Aging and Psychological Distress: Are There Gender Differences?

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ABSTRACT

Although there is consensus in the mental health literature that women report more distress and depressive symptoms than men, it is not clear if this applies to all age groups. To examine the relationship of gender and distress among older adults, two methods were employed. First, a review was conducted of all random community surveys conducted since 1950, which included older adults and reported prevalence rates by age and gender. Results showed almost as many studies (9) providing evidence of no differences or more male distress, as studies verifying more reported female distress (10). In the second approach, interviews were conducted with a random probability sample of 476 older adults living in Middlesex County, New Jersey, including 163 bereaved persons whose spouse died 6 to 24 months prior to the interview, and 313 persons with no known recent stressful life events. Psychological distress was measured by the Johns Hopkins Symptom Checklist and a modified version of the General Well Being Scale. Data analysis revealed that on five measures of distress, gender generally was not related to either moderate or severe distress symptoms for bereaved or non-bereaved respondents. For community respondents, there were no significant gender differences for individual symptoms, nor was gender significantly correlated with any of the symptom scales. The data did not support the view that older women are more distressed than older men. (Appendix A provides detailed information on the 13 studies reviewed for the first section of the research. A three-page list of references is included. (NRB)
AGING AND PSYCHOLOGICAL DISTRESS:
ARE THERE GENDER DIFFERENCES?*

MARJORIE CHARY FEINSON, PH.D.

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AGING AND PSYCHOLOGICAL DISTRESS:
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Marjorie Chary Feinson, Ph.D.

There is a consensus in the mental health literature that females report more distress and depressive symptoms than males. However, it is not clear if this applies to females in all age cohorts, particularly those age 65 and over. A review of epidemiological studies conducted during the past 30 years in which distress rates are reported by gender does not provide consistent and conclusive evidence of more reported female distress. Indeed, there is evidence from 9 studies indicating no gender differences (6 studies) or more distress reported by older males (3 studies). In contrast, there is evidence from 10 studies of more reported female distress.

Data from a random probability sample of older adults (n=476) living in the community provides support of no significant gender differences. On 5 measures of distress, gender generally is not related to either moderate or severe distress symptoms. This lack of gender differences applies to both bereaved (n=163) and non-bereaved (n=313) respondents. Accordingly, the consensus regarding females and distress should be altered to reflect these findings about older adults.
AGING AND PSYCHOLOGICAL DISTRESS:
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Introduction

A controversial and widely researched issue in the mental health literature concerns whether females report more distress or depressive symptoms than males. The controversy began about a decade ago when Gove and Tudor (1973) concluded that more women than men are mentally ill. In the interim, several reviewers have demonstrated that when 'mental illness' is broken down into specific types of categories, the results do not support Gove and Tudor's conclusion. Indeed, the reviewers argue that there are gender differences (Dohrenwend and Dohrenwend, 1969, 1976; Goldman and Ravid, 1980). Women tend to report more distress and depressive symptoms, while men report more symptoms reflective of personality disorders. Although even the consensus that females report more distress and depressive symptoms has recently been challenged (e.g. Feinson, 1984; Newman, 1984; Zent, 1984), the issue of gender and distress among older adults remains salient for etiological as well as policy considerations.

Clarifying the relationship between gender and distress for the older adult population is important for several reasons. First, females comprise 60% of the older population outnumbering men 3 to 2. Second, the income of older females is substantially less than older males with poverty rates disproportionately higher among females (twice as high for white women and four times as high for black women). Third,
half of all older females are widowed compared to only one out of eight men. Fourth, most of the 7 million elders who live alone are women (U.S. Bureau of Census, 1983). Since distress and depressive symptoms often are associated with these conditions - low income, widowhood, and social isolation - it seems reasonable to assume that older females would be particularly vulnerable to psychological distress and depressive symptoms. Finally, the issue merits clarification in order to verify or discredit commonly held perceptions about the impaired psychological status of older women.

The relationship of gender and distress among older adults is examined in two ways. The first consists of a review of all random community surveys conducted since 1950 (post WWII) in which older adults are included and prevalence rates are reported by age and gender. The second is an analysis of the findings from a recent mental health survey. In combination, these two data sources should provide convincing evidence on the controversial issue of gender and distress vis-a-vis older adults.

**Review of Mental Health Surveys**

Thirteen studies have been located which represent the preponderance of surveys conducted in the United States during the past 3 decades in which distress rates are reported by gender for the older adult population (see Appendix A). Only studies utilizing random probability samples of elders living in the community have been included; thus, studies conducted in nursing homes, senior centers, senior apartments, or outpatient clinics have been excluded because sample bias
constrains the generalizability of the results.

