alexander, Holtzworth-Munroe, & Jameson, 1994; Baucom, Shoham, Mueser, Daitto, & Stickle, 1998; Beach, 2001; Beach, Fincham, & Katz, 1998; Beckerman, 2001; Dahl, Bathel, & Carreon, 2000; Emanuels-Zuurveen, & Emmelkamp, 1996; Kung & Elkin, 2000; Leff & Everitt, 2001; Miller, Johnson, Sandberg, Stringer, & Gfeller, 2000; Prince & Jacobson, 1995; Tischman, 1997; Van Doorn, Kasl, Beery, Jacobs, & Prigerson, 1998; Yapko, 1999). Unfortunately, this marital lens has not yet been readily applied to the study of depression at all stages of the life cycle.

To date, among the vast volumes of research on depression in later life, very little focuses on marital process and its relation to this devastating illness (Futterman, Thompson, Gallagher-Thompson, & Ferris, 1995; Powers, Thompson, Futterman, Gallagher-Thompson, 2002). Because depression in later life can be complicated by the interaction between two married partners, it is vital that an ‘interactional description’ (Coyne, 1976; Sandberg & Harper, 2000b) be developed for later life couples as well (Bookwala & Franks, 2005; Bookwala & Jacobs, 2004; Sandberg, Miller, & Harper, 2002; Tower & Kasl, 1996a; Tower, Kasl, & Moritz, 1997; Whisman, Uebelacker, Tolejko, Chata, & McKelvie, 2006). The purpose of this study was to examine the differences in communication processes among mature, long-term married individuals where one or both experience various levels of depression. Specifically couples were categorized according to severity of depression and whether one or both were depressed to determine what differences in problem solving and affective communication were evident.

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The problem of depression in later life

It is widely accepted that depression is one of the most common emotional/psychological disorders found in older people in the US (Arean et al., 1993; Futterman et al., 1995; Molinari, 1991; Parashos et al., 2002). Some studies have estimated that as many as 27% of community dwelling elders report depressive symptoms (Blazer, Hughes, & George, 1987). Estimates of the prevalence of major depressive disorders in community based elders range from 3 to 36% (Arean et al., 1993; Clement et. al., 1999; Powers et al., 2002). In addition, a great deal of research now also confirms that minor or subsyndromal depression, which often goes undiagnosed, has serious negative effects on the elderly as well (Lyness et al., 2006; VanItallie, 2005). Both the National Institutes of Health (1991) and the American Psychological Association (1993) have summarized the devastating impact of depression on older adults, as well as their families and society.

The importance of understanding and addressing this illness in later life increases as America ages. Demographic projections suggest that in the next 30 years the number of Americans over the age of 65 will literally double, representing an increase of over 30 million individuals (American Association of Retired Persons, 2001). Therefore, not only is depression an extremely costly disease in later life, in terms of human suffering and money, but its influence is likely to increase substantially as the elderly population increases worldwide and especially in the United States and Western Europe.

Marital process and depression in later life

As previously mentioned, there is paucity in the literature regarding the marital process of older couples who may be experiencing depression. However, there are a few notable exceptions. Bookwala and colleagues (2004, 2005) published two articles on marital process and depression in older couples using data from the National Survey of Families and Households (NSFH). Comparing young, middle age, and older couples, Bookwala and Jacobs (2004) found that marital satisfaction mediated the link between negative marital processes and depression for older couples and that marital satisfaction was strongly related to depressed affect for older couples. In their article, Bookwala and Franks (2005) attempted to move beyond main effect research that has shown a direct link between marital quality and depression for couples across the life span. In addition to supporting the main effect in older marriages, these authors also found that ‘respondents with physical disability who were in marriages marked by higher marital disagreement reported significantly greater depressed affect than elders with similar levels of physical disability who were in less conflictual marriages’ (p. P340).

These results lend support to the groundbreaking articles written by Tower and Kasl (1995, 1996a, 1996b). Utilizing the data gathered from the National Institute on Aging’s Established Populations for Epidemiologic Studies of the Elderly (EPESE) program, these authors found that partners who are able to find the closeness they needed in marriage were less likely to be depressed and that levels of depression in one spouse influence those in the other.