The studies reflect considerable methodological variation regarding when and where the surveys were conducted, the number of respondents included, the instruments used to assess distress, and, finally, how the findings are reported. For example, the earliest study was conducted by Bellin and Hardt (1958) during the 1950's in New York; the most recent were conducted during the early 1980's (Weissman et al., 1984; Murrell et al., 1983). Some studies were conducted in one city like San Francisco (Lowenthal and Berkman, 1967) or New York City (Benfari et al., 1972); some samples were drawn from a state like Kentucky (Blazer and Williams, 1980; Murrell et al., 1983), while 2 included a national sample (Gurin et al., 1960; Veroff et al., 1981). Of the 13 studies, 8 were focused specifically on older adults age 55 and over, while the remainder included younger age cohorts as well.

Perhaps the broadest variation is reflected in the instruments used to measure psychological distress. Ten of the studies used symptom checklists which are summed and scored to provide rough estimates of psychological impairment. Two of the studies (Bellin and Hardt, 1958; Lowenthal and Berkman, 1967) also used symptom scales, but the responses were analyzed and rated by professionals or psychiatrists rather than scored by laypersons. In contrast to these checklists, which provide estimates of impairment but are not specific enough to classify the impaired into diagnostic categories, is the recent study conducted by Weissman et al. (1984). These researchers utilized a diagnostic instrument, the DIS, which
was specifically designed to provide psychiatric diagnoses for the impaired living in the community.

In addition to different instruments, the researchers were not all focused on the same type of distress. One measured mental status, two measured psychological anxiety, while eight measured depressive symptoms. Of these eight, only two studies utilized the exact same instrument, the CES-D (the Center for Epidemiologic Studies Depression, Radloff, 1977).

Another important variation concerns the reporting of the findings. There is little consistency in the reporting of rates by age. For example, some studies report one rate for all those age 65 and over. Some divide the sample into two age cohorts and report a rate for those age 65 to 74 and a separate rate for those age 75 and over. Some divide the sample into 5 year cohorts up to age 80 or 85, while one study reports one rate for those 60 to 69 and another rate for those 69 and over (Benfari, et al., 1972). Moreover, most of the researchers controlled the data only for age while a few controlled for one or more demographic variables (Atchley, 1976; Frerichs et al., 1981).

[Table 1 about here]

Despite these variations, it is possible to draw some conclusions regarding the issue of gender and distress among older adults. As shown in Table 1, four studies (Bellin and Hardt, 1958; Benfari et al., 1972; Abrahams and Patterson, 1978-79; Berry et al., 1984) provide some evidence of no significant differences in distress between older females
and males. Bellin and Hardt (1958) used a 37 item mental status inventory rated by professionals. They reported no significant gender differences either by age or marital status. Benfari et al. (1972) measured distress with 53 psychological items and reported no significant gender differences for 2 categories of distress - depression and esteem/confidence. The study by Abrahams and Patterson (1978-1979) did not include specific rates of distress by gender, but the researchers indicated that there were no significant gender differences on symptoms of distress and depression. Berry et al. (1984) used the Zung Depression Scale (SDS) and reported no significant main effect for gender and no significant interaction between gender and age for the 10 psychological items on the Zung scale.

Also listed in Table 1 (column 1) are two studies (Lowenthal and Berkman, 1967; Weissman et al., 1984) which provide evidence of no gender differences for some age cohorts, but the significance of these findings has not been reported.

Three additional studies listed in Table 1 (column 2) provide some evidence that males report more distress than females. The Lowenthal and Berkman study (1967) indicates that males in the 70-74 cohort report more distress than females. The two surveys conducted by Weissman and Myers (1978) reveal that males in both age cohorts generally report more depressive symptoms than females. Gurland et al. (1983) report substantially higher prevalence rates for males age 80 and over. Significance rates are not provided in any of these
studies, although the findings are probably significant due to the size of the sample and the magnitude of the differences.

The largest number of studies shown in Table 1 (Column 3), ten in all, provide some evidence that older females report more distress than older males. Of these, three provide significant findings (Benfari et al., 1972; Atchley, 1976; Veroff et al., 1981) while seven do not report whether the gender differences among older adults are significant or may have occurred by chance (Gurin et al., 1960; Lowenthal and Berkman, 1967; Blazer and Williams, 1980; Frerichs et al., 1981; Gurland et al., 1983; Murrell et al., 1983; Weissman et al., 1984). However, the findings are probably significant in view of the sample size and the magnitude of the gender differences.