These significant and independent findings in no way suggest that important biological and/or psychological factors do not play a role in the onset and course of a depressive episode, but they do show that marital process is a key player in the depression equation. In fact, it may be the couple’s ability to interact in positive ways during health and other crises that can help to moderate the effects of depressive risk factors (Sandberg & Harper, 1999, 2000a, 2000b; Sandberg, Miller, & Harper, 2002; Tower & Kasl, 1996a).

Furthermore, these findings also suggest that an understanding of marital dynamics is important for both clinicians and researchers who work with older couples. As Tower and Kasl (1996b) noted, ‘attention should be paid to the healthy spouse when his or her partner suffers adverse health changes to avert distress in both spouses; intervening with both spouses when a life event threatens one of them may be cost effective in saving both money and human suffering’ (p. 695). Also, the authors advised that family focused workers should strive to educate spouses about the potentially positive impact they could have on their partners in times of crises, ‘in effect immunizing them[elves] against stresses inevitable in old age’ (Tower & Kasl, 1996b, p. 695).

Existing research has also highlighted that the interaction between marital dynamics and depression may not be the same for older men as for older women (Sandberg & Harper, 2000a, 2000b). Specifically, Tower and Kasl (1996a, 1996b) noted that emotional distance in older marriages was particularly problematic, in terms of depression, for women. However, a clear understanding of how emotional distance or conflict impacts depressive symptoms in older men, and how closeness is communicated for older women is still unclear. Research is needed, that can highlight specific marital processes in later life that are significantly related to depressive symptoms.

Affective communication, marital process, and depression in later life

Of particular interest to the marital process and depression theory in late life marriages is the concept of affective communication. A number of researchers have looked at ways in which affective expression varies from older to younger couples and individuals (Carstensen, Gottman, & Levenson, 1995). Central to the focus of the current project is the work of

In these studies, approximately 150 couples [divided into groups of older (age 60–70) and middle aged (40–50)]; participated in three structured 15 min conversations in a laboratory setting (see Levenson et al., 1993 for a full description of the sample and project design). While discussing one of three pre-selected topics (events of the day, problem area, and pleasant topic) in each 15-min segment, the couple's autonomic and somatic physiology was recorded (Levenson et al., 1994). In addition, the entire interaction was videotaped and coded and the couples completed a self-report measure on their experience (Carstensen et al., 1995).

The overall results of these studies suggest that older couples demonstrate more positive affective communication than middle aged couples (Levenson et al., 1994). Specifically, the researchers noticed that older couples were less physiologically aroused and displayed less negative affect (anger, disgust, belligerence, and whining) during marital interaction (Carstensen et al., 1995; Levenson et al., 1994). Although the differences between partners were most pronounced in distressed or unhappy marriages, wives in both age groups were more emotionally expressive (both negative and positive) than their husbands (Carstensen et al., 1995).

In summary, when comparing their findings to similar studies of younger couples the authors noted that there is a positive trend between age and affective communication in marriage across the life span (Carstensen et al., 1995). It is also interesting to recognize the similarities among the age groups, namely that couples living in unhappy marriages appear to struggle with more negativity regardless of age/length of marriage (Carstensen et al., 1995). Nevertheless, it must be noted that the authors found the older couples seem to have developed an ability to control the emergence of the negative affect, a skill that has eluded their younger counterparts.

Ironically, in spite of this skillful research on emotional expression in mature marriages and the vast quantity of research connecting negative affective expression, distress, and depression in younger marriages, few studies have investigated the relationship of marital distress, negative affect, and depression in later life (Bookwala & Franks, 2005; Sandberg & Harper, 2000b; Sandberg, Miller, & Harper, 2002). Therefore, expanding upon the research that has been done with younger couples to include older samples is a key to establish the need for and validity of family based treatment of depression in later life.