Of these studies providing evidence of more reported female distress, in only one study is there evidence that gender would persist as a significant variable in the older adult population after controlling for the effects of other sociodemographic variables (Atchley, 1976). The danger of drawing conclusions based only on a significant bivariate relationship without controlling for the effects of key sociodemographic variables was persuasively demonstrated by Warheit et al. (1975). In their analysis of race and mental illness, they found that without controls, blacks had significantly higher scores than whites on all five distress scales. However, when controls for age, gender, and socioeconomic status were introduced, race was barely significant in the equation for general psychopathology and
not significant in the others except for phobias. The authors concluded that race was not an important predictor of mental illness (1975:254). Finally, in none of the studies listed in Table 1 did the researchers report the amount of variance explained by the significant variables or if gender was a major contributor to the explained variance.

To summarize, there are four studies which provide evidence of no significant gender differences and two additional studies in which the similar distress rates are probably significant. Added to these is evidence from three studies that older males report more distress than older females. Thus, there is evidence provided by nine studies that does not support the concept that females report more psychological distress than males.

In contrast, there are ten studies in Table 1 which provide evidence of more reported female distress. Seven do not indicate if the differences are significant, although they are probably significant. Three indicate that females report significantly more distress, however, of these three, only one controls for the effects of other demographic variables and none of the researchers report how much, if any, of the variance is accounted for by gender.

Clearly, the studies conducted during the past 30 years do not provide consistent or convincing evidence that older females report more psychological distress than older males. There are almost as many studies (9) providing evidence of no differences or more male distress as there are studies verifying more reported female distress (10). However, data
from a recent mental health survey of older adults should clarify this relationship.

Data from a Recent Survey of Older Adults

In the context of inconclusive findings from other studies, data from a random probability sample of 476 older adults living in the community are presented. The data were collected in face-to-face interviews during 1980 and 1981 from residents, age 65 and over, of Middlesex County, New Jersey. The county consists of several large urban centers, many suburban towns, and a large rural area. Approximately 10% of the total county's population (594,984) is over age 65, a proportion similar to the national average.

The 476 respondents form 2 distinct sub-samples; a sample of 163 bereaved individuals whose spouses died 6 to 24 months prior to the interview; and a sample of 313 elders with no known recent stressful life events. The overall response rate was 65%.

A major advantage of this study compared to those included in Table 1 with one exception (Weissman et al., 1984) concerns the measurement of psychological distress. In fact, distress was measured with two instruments: a self-report symptom checklist called the Johns Hopkins Symptom Checklist or the SCL-90-R (Derogatis et al. 1973); and a modified version of the General Well Being Scale employed by the Rand Corporation in its Health Insurance Study (1979).

The SCL-90-R, in contrast to some symptom checklists widely used in epidemiological studies, is considered a "notable example" of the newer research and diagnostic
instruments. It is both multi-dimensional and content-meaningful (Dohrenwend and Dohrenwend, 1982). Developed over the past 10 to 15 years, it has been tested for internal consistency and scaled to represent meaningful dimensions of psychopathology. Accordingly, it attempts to resolve the methodological problem of identifying 'cases' in the sample by using "a more detailed typology of psychological symptoms resembling certain diagnostic groups as defined in DSM-III" (Uhlenhuth, et al. 1983:1168). In this respect, it is similar to the DIS utilized by Weissman et al. (1984). The 90 symptoms can be grouped and interpreted as 9 primary symptom dimensions (depression, anxiety, somatization, etc.) or can be treated as one global measure of distress (GSI).

Reliability estimates for each of the scales and for the summary measure or GSI (Global Symptom Index), were computed using coefficient alpha, a multi-point variation of the Kuder-Richardson formula 20. (Coefficient alpha measures the internal consistency of items within scales.) A decision was made to use only those scales which achieved a coefficient alpha of .80 or greater in the total sample, an acceptable level for epidemiological surveys. Thus, somatization (.80), depression (.83), and anxiety (.80) along with the GSI (.96) are retained as measures of the dependent variable, psychological distress.

The second instrument used to assess distress is the General Well Being Scale used by Rand and based on the CWB Schedule developed by Dupuy (1977) for the National Health Interview Survey. The modified version used in this study
includes 15 of the items which tap both favorable and unfavorable aspects of well-being (e.g. "How much of the time have you felt cheerful?" "How often did you get rattled or flustered?") Six response choices are offered for each item ranging from extremely positive to extremely negative evaluations. The items ask the respondents about their emotional status during the past month. The reliability coefficient for this scale is .90, comparable to the .93 reported by the developer (Rand 1979). On both scales, higher scores represent more symptoms and more distress. Accordingly, the Well Being scale has been renamed General Malaise.