For example, numerous studies of younger couples have shown that depressed couples display more negative affect, conflict, and tension than their non-depressed counterparts (see review article by Prince & Jacobson, 1995). Building on this basic process research, clinically focused investigators from different theoretical approaches have developed and tested marital therapies for depression (Alexander et al., 1994; Baucom et al., 1998; Beach, 2001; Beach, Fincham, & Katz, 1998; Beckerman, 2001; Dahl et al., 2000; Emanuels-Zuurveen & Emmelkamp, 1996; Gotlib & Beach, 1995; Kung, 2000; Kung & Elkin, 2000; Leff & Everitt, 2001; Liddle et al., 2002; Miller et al., 2000; Prince & Jacobson, 1995; Trapp, 1998; Whisman & Uebelacker, 1999; Yapko, 1999).

These effective and cost efficient approaches seem to be particularly helpful in cases where depression co-exists with marital discord (Leff & Everitt, 2001; Prince & Jacobson, 1995). The process of moving from basic research to designing a treatment plan and then onto efficacy studies, or what Miklowitz and Hooley (1998) call ‘a pathway from basic research to clinical trials’, now should be replicated with mature couples struggling with depression (p. 419).

**Problem solving communication and depression in later life**

A similar pattern can be observed among the studies regarding problem solving communication and depression in older and younger marriages. Although research on the importance of problem solving in the onset and treatment of depression in the lives of older individuals exists (Arean et al., 1993; Nezu, Nezu, & Perri, 1989), no research focusing on the presence, importance, or efficacy of problem solving communication in mature marriages experiencing depression could be found in the literature. Once again, this simple finding highlights the almost complete absence of an ‘interactional’ lens in studies and treatment of mature marriages (Coyne, 1976).

However, there exists among the literature on depression and marital interaction in younger marriages substantial evidence regarding the impact of problem solving communication on depression and vice versa. Both Gotlib and Beach (1995) and Prince and Jacobson (1995) have provided excellent overviews of the literature regarding marital discord models of depression, including the reciprocal relationship between problem solving and depressive symptoms. However, for the purpose of this study, only two of these articles will be discussed.

In 1985, Biglan, Hops, and Sherman and their colleagues reported findings from a study where problem-solving patterns of three groups of couples (non-depressed, marital distress with wife depression, non-marital distress with wife depression) were compared. As part of the study, all 52 of the couples were videotaped while they tried to solve two salient relationship problems in two 10-min interactions. The videotapes were then coded and the data analyzed. The results suggest couples with a depressed partner, regardless of level of distress, self-disclose less frequently and exhibit higher levels of aggressive behavior than non-depressed couples. In addition, the depressed/distressed couples displayed less facilitative behavior than all other couples.
In the second study, Kahn, Coyne, and Margolin (1985) similarly asked 14 couples with at least one partner experiencing depression and 14 non-depressed couples to engage in a 10 min discussion about a problematic marital topic. Immediately following the discussion, each partner completed a number of paper and pencil instruments. ‘Reports by depressed persons and their spouses showed remarkable agreement in indicating that both partners in these couples engaged in less constructive problem-solving and more destructive behaviour than couples without a depressed member’ (p. 457). Furthermore, the depressed couples reported higher levels of hostility, competitiveness, and distrust.

The results of these two controlled, laboratory studies suggest that difficulty in problem-solving communication, marital distress, and depression are interrelated in some way. However, there is still little clarity regarding the direction and strength of the relationship among these key variables (Burns et al., 1994; Fincham, Beach, Harold, & Osborne, 1997). This lack of clarity is particularly profound in late life marriages.

Method
The authors hypothesized that there would be significant differences in mean affective communication and problem solving scores between different marital groups based on combinations of husband’s and wife’s depression scores (low, med, high husband depression groups by low, med, high wife depression groups), even when health satisfaction is controlled for. It was further hypothesized that it would only take one partner in the couple to be depressed to negatively impact affective communication and problem solving. And finally, it was hypothesized that if both partners were clinically depressed, these same two communication processes would deteriorate even further.

Procedure
Questionnaires were mailed to 9328 addresses that had been purchased from the Donnelley Corporation, a major marketing firm. The Donnelley Corporation guaranteed that each of these addresses represented a married couple with at least one partner between the ages of 55 and 75 that had been selected at random from a sample of couples from each state in the United States. The design and purpose of the longitudinal study was to follow couples through the retirement process, for this reason an age restriction in sampling was utilized.

Each couple was sent a packet that contained two questionnaires, each a different color, pastel green for the husband and pastel yellow for the wife. The instructions requested that they complete the questionnaires individually without consulting each other. Two stamped return envelopes were included in the packet with instructions that each person should place her/his questionnaire in the envelope and mail it separately from her/his partner’s questionnaire. After 4 weeks, a follow up post card was mailed to those who had not yet responded encouraging them to do so (Dillman, 2000).

Sample
Of the 9328 mailed questionnaires, 1611 were returned. An additional 591 were returned because the addresses were bad or because the people meeting the criteria for inclusion in the study were no longer living at the address and postal forwarding had expired. Of the 1611 that were returned, 719 were unusable because these questionnaires were incomplete. Because of the stringent inclusion requirement of complete data from both a husband and a wife who are married to each other, an additional 278 surveys excluded because they were returned by either the husband or the wife but not both. This left 614 husbands and wives married to each other who were the subjects of this study. According to Dillman’s formula (1978, 1991) for determining return rates, the return rate for this sample was 24%. Such a response rate is not uncommon for a lengthy questionnaire mailed to older subjects (Kaldenberg, Koenig, & Becker, 1994; Roszkowski & Bean, 1990).

As shown in Table 1, the average age of the husbands in this sample was 66 years, and 63 years for the wives. The average length of marriage for these couples was 36 years. Seventy seven percent of the men and 74% of the women were in their first marriage; 18% of the men and 29% of the women were in their second marriage; 6% of the men and 1% of the women were in their third or more marriage. The majority of the respondents, both male and female, described themselves as White (98%). Although the majority of the respondents were Caucasian, there was substantial breadth among the sample according to religion, level of education, and annual income.

For example, the majority of the respondents were affiliated with a Protestant religious organization (62% for men and 63% for women). However, 20% of the men and women described themselves as Catholic, while 4% of the men and 1% of the women classified themselves as Jewish, and another 11% of the husbands and 14% of the wives listed a religious affiliation other than the three previously mentioned. The average level of education was quite similar for both men and women, 14 and 13 years respectively, ranging from pre-secondary to graduate school. The median individual yearly income for the male respondents was $20,000 to $29,999; whereas the female respondent’s median score was lower, $10,000–19,999. However, it is important to note the wide range of scores with approximately 1/3 of the male respondents earning less than $20,000 a year, another 1/3 earning between $20,000–40,000, and the last 1/3
Table 1. Demographic characteristics of sample.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Husbands (N = 614)</th>
<th>Wives (N = 614)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Age</td>
<td>65.94</td>
<td>4.48</td>
</tr>
<tr>
<td>Length of marriage</td>
<td>36.03</td>
<td>11.63</td>
</tr>
<tr>
<td>Years of education</td>
<td>13.60</td>
<td>3.23</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Black</td>
<td>3</td>
<td>0.5</td>
</tr>
<tr>
<td>Caucasian</td>
<td>592</td>
<td>97.5</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4</td>
<td>0.7</td>
</tr>
<tr>
<td>Other</td>
<td>15</td>
<td>1.3</td>
</tr>
<tr>
<td>Income&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 9.9</td>
<td>36</td>
<td>5.9</td>
</tr>
<tr>
<td>19 to 19.9</td>
<td>148</td>
<td>24.1</td>
</tr>
<tr>
<td>29 to 29.9</td>
<td>139</td>
<td>22.6</td>
</tr>
<tr>
<td>30 to 39.9</td>
<td>87</td>
<td>14.2</td>
</tr>
<tr>
<td>40 to 49.9</td>
<td>52</td>
<td>8.5</td>
</tr>
<tr>
<td>50 to 59.9</td>
<td>29</td>
<td>4.7</td>
</tr>
<tr>
<td>60 to 69.9</td>
<td>25</td>
<td>4.1</td>
</tr>
<tr>
<td>Over 70</td>
<td>43</td>
<td>7.0</td>
</tr>
<tr>
<td>Missing</td>
<td>55</td>
<td>8.9</td>
</tr>
<tr>
<td>Religion</td>
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<td></td>
</tr>
<tr>
<td>Catholic</td>
<td>128</td>
<td>20.8</td>
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<tr>
<td>Church of Jesus Christ</td>
<td>4</td>
<td>0.7</td>
</tr>
<tr>
<td>Jewish</td>
<td>25</td>
<td>4.1</td>
</tr>
<tr>
<td>Protestant</td>
<td>378</td>
<td>61.6</td>
</tr>
<tr>
<td>Other</td>
<td>65</td>
<td>10.6</td>
</tr>
<tr>
<td>Missing</td>
<td>14</td>
<td>2.2</td>
</tr>
<tr>
<td>Retired</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full</td>
<td>351</td>
<td>57.0</td>
</tr>
<tr>
<td>Partial</td>
<td>207</td>
<td>33.7</td>
</tr>
<tr>
<td>Not retired</td>
<td>56</td>
<td>9.3</td>
</tr>
</tbody>
</table>