The SCL-90-R and the General Malaise Scale are distinct in the information they elicit. The SCL-90-R asks about specific symptoms during the past 7 week while the General Malaise Scale taps more general feeling states during the past month. The fact that the two instruments are not tapping the same dimensions is reflected in the zero-order correlations between them, .40 for the community sample and .59 for the bereaved sample. In using these 2 instruments, the measurement of psychological distress is substantially improved over the majority of studies reported on previously.

The first analysis of gender differences is a comparison of each symptom on the SCL-90-R and of the 15 items on the General Malaise Scale for both the community and bereaved samples. The analysis focuses on the persistence of symptoms rather than just the presence of symptoms since persistent symptoms reflect individuals at high risk while presence can also tap transient or trivial symptoms (Craig and Van Natta,
Persistent symptoms on the SCL-90-R are those which the respondents indicated they experienced 'quite a bit' (3) or 'extremely' (4) during the past week. Similarly, persistent negative feelings on the General Malaise Scale are those which respondents indicated they felt 'a good bit of the time' (4), 'most of the time' (5), or 'all of the time' (6).

A statistical analysis of the SCL-90-R symptoms using Chi-square revealed no significant gender differences between community females and males on any of the items with one exception: males reported significantly more distress for the item 'mind going blank' (5% of males compared to 0% of females, df=1, p=.01). For the bereaved sample, only 2 of the 90 items reveal significant differences: bereaved females reported significantly more 'worrying too much about things' (16% of females compared to 0% of males, df=1, p=.01) and significantly more 'trouble falling asleep' (14% of females compared to 2% of males, df=1, p=.02). Similarly, on the General Malaise Scale, there were no significant gender differences on any of the 15 items for either the community or bereaved respondents. In sum, an item by item analysis of both distress instruments reveals generally no significant gender differences.

The second analysis focuses on prevalence rates for moderate and severe distress symptoms by gender for community respondents (Table 2) and bereaved respondents (Table 3). As shown in Table 2, for moderate symptoms, there are no significant gender differences for community respondents. Similarly, with severe symptoms, there are no significant
differences on 4 of the 5 distress measures. The only significant difference regards somatization with males reporting significantly more symptoms than females. Beyond the lack of significant gender differences for community respondents, it is interesting to note that community males consistently report more symptoms than females for all measures with one exception, severe depressive symptoms.

[Table 2 about here]

Table 3 reveals a similar response from bereaved respondents. For moderate level of symptoms, there are no significant differences on 3 measures and significantly more distress reported by widows on 2 measures, general distress and depression. However, for the severe level of symptoms, there are no significant differences on any of the measures, but there is a trend for widows to report more distress than widowers.

[Table 3 about here]

A third analysis involves zero-order correlations between the 5 distress measures and sociodemographic characteristics for both sub-samples. The striking finding for the community sample is shown in the first column labeled 'Gender' of Table 4. The correlation coefficients listed in Column 1 reveal that gender is not significantly correlated with any of the 5 measures. In Table 5, the coefficients listed in Column 1 for the bereaved respondents reveal that gender is significantly related to general distress and depression with females reporting more symptoms. This is consistent with the higher prevalence rates shown in Table 3. However, the size of the
coefficients (r = .18, r = .17) indicates that the relationship is quite weak. Moreover, when the gender-distress relationship for the bereaved is examined using regression analysis, none of the regression equations are significant and gender is not a significant variable. In sum, the data from this random probability sample of community and bereaved respondents does not support the perception that older females are more distressed than older males.

[Tables 4 and 5 about here]

Conclusion

The thirteen community studies reporting distress rates by gender do not provide conclusive evidence supporting the view that older females report more distress and depressive symptoms than older males. There is evidence from nine studies of no significant gender differences or males reporting more distress. In contrast, there are ten studies which provide evidence of more female distress. Of the three reporting significant findings, there are no controls for the effects of other sociodemographic variables. Thus, it remains unclear from these studies whether gender would continue to be a significant variable when other demographic characteristics are taken into consideration.

In addition, data from a recent mental health survey of community and bereaved respondents do not support the view that older females are more distressed than older males. For community respondents, there are no significant gender differences for individual symptoms, nor is gender significantly correlated with any of the symptom scales. For
bereaved respondents, the situation is similar. Gender is significantly, but weakly correlated with two distress measures with females reporting more symptoms. These differences, however, disappear when the effects of other demographic factors are controlled in regression analyses.