Note: *Yearly income in thousands of US dollars.

In this study and (1) those that were not included because their spouses did not complete the questionnaire, (2) non-respondents, and (3) 2000 US Census information. The Donnelly Corporation was able to provide us with age and general income for the non-respondents so we could compare those with the subjects in the study. Using ANOVA and Chi Square tests, we previously compared the characteristics of these three groups with the characteristics of the subjects in the study (Sandberg et al., 2002). For both the couple sample and the one partner only respondents, there was also some selection bias in regards to race. However, there were no significant differences between our sample and the other three groups based on age, length of marriage, number of children, income, employment, and religious preference.

**Instruments**

The Center for Epidemiological Studies Depression Scale (CES-D) "is a short self-report scale designed to measure depressive symptomatology in the general population" (Radloff, 1977, p. 385). Subjects’ scores from the CES-D were used to categorize them into low, medium, and high depression groups. Those who reported exhibiting few or no symptoms of depression (scores of 0–5) were placed into the low group. Those with scores of 6–10 (some symptoms of depression but not clinical depression, minor, or subsyndromal depression) were placed in the medium group, and those with scores of 11 or higher were placed into the high depression group Categorizing both husbands and wives into groups based on their level of reported depression permitted the researchers to create nine different couple combinations of depression (e.g. both high, both medium, both low, husband high–wife medium, husband high–wife low, husband low–wife medium, and husband low–wife high). Mean scores for problem solving and affective communication could then be calculated for each of these groups.

The CES-D has consistently demonstrated itself to be reliable (split-halves correlation and Cronbach alpha coefficient ranging from 0.85 to 0.92) and valid (criterion and discriminant) measure for depressive symptomatology (Clement et al., 1999; Radloff & Teri, 1986). In addition, the CES-D, and numerous shortened versions, has frequently been utilized in studies where the sample consisted of older individuals. In these studies, the CES-D and its sub-forms again displayed appropriate psychometric properties (Andreson, Malmgren, Carter, & Patrick, 1994; Kohout et al., 1993; Santor et al., 1995). The Marital Satisfaction Inventory, revised (MSIr) is multi-dimensional self-report instrument used to measure marital interaction (Sheeer & Snyder, 1984; Snyder, 1979, 1997). The MSIr consists of a validity scale (CNV), a global distress scale (GDS), and nine additional scales measuring various aspects of marital interaction, ranging from communication to satisfaction.
with children. Numerous studies have supported the reliability (test–retest at 6 weeks, 0.89) and validity (both criterion and discriminant) of the MSIr and the interpretive value of its sub-scales (Burnett, 1987; Snyder & Regts 1990). For the purpose of this study, the affective (AFC) and problem solving communication (PSC) sub-scales were used to measure perceived communication patterns. The Cronbach Alpha for the AFC, and PSC research version was 0.85 and 0.89, respectively (Snyder, 1997). The researchers decided to create a couple problem solving score and a couple affective communication score after examining trends in the data for these combined couple scores compared to trends in individual scores. Since results indicated that using combined couple scores did not differ from results using individual husband and wife scores, combined couple scores were used to simplify reporting of results.

**Results**

Means, standard deviations, and ranges for relevant variables are reported in Table 2 as well as the percentages of husbands and wives falling into each of the depression groups.

The mean combined couple score on the affective communication scale was 5.70 (SD = 7.85, range 0–35) higher scores representing problems in communicating feelings and emotions. The average combined couple score on the problem-solving scale was 10.11 (SD = 5.92, range 0–25). Mean depression scores were below the clinical depression cutoff of 10 for both wives (7.41; SD = 5.78, range 0–40) and husbands (5.96; SD = 5.55, range 0–37). Sixteen percent of the men and 23% of the women fell above the cutoff for clinical depression, percentages that are within the average range of reported depressive symptoms for community dwelling older adults (Arean et al., 1993; Blazer, Hughes, & George, 1987). By crossing level of wife’s depression with level of husband’s depression, nine different groups were created (both low, both medium, both high, husband high–wife medium, husband high–wife low, husband low–wife medium, husband low–wife high, for both wives and husbands). The medium group would include individuals experiencing depressive symptoms, minor or subsyndromal depression. The highest group includes individuals who would be considered depressed according to CES-D standards (Gallo & Rabin, 1997; Mossey, 1997).

Analysis of variance was performed to test the statistical hypothesis that the couple mean scores for affective and problem-solving communication would be unequal across the nine couple combination types based on levels of depression in both husbands and wives. The first analysis was conducted with wives’ self rating of affective communication as the dependent variable. Analysis of variance results as shown in Table 4 revealed significant main effects between wife depression groups (F = 21.68, df = 2613, p < 0.001) and between husband depression groups (F = 4.05, df = 2613, p < 0.01).

Tukey post hoc tests showed that couples with wives in the high depression group scored significantly different on affective communication from couples with wives in the medium and low depression groups, and couples scores in the medium depressed group were significantly different from those in the low wife depression group. Tukey post-hoc tests showed that the three husband groups based on level of depression were significantly different from each other.

As can be seen in Table 4, there was also significant interaction (F = 2.38, df = 2613, p < 0.05). The superscripts by the cell means in Table 3 identify which

Table 2. Means, SDs, and ranges for key variables and percent clinically depressed (with MSIr norms, Snyder, 1999).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Husbands</th>
<th>Wives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husbands</td>
<td>Wives</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>5.96</td>
<td>7.41</td>
</tr>
<tr>
<td>Problem solving</td>
<td>4.67 (6.68)</td>
<td>5.44 (6.44)</td>
</tr>
<tr>
<td>Affective communication</td>
<td>2.24 (3.23)</td>
<td>3.47 (4.11)</td>
</tr>
<tr>
<td>Depression group*</td>
<td>Low (0–4) %</td>
<td>Low (0–4) %</td>
</tr>
<tr>
<td></td>
<td>Medium (5–9) %</td>
<td>Medium (5–9) %</td>
</tr>
<tr>
<td></td>
<td>High (10+) %</td>
<td>High (10+) %</td>
</tr>
<tr>
<td>Married couple score</td>
<td>10.11</td>
<td>34.7</td>
</tr>
<tr>
<td>Problem solving</td>
<td>5.70</td>
<td>42.8</td>
</tr>
<tr>
<td>Affective communication</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: *Score of 10 or higher would place a person in the clinically depressed group. Numbers in parentheses are Snyder’s norms (1979).
specific couple combinations based on husband’s and wife’s level of depression are different from each other. Scores for husband low/wife low group, the husband medium/wife medium group, the husband high/wife medium group, husband low/wife high group, husband medium/wife high group, and husband high/wife high group were all significantly different from each other. Examining the means in Table 3 shows there is a general deterioration in couple affective communication scores as either husband or wife are more depressed and especially when both are depressed. When husband and wife satisfaction with health was added as a covariate to the model, the results did not change.

ANOVA results with couple problem solving as the dependent variable yielded a similar pattern with main effects for wives (F = 23.35, df = 2613, p < 0.001) and significant main effects for husbands (F = 9.60, df = 2613, p < 0.001) and significant interaction effects (F = 3.50, df = 2, 613, p < 0.01). As in the previous post-hoc analysis, couples with wives in the high depression group scored significantly different on the problem-solving communication scale than all other groups. Also, couples with wives in the low depression group scored significantly different than the mid–high depression group. Examining the means that are significantly different from each other as shown in Table 3 basically illustrates that as either husband or wife are more depressed, problem solving communication is more distressed, and if both husband and wife are more depressed, an even worse deterioration occurs in problem solving processes between them. Entering health satisfaction as a covariate did not change the results.