In sum, the paucity of supportive data and some substantive findings to the contrary do not support the perception that more distress and depression are found among older women. Despite the fact that more of them are widowed, that they have considerably lower incomes, and that more of them live alone, they do not appear to be more distressed or depressed than their better situated male counterparts. Clearly, more research is needed to understand why this is so. However, in the interim, it is necessary to utilize the existing data to revise societal perceptions and social policies so that both begin to reflect the reality of older adults' lives!
FOOTNOTES

Atchley's study (1976) consists of a random sample of retired telephone workers and teachers rather than a random sample of community residents. However, it is being used in this analysis because of the size of the sample and the fact that it does not reflect the same kind of bias found in a clinic sample.

Studies are listed more than once if they utilized more than 1 measure of distress or if they reported different findings for different age groups.

The authors analyzed the Zung Depression Scale and found that it contained 10 psychological and 10 somatic symptoms. While there were no significant main or interaction effects of gender vis-a-vis the psychological scale, the reverse was true for the somatic symptoms. There were significant main effects for gender and age and a significant interaction with females reporting more symptoms. The somatic symptoms included difficulty sleeping at night, less interest in sex, loss of appetite, and increased constipation, all complaints which often accompany the physical aging process and are probably not reflective of psychological distress or depression (Berry et al., 1984).

The overall completion rate was 65%. For the community, 72% of the interviews were completed, 17% refused and 11% were unable to be interviewed because they could not be located or were too sick, not at home, etc. For the bereaved sample, 54% of the interviews were completed, 10% refused an interview, and 36% were not located, not at home, too sick, etc. It is
assumed that of those not able to be interviewed (11% and 36% respectively), a certain proportion would have been disqualified for being under age 65, thus improving the completion rates somewhat.

'There were slight differences in the alpha coefficients calculated for each sub-sample as follows: for the community sample, alphas of .95, .82, .77, and .80 for GSI, depression, anxiety, and somatization respectively; for the bereaved sample, alphas of .96, .84, .84, and .81 for the four scales respectively.

'Alpha coefficients for General Malaise were .90 and .90 for the community and bereaved samples respectively.
**TABLE 1: SUMMARY OF STUDIES SHOWING RELATIONSHIP BETWEEN GENDER AND DISTRESS**

<table>
<thead>
<tr>
<th>NO SIGNIFICANT GENDER DIFFERENCES</th>
<th>FEMALES SIGNIFICANTLY HIGHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>BELLIN AND HAADT (1958) re: mental status</td>
<td>BENFAR, BEISER, LEIGHTON, AND MERTENS (1972) re: anxiety, physiological, mixed anxiety/depression</td>
</tr>
<tr>
<td>BENFARI, ET AL. (1972) re: depression, self esteem/confidence</td>
<td>ATCHLEY (1976) re: loneliness, anxiety, depression</td>
</tr>
<tr>
<td>BERRY, STORANDT, AND COYNE (1984) re: depression items</td>
<td></td>
</tr>
</tbody>
</table>

**NO GENDER DIFFERENCES (significance not reported)**

<table>
<thead>
<tr>
<th></th>
<th>MALES HIGHER (significance not reported)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOWENTHAL AND BERKMAN (1967) re: distress age 60-64</td>
<td>LOWENTHAL AND BERKMAN (1967)* re: distress age 70-74</td>
</tr>
<tr>
<td>GURLAND ET AL. (1983)* re: depression age 80+</td>
<td></td>
</tr>
</tbody>
</table>

**FEMALES HIGHER (significance not reported)**

<table>
<thead>
<tr>
<th></th>
<th>FEMALES HIGHER (significance not reported)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOWENTHAL AND BERKMAN (1967)* re: distress in 3 cohorts</td>
<td>GURIN, VEROFF, AND FELD (1960)* re: psychological anxiety</td>
</tr>
<tr>
<td>BLAZER AND WILLIAMS (1980)* re: depression</td>
<td>LOWENTHAL AND BERKMAN (1967)* re: distress in 3 cohorts</td>
</tr>
<tr>
<td>FRERICHS, ANESENSEL, &amp; CLARK (1981)* re: depression</td>
<td>BLAZER AND WILLIAMS (1980)* re: depression</td>
</tr>
</tbody>
</table>

Source: Compiled by the Author.