In totality, these results support the hypothesis that older couples who are experiencing greater levels of depression score lower on affective and problem-solving communication than those who are not. It appears that it takes only one partner to be depressed to affect both affective and problem-solving communication, but both partners being depressed seems to lead to further deterioration in affective communication and problem solving.

Discussion
The findings of this study support in long term, mature marriages what has been known about early and middle aged married couples in which one or both spouses is experiencing depression. Specifically, although couples in long term marriages as a group seem to have developed an ability to control the emergence of negative affect (Carstensen et al., 1995), it appears that when one or both spouses is experiencing depressive symptoms, affective and problem solving communication potential is diminished.
These findings seem to paint a pattern that is consistent with other empirical studies of depression in older marriages (Bookwala & Franks, 2005; Bookwala & Jacobs, 2004; Tower & Kasl, 1995, 1996a, 1996b), namely clinical depression and ineffective marital processes often co-occur in the same couple. These findings are also consistent with findings in studies of depression among middle aged and early marriage where problem solving and affective communication is also poorer when one or both spouses is depressed (Biglan et al., 1985; Kahn et al., 1985).

However, the findings of this study certainly do not allow the authors to make conclusions about causality. The study was cross sectional, and so it is impossible to tell from these results whether poor affective and problem solving communication processes lead to clinical depressive symptoms or whether depression eventually led to poor affective and problem solving communication. Which ever is the case, it is likely that depressive symptoms and poor communication processes in marriage aggravate each other (Sandberg et al., 2002).

Clinical depression in the elderly is a complex issue related to many different factors including genetic vulnerability, dementia, organicity, illnesses associated with aging, and environmental factors (Futterman et al., 1995). The authors do not want to imply that affective and problem solving communication are what cause depression in elderly marriages. Rather we desire to emphasize that when depression occurs in the elderly, clinicians and physicians need to consider the partner and the marriage of the patient, not just the person with the disorder (Sandberg & Harper, 2000b; Tower & Kasl, 1995). Even when depression is related to genetic and biological factors, the way marital partners respond to the illness can affect the course of the illness and the effectiveness of coping or treatment (Prince & Jacobson, 1995).

Of particular interest to the authors was the finding that adding health to the model did not change the results. The authors reasoned that in older men and women, and especially in older men, satisfaction with health would be more strongly associated with depressive symptoms than marital communication. It appears that this is not the case for this sample. These findings add support to research by Bookwala and Franks (2005) that "found support for the moderating role of marital disagreement wherein the detrimental effect of disability on depressed affect was significantly heightened among older couples with more disagreements with their spouse" (p. P338). It appears that marital communication in older couple relationships is significantly and uniquely related to depressive symptoms, even when controlling for health and disability.

**Implications for practitioners**

The results of this study point to a number of noteworthy implications for mental health professionals. The first is related to the concept that at least in some older married couples, affective communication and problem solving skills may buffer the risk of depression in husbands and wives. Because older couples face different issues (increased physical ailments and health concerns) than young married, older couples may face the challenge of dealing daily with strong emotions including fear, anger, and loss. These often unwelcome changes that come with aging may also require husbands and wives to be able to solve a number of problems (health care decisions and living environment changes) in new and creative ways. If older couples can be creative and effective in their problem solving communication, they may be able to more successfully navigate these challenges. However, when older men and women are unable to express their feelings and resolve them, and cannot solve problems through communicating, they may be at increased risk for depressive symptoms. As a result, gerontologically focused health care professionals across disciplines would need to be willing to assess the functioning of both the patient’s partner and their marriage when working with an older patient at risk for or experiencing depression.