*Findings are probably significant due to the size of the sample and the magnitude of the gender differences.*
### TABLE 2: PERCENTAGE OF COMMUNITY RESPONDENTS REPORTING DISTRESS

#### A. MODERATE LEVEL OF SYMPTOMS

<table>
<thead>
<tr>
<th>MEASURES OF DISTRESS</th>
<th>FEMALES (n=185)</th>
<th>MALES (n=128)</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL DISTRESS (GSI)</td>
<td>10.8% (20)</td>
<td>11.7% (15)</td>
<td>NS</td>
</tr>
<tr>
<td>DEPRESSION</td>
<td>11.4% (21)</td>
<td>11.7% (15)</td>
<td>NS</td>
</tr>
<tr>
<td>ANXIETY</td>
<td>10.3% (19)</td>
<td>15.6% (20)</td>
<td>NS</td>
</tr>
<tr>
<td>SOMATIZATION</td>
<td>14.6% (27)</td>
<td>14.8% (19)</td>
<td>NS</td>
</tr>
<tr>
<td>GENERAL MALAISE(^3)</td>
<td>16.2% (30)</td>
<td>17.2% (22)</td>
<td>NS</td>
</tr>
</tbody>
</table>

#### B. SEVERE LEVEL OF SYMPTOMS

<table>
<thead>
<tr>
<th>MEASURES OF DISTRESS</th>
<th>FEMALES (n=185)</th>
<th>MALES (n=128)</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL DISTRESS (GSI)</td>
<td>3.8% (7)</td>
<td>4.7% (6)</td>
<td>NS</td>
</tr>
<tr>
<td>DEPRESSION</td>
<td>5.4% (10)</td>
<td>4.7% (6)</td>
<td>NS</td>
</tr>
<tr>
<td>ANXIETY</td>
<td>3.2% (6)</td>
<td>4.7% (6)</td>
<td>NS</td>
</tr>
<tr>
<td>SOMATIZATION</td>
<td>3.2% (6)</td>
<td>8.6% (11)</td>
<td>Chi(^2)=4.217 p=.04</td>
</tr>
<tr>
<td>GENERAL MALAISE(^3)</td>
<td>3.2% (6)</td>
<td>4.7% (6)</td>
<td>NS</td>
</tr>
</tbody>
</table>

\(^1\) Moderate symptoms defined as 1 or more standard deviations beyond the mean of the Community Sample. Severe symptoms defined as 2 or more standard deviations beyond the mean of the Community Sample.

\(^2\) Number of respondents indicated in parentheses.

\(^3\) General Malaise is a modified version of the Rand Health Insurance Study General Well Being Scale with the scores reversed (i.e. higher scores indicate lower level of well being or malaise).
### Table 3: Percentage of Bereaved Respondents Reporting Distress Symptoms

#### A. Moderate Level of Symptoms

<table>
<thead>
<tr>
<th>Measures of Distress</th>
<th>Widows (n=119)</th>
<th>Widowers (n=44)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Distress</td>
<td>22.7% (27)²</td>
<td>6.8% (3)</td>
<td>Chi²=5.388</td>
</tr>
<tr>
<td>(GSI)</td>
<td></td>
<td></td>
<td>p=.02</td>
</tr>
<tr>
<td>Depression</td>
<td>28.6% (34)</td>
<td>13.6% (6)</td>
<td>Chi²=3.869</td>
</tr>
<tr>
<td>Anxiety</td>
<td>18.5% (22)</td>
<td>11.4% (5)</td>
<td>NS</td>
</tr>
<tr>
<td>Somatization</td>
<td>19.3% (23)</td>
<td>9.1% (4)</td>
<td>NS</td>
</tr>
<tr>
<td>General Malaise³</td>
<td>26.1% (31)</td>
<td>25.0% (11)</td>
<td>NS</td>
</tr>
</tbody>
</table>

#### B. Severe Level of Symptoms³

<table>
<thead>
<tr>
<th>Measures of Distress</th>
<th>Widows (n=119)</th>
<th>Widowers (n=44)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Distress</td>
<td>9.3% (11)</td>
<td>2.3% (1)</td>
<td>NS</td>
</tr>
<tr>
<td>(GSI)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>14.3% (17)</td>
<td>6.8% (3)</td>
<td>NS</td>
</tr>
<tr>
<td>Anxiety</td>
<td>9.2% (11)</td>
<td>2.3% (1)</td>
<td>NS</td>
</tr>
<tr>
<td>Somatization</td>
<td>7.6% (9)</td>
<td>0 (0)</td>
<td>NS</td>
</tr>
<tr>
<td>General Malaise³</td>
<td>6.7% (8)</td>
<td>4.6% (2)</td>
<td>NS</td>
</tr>
</tbody>
</table>

¹ Moderate symptoms defined as more than 1 standard deviation beyond the mean of the Community Sample. Severe symptoms defined as more than 2 standard deviations beyond the mean of the Community Sample.

² Number of respondents indicated in parentheses.

³ General Malaise is a modified version of the Rand Health Insurance Study General Well Being Scale with the scores reversed (i.e. higher scores indicate lower level of well being or malaise).
**TABLE 4: ZERO-ORDER CORRELATIONS BETWEEN DISTRESS AND DEMOGRAPHICS FOR COMMUNITY RESPONDENTS**

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>GENDER¹</th>
<th>RACE²</th>
<th>MARITAL³</th>
<th>AGE</th>
<th>INCOME</th>
<th>EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTRESS MEASURES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GENERAL DISTRESS (GSI)</td>
<td>.001</td>
<td>.07</td>
<td>-.09</td>
<td>.15**</td>
<td>-.11*</td>
<td>-.04</td>
</tr>
<tr>
<td>DEPRESSION</td>
<td>.06</td>
<td>.07</td>
<td>-.16**</td>
<td>.20***</td>
<td>-.16**</td>
<td>-.07</td>
</tr>
<tr>
<td>ANXIETY</td>
<td>-.01</td>
<td>.06</td>
<td>-.18*</td>
<td>.19***</td>
<td>-.17**</td>
<td>-.02</td>
</tr>
<tr>
<td>SOMATIZATION</td>
<td>-.07</td>
<td>.07</td>
<td>-.05</td>
<td>.12*</td>
<td>-.10</td>
<td>-.14*</td>
</tr>
<tr>
<td>GENERAL MALAISE²</td>
<td>.02</td>
<td>-.08</td>
<td>-.04</td>
<td>.13*</td>
<td>-.01</td>
<td>-.06</td>
</tr>
</tbody>
</table>

*¹p<=.05  
**p<=.01  
***p<=.001

¹ Gender coded 1 for male, 2 for female.  
² Race coded 1 for Black/Hispanic, 2 for White.  
³ Marital status coded 1 for not married, 2 for married.  
⁴ General Malaise is the Rand HIS General Well Being Scale reversed.
TABLE 5: ZERO-ORDER CORRELATIONS BETWEEN DISTRESS AND DEMOGRAPHICS FOR BEREAVED RESPONDENTS

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>GENDER¹</th>
<th>RACE²</th>
<th>AGE</th>
<th>INCOME</th>
<th>EDUCATION</th>
<th>BEREAVEMENT⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTRESS MEASURES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GENERAL DISTRESS (GSI)</td>
<td>.18*</td>
<td>-.06</td>
<td>-.10</td>
<td>-.05</td>
<td>-.19</td>
<td>-.15*</td>
</tr>
<tr>
<td>DEPRESSION</td>
<td>.17*</td>
<td>.06</td>
<td>-.07</td>
<td>-.09</td>
<td>-.15*</td>
<td>-.13</td>
</tr>
<tr>
<td>ANXIETY</td>
<td>.09</td>
<td>.04</td>
<td>-.04</td>
<td>-.05</td>
<td>-.08</td>
<td>-.15</td>
</tr>
<tr>
<td>SOMATIZATION</td>
<td>.13</td>
<td>-.08</td>
<td>.04</td>
<td>-.12</td>
<td>-.17*</td>
<td>-.19*</td>
</tr>
<tr>
<td>GENERAL MALAISE³</td>
<td>.06</td>
<td>-.02</td>
<td>-.08</td>
<td>-.05</td>
<td>-.12</td>
<td>-.07</td>
</tr>
</tbody>
</table>

*P<.05

¹ Gender coded 1 for male, 2 for female.
² Race coded 1 for Black/Hispanic, 2 for White.
³ General Malaise is the Rand HIS General Well Being Scale reversed.
⁴ Bereavement represents the number of months elapsed from the date of spouse's death.
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Weissman, M.M. and J.K. Myers


Zent, M.R.
### APPENDIX A: COMMUNITY STUDIES OF GENDER AND MENTAL IMPAIRMENT IN OLDER ADULTS

<table>
<thead>
<tr>
<th>Author(s) &amp; Publ. Date</th>
<th>Year of Study</th>
<th>Measure of Impairment</th>
<th>Sample Size</th>
<th>Age</th>
<th>Study Site</th>
<th>Percent Impaired or Impairment Scores</th>
<th>Control Variables</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bellin and Hardt (1958)</td>
<td>1950's</td>
<td>37 item mental status inventory: rated by professionals.</td>
<td>1541</td>
<td>65+</td>
<td>New York</td>
<td>Total: 24.0% 22.2%</td>
<td>Gender by age</td>
<td>(1) No significant gender differences by age. (2) No significant gender differences by marital status.</td>
</tr>
<tr>
<td>Gurin, Veroff, and Feld (1960)</td>
<td>1957</td>
<td>5 items of psychological anxiety</td>
<td>2460</td>
<td>65+</td>
<td>U.S.</td>
<td>20-29: 14% 5%</td>
<td>Gender by age</td>
<td>(1) Females report more anxiety in all age groups. (significance not reported)</td>
</tr>
<tr>
<td>Lowenthal and Berkman (1967)</td>
<td>1960</td>
<td>7 items of distress: rated by psychiatrists.</td>
<td>600</td>
<td>60+</td>
<td>San Francisco</td>
<td>60-64: 12% 11%</td>
<td>Gender by age</td>
<td>(1) Females report more distress in 3 age cohorts. (2) Males report more in 1 age cohort. (3) Little difference reported in youngest age cohort. (significance not reported)</td>
</tr>
<tr>
<td>Benfari et al. (1972)</td>
<td>not given</td>
<td>53 psychological items</td>
<td>531</td>
<td>under 70+</td>
<td>New York City</td>
<td>Anxiety: 60-69: 50.5 47.5</td>
<td>Gender by age</td>
<td>(1) Females report more anxiety, physiological, mixed anxiety/depression. (2) No significant gender differences re: depression, self esteem/confidence.</td>
</tr>
</tbody>
</table>