Regardless of whether depressive symptoms or problems in affective and problem solving communication develop first, the findings of this study lead us to recommend a more concentrated effort among all mental and physical health providers to include married partners in their overall assessment and treatment plans for the elderly as they should for younger married individuals. A pattern that has long been recommended and seen success with younger couples experiencing depression (Alexander et al., 1994; Baucom et al., 1998; Beach, 2001; Beach et al., 1998; Beckerman, 2001; Dahl et al., 2000; Emanuels-Zuurveen, & Emmelkamp, 1996; Kung & Elkin, 2000; Leff & Everitt, 2001; Miller et al., 2000; Prince & Jacobson, 1995; Tiechman, 1997; Van Doorn et al., 1998; Yapko, 1999). Too often, when a spouse is diagnosed with an illness that may be age related their partner can be seen simply as someone with whom health or mental health care workers must communicate the diagnosis and possible prognosis. When the married spouse is not seen as potentially impacting both the course of the illness and the treatment, health care workers are likely treating only part of the problems (Prince & Jacobson, 1995; Sandberg & Harper, 2000b).

At a most basic level, regardless of which came first, the results of this study and others (Bookwala & Jacobs, 2004) suggest that problematic communication problems and depressive symptoms often co-exist in the same older couples. Therefore, an attempt to treat depression in an older adult without considering the potential impact of long term marital processes would be unwise for health care providers, regardless of professional discipline. In cases of clear marital disharmony and depression, marital therapy should be considered as a supportive treatment.
(Beach et al., 1998; Prince & Jacobson, 1995; Sandberg & Harper, 1999). Even in cases where the depression is related to dementia or organic causes, the course of depression and marriage might be helped by specific marital intervention, namely helping married partners develop improved affective and problem solving communication skills.

In addition, when an older married person is diagnosed with a chronic illness, marital support groups that focus on education as well as affective and problem solving communication skills could be part of available supplementary support. According to Tower and Kasl (1996a), both the spouse of and the older person recently diagnosed with an illness are at a risk of developing depression; therefore, interventions aimed at developing good problem solving and affective expression skills may help to alleviate the risk for depression, thus creating a better outcome for the marriage as well as for the diagnosed partner.

**Implications for future research**

Additional research is needed to address a number of the key limitations of the current study. The primary limitation of this study was that 97.5% of the individuals were Caucasian. While we can generalize these findings to the older Caucasian population of the US, we cannot draw conclusions about marital communication patterns and depression in other racial groups or older adults residing outside the US. The requirement that both respondents be capable of reading and understanding the questionnaire, making it unlikely that those with cognitive impairment return their questionnaires, was also a significant limitation for a study addressing depression in older couples, considering cognitive and health problems are strongly related to depression in later life. Furthermore, a more sophisticated assessment of health is needed in order to truly control for the well established link between depression and health in later life. Lastly, one cannot truly conclude that causal relationships exist with cross sectional data. Clearly longitudinal research is needed that focuses on the casual nature of the relationship between marital process and depression in older couples. In addition, several research questions have arisen from the findings of this study. The first is whether interventions specifically aimed at improving problem solving and affective communication in marriage will have an impact on the outcome of depression in elderly husbands and wives. Another question is whether receiving individual treatment for depression through typical cognitive behavioral or other psychological intervention would have an impact on marital communication processes in older couples. This may be the case considering that depressed persons usually have a more negative view of all aspects of the world including their marriage and have less energy and commitment to be involved in aspects of their lives including marriage. If marital therapy or marital support groups were standard practice for the elderly who are depressed or have stressful circumstances that put them at risk for depression, would the outcome be better than intervention simply aimed at the individual experiencing the symptoms? Would this be true for outcomes in physical illness as well as emotional illness such as depression? And finally, under what circumstances does marital quality actually serve as a mediating variable between depression and other biopsychosocial variables, as suggested in other research (Sandberg & Harper, 2000a, 2000b; Schmaling & Jacobson, 1990).

In conclusion, gerontologists and those health care providers who regularly work with concerns of the aged should recognize that interventions focusing on marital processes may be extremely helpful additions to interventions targeting the depression itself. As is true for younger marriages, deficits in specific communication abilities, such as effectively expressing emotions and problem solving, co-occur with depression in spouses in long term, mature marriages. It would appear that effective treatments for depression in the elderly should include assessment and involvement of married partners even when the illness has biological and genetic roots.

**References**