### Findings:

- No significant gender differences by age.
- No significant gender differences by marital status.
- Females report more anxiety in all age groups.
- Females report more distress in 3 age cohorts.
- Males report more in 1 age cohort.
- Little difference reported in youngest age cohort.
- Females report more anxiety, physiological, mixed anxiety/depression.
- (Significance not reported)
<table>
<thead>
<tr>
<th>Study</th>
<th>Year</th>
<th>Gender</th>
<th>Age</th>
<th>Location</th>
<th>Male Symptoms</th>
<th>Female Symptoms</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weissman and Myers</td>
<td>1967</td>
<td>Males</td>
<td>18+</td>
<td>New Haven, Connecticut</td>
<td>10%</td>
<td>24#</td>
<td>(significance not reported)</td>
</tr>
<tr>
<td>Blazer and Williams</td>
<td>1972</td>
<td>Males</td>
<td>65+</td>
<td>Kentucky</td>
<td>10%</td>
<td>5%</td>
<td>None</td>
</tr>
<tr>
<td>Atchley</td>
<td>1976</td>
<td>Males</td>
<td>55+</td>
<td>Midwest</td>
<td>28.9%</td>
<td>21.1%</td>
<td>Gender by age, marital status, education, perceived income adequacy.</td>
</tr>
<tr>
<td>Veroff, Douvan, and Kulke</td>
<td>1981</td>
<td>Males</td>
<td>65+</td>
<td>U.S.</td>
<td>20-29</td>
<td>20%</td>
<td>(2) Gender remains significant in multivariate analysis.</td>
</tr>
<tr>
<td>Frerichs and Anshawensel. and Clark</td>
<td>1981</td>
<td>Males</td>
<td>18+</td>
<td>Los Angeles</td>
<td>16%</td>
<td>8#%</td>
<td>Gender by age, all demographic variables. (significance not reported)</td>
</tr>
<tr>
<td>Source</td>
<td>Study</td>
<td>Sample Size</td>
<td>Age Range</td>
<td>Gender Differences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
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<td></td>
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</tr>
<tr>
<td>Gurland et al. (1983)</td>
<td>445 65+ New York City</td>
<td>65-69: 28% Males, 22% Females; 70-74: 31% Males, 7% Females; 75-79: 14% Males, 8% Females; 80+: 19% Males, 43% Females</td>
<td>Gender by age, symptoms from 65-79, males report more symptoms in oldest age cohort.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berry, Storandt, and Coyne (1984)</td>
<td>462 60+ Large Psychological Items</td>
<td>60-64: 16.12 Males, 15.93 Females; 65-69: 16.03 Males, 15.83 Females; 70-74: 17.12 Males, 16.93 Females; 75-79: 16.44 Males, 17.23 Females</td>
<td>Gender by age, no significant main effects (sex, age) or interaction (sex by age) for psychological items.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weissman et al. (1981)</td>
<td>2588 65+ New Haven, Connecticut DSM-III Disorders</td>
<td>65-69: 9.5 Males, 6.5 Females; 70-74: 6.5 Males, 5.5 Females; 75-79: 6.0 Males, 5.5 Females; 80-84: 8.7 Males, 5.5 Females; 85+: 3.9 Males, 4.0 Females</td>
<td>Gender by age, females report more symptoms in 3 age cohorts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murrell, Himmelfarb, and Wright (1983)</td>
<td>2517 55+ Kentucky CES-D (depression)</td>
<td>65-74: 12.9% Males, 14.5% Females; 75+: 17.5 Males, 26.0 Females</td>
<td>Gender by age, females report more symptoms in both age cohorts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Compiled by the Author.

# Figures are approximate as they are derived from a graph.